

*Ian Needham - Henk Nijman - Tom Palmstierna - Roger Almvik - Nico Oud*

*Proceedings of the 7th European Congress on*

# VIOLENCE IN CLINICAL PSYCHIATRY

**KAVANAH**

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# **Violence in Clinical Psychiatry**



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*Editors*

# **Violence in Clinical Psychiatry**

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## Preface

The 7th European Congress on Violence in Clinical Psychiatry ventures for the first time beyond the 14th meridian to the “Golden City” of Prague in the Czech Republic. This city is a renowned centre of education, science and culture. The Charles University in Prague founded in 1348, was the first university in Central Europe. Prague was an important centre of astronomy and has attracted famous astronomers such as Tycho Brahe (1546–1601) or Johannes Kepler (1571–1630). The importance of Prague’s astronomical history is aptly represented in the names of the conference rooms at the Clarion Congress Hotel Prague – Meridian, Nadir, Virgo, Leo, Taurus, Aquarius, Kepler, Tycho, and Stella. From a cultural vantage point Prague has also produced composers of world fame such as Antonín Dvořák, Bedřich Smetana, Leoš Janáček, and Bohuslav Martinů. Less known is the Czech composer Alois Hába (1893–1973) who experimented with micro-tonal composition and who wrote a complete opera – *Matka* – in the quarter-tone system. Also the Jewish-German born writer Franz Kafka (1883–1924) lived in the city of Prague and wrote his famous works such as “The Castle”, “The Trial”, and “The Judgement”. Characteristic in Kafka’s work is the eerie atmosphere describing nightmarish and surreal situations which has come to be known as the “Kafkaesque”. We suspect that many professionals dealing with violence in psychiatry may have sensed this Kafkaesque feeling at some time or other.

The 7th European Congress on Violence in Clinical Psychiatry entitled “Challenges for Care and Treatment” offers about 250 state of the art presentations on numerous aspects of violence in pre-congress workshops, keynotes, papers, workshops, seminars and poster presentations. The conference subthemes reflect the depth and breath of the approach to the subject:

- Assessment and treatment of sexual violence
- Biological determinants and factors of violence
- Ethical and legal perspectives on violence
- Gender aspects of violence
- Impact and effect of violence on staff and caregivers
- Impact and effect of coercive measures on patients
- Nature, epidemiology and cross-cultural aspects of violence
- Pharmacological treatments for violent patients
- Psychological treatments, therapies and trainings for violent patients
- Risk and strength assessment, and prediction of violence
- Service user perspectives on violence
- Specific populations: child and adolescent, the elderly, forensic, intellectually disabled
- Strategies for reducing coercive measures
- Training and education of staff

One major development in the present conference is the explicit inclusion of the subtheme on violence in the intellectually disabled population. The reason for the inclusion of this topic is the insight that professionals working in the purely psychiatric domain and in special institutions for the intellectually disabled may profit from each other approaches.

The fact that the European Congress Violence is being held for the seventh time demonstrates the necessity and the willingness of the presenters – researchers, clinicians, policy makers, users – to further develop, to refine, and to render more ethical approaches to the handling of the problem of violence. Such a development is a perpetual and arduous process and possibly a “reaching for the stars”. Given the astrological importance of the city of Prague the Latin saying “Per ardua ad astra” (through struggle to the stars) comes to mind and seems an apt description of the endeavours to advance the body of knowledge on violence in clinical psychiatry.

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## **Supporting Organisations**

The Congress organisation committee cordially thanks the following organisations for their support:

- European Violence in Psychiatry Research Group (EViPRG)
- Altrecht Aventurijn
- CONNECTING, partnership for consult & training
- Karolinska Institute
- Psychiatrisch Zentrum Rheinau (PZR)
- British Institute for Learning Disabilities (BILD)
- World Psychiatric Association (WPA)
- Section on Art and Psychiatry
- Section on Psychiatry and Intellectual Disability
- Section on Stigma and Mental Illness
- Czech Psychiatric Association (CPA)

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## **General scientific remark**

The texts in the conference proceedings have not been subjected to any peer review process.

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# Chapter 1 – Pre-Congres Workshops

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## The Comprehensive Assessment of Psychopathic Personality (CAPP)

*Stephen Hart (Canada)*

Stephen Hart is a Professor in the Department of Psychology and a Member of the Mental Health, Law, and Policy Institute at Simon Fraser University in Canada, and also a Visiting Professor in the Faculty of Psychology at the University of Bergen in Norway. Dr. Hart's primary area of expertise is clinical-forensic psychology. Most of his work focuses on clinical-forensic assessment in criminal and civil settings, and especially on the assessment of violence risk and the assessment of psychopathic personality disorder. He is the author or co-author of more than 125 articles, chapters, and books. He has served as co-editor of the *International Journal of Forensic Mental Health*, and a member of the editorial boards of *Behavioural Sciences and the Law*, *Criminal Justice and Behaviour*, the *Journal of Forensic Psychology Practice*, the *Journal of Personality Disorders*, *Law and Human Behaviour*, and *Legal and Criminological Psychology*. He has served as President of the American Psychology-Law Society (Division 41 of the American Psychological Association) and a Director of the Canadian Association of Threat Assessment Professionals. Dr. Hart has conducted more than 200 training workshops for mental health, law enforcement, corrections, and legal professionals in North America, Europe, Asia, and Australasia. He has provided expert testimony in the superior courts of the provinces of Alberta, British Columbia, Manitoba, and Ontario; and in the states of Arizona, California, Florida, Illinois, Iowa, Kansas, Missouri, Texas, Washington, and Wisconsin. He has received several awards, including the Saleem Shah Award for Early Career Contributions to Psychology and Law, from the American Academy of Forensic Psychology and the American Psychology-Law Society, and the Career Contributions Award, from the Society of Clinical Psychology (Division 12 of the American Psychological Association).

### Abstract

The Comprehensive Assessment of Psychopathic Personality (CAPP) has been developed to assess the symptoms of psychopathic personality disorder (PPD). Two important features distinguish the CAPP from other tests of PPD; it is comprehensive and it is dynamic. The CAPP covers the full domain of PPD symptomatology. This means the CAPP is potentially useful in a variety of settings (e.g., correctional, forensic psychiatric, civil psychiatric, community and family), rather than being optimized for use in a single setting. The CAPP can be used to assess the severity of symptoms over discrete time periods, in addition to lifetime severity. This means the CAPP is potentially useful when it is necessary to measure changes in the severity of symptoms over time (e.g., when studying their developmental course, response to treatment, reaction to situational changes or variation in relation to the course of an axis one disorder). At present it is unclear to what extent traits of personality disorder change over time (if at all) or why they might change, but it is impossible to answer these questions empirically without a test that is (theoretically) sensitive to change.

The CAPP actually comprises a family of tests – all currently under development, and therefore experimental in nature – based on the same model of PPD. The current version, the Institutional Rating Scale or CAPP-IRS, is designed for use in secure treatment facilities (e.g., forensic psychiatric hospitals, civil psychiatric facilities, special hospital, prisons) where severe PPD symptomatology is relatively common and where important decisions (e.g., classification, programming, and release) may be based in part on apparent changes in PPD symptomatology over time. The CAPP-IRS permits trained observers to rate the recent severity of PPD symptoms; the time frame for rating symptoms is 6 months, and for each symptom we provide a list of behavioural indicators relevant to institutional adjustment. This family of instruments will include a Staff Rating Scale Version and a Life-Time Version.

The CAPP has been developed by David Cooke, Stephen Hart, Caroline Logan and Christine Michie.

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# The Short-Term Assessment of Risk and Treatability (START): measuring and managing risk in the short-term

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Dr. Caroline Logan is a Consultant Forensic Clinical Psychologist in Greater Manchester West Mental Health NHS Foundation Trust and an Honorary Research Fellow in the Department of Community Based Medicine at the University of Manchester. She has worked as a researcher and a clinician in forensic services for fifteen years, working directly in both roles with clients who are at risk to themselves and others. She has also undertaken various consultancy roles with the multidisciplinary teams and the health and criminal justice organisations that look after and manage this client group, examining risk assessment and management practice and proposing and evaluating local and national change. She is both a clinical psychologist and a forensic psychologist, and she has a D.Phil in experimental psychology.

Dr Michael Doyle is currently in joint post of Clinical Researcher & Lecturer at the University of Manchester, and Nurse Consultant for Clinical Risk at North West Adult Forensic Services at Greater Manchester West NHS Trust. He is project manager for national study funded by National Institute of Health Care Research and Programme Director for recently developed MSc Forensic Mental Health at the University of Manchester. He is Treasurer for the International Association of Forensic Mental Health. Published widely on psychosocial risk assessment, formulation and management. Provides training, consultancy and advice to health, social care organizations and criminal justice agencies across the UK, Europe and beyond. Accredited as a Behavioural and Cognitive Psychotherapist and continues clinical practice, supervision and mentorship.

## Abstract

A new assessment scheme: The Short-Term Assessment of Risk and Treatability (START) presents a workable method for assessing risks to self and others encountered in mentally and personality disordered clients. It's a 20-item clinical guide for the dynamic assessment of seven risk domains (violence to others, suicide, self-harm, self-neglect, unauthorized absence, substance use, and victimization). The START represents a refinement in the assessment of dynamic risk factors in that it provides for the differential coding of both patient strengths and needs, while allowing for the recording of case-specific risk factors. The START is meant for interdisciplinary use and each of the 20 items is assessed according to succinct descriptions provided in the published manual. The START is intended for use with adults with mental, personality and substance related disorders. It is relevant to inpatient and community psychiatric, forensic, and correctional populations.

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# European Association in Mental Health and Intellectual Disability (EAMHID) Guidelines for Assessment, Diagnostic and Treatment of Severe Problem Behaviour in Persons with Intellectual Disability

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Prof. Anton Došen, psychiatrist/child psychiatrist, is emeritus professor of "Psychiatric Aspects of Intellectual Disability" at the Radboud University, Nijmegen, the Netherlands. He served 10 years as the chairman of the Section on Psychiatry and Intellectual Disability of the World Psychiatric Association, and was the founder of The European Association for Mental Health in Mental Retardation. Currently he is honorary president of the Association. He is active in the dissemination of existing knowledge regarding professional help to people with mental health problems and intellectual disability by teaching through different courses, postgraduate seminars, symposia and congresses in different countries. In his publications he is in particular engaged with developmental perspective and integrative approach in assessment, diagnostic and treatment of psychiatric illness and behaviour problems among individuals with intellectual disability and autism. His methods of applying the developmental perspective and integrative approach is widely in use in the practice of professionals in the Netherlands and Belgium.

## Abstract

Problem Behaviour (PB) in individuals with intellectual disability (ID), in particular aggression, is frequently discussed by professionals as this difficulty often represents a serious obstacle to the provision of care for this population. At present PB is viewed as a specific phenomenon with specific presentation form and onset mechanism. A group of internationally distinguished experts in this field, under leading of professor Dosen, developed the Guidelines for PB as an EAMHID (European Association for Mental Health in Intellectual Disability) document.

The main objective of the Guidelines is to supply a conceptual framework for the explanation and understanding of the phenomenon of PB in individuals with ID, with the goal of promoting an improved professional approach to the problem. In the workshop the emphasis will be on the developmental bio-psycho-social approach in assessment with the aim of differentiation of PB from a "normal but difficult" behaviour of a person with ID, on the one hand, and from a psychiatric disorder, on the other hand. The integrative diagnostics and a comprehensive integrative treatment approach of PB will be discussed on the base of case presentations.

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# Chapter 2 – Keynote speeches

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## The bulldozer and the ballet dancer: Aspects of nurses' caring approaches in acute psychiatric intensive care

### *Keynote speech*

*Anna Björkdahl, Tom Palmstierna, Hansebo Görel  
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**Keywords:** Violence, acute psychiatry, caring approaches, conflicting values, ward culture

### **Background**

The environment of acute psychiatric wards may be stressful, with unpredictable activities such as acute admissions, discharges, transfers in and out, critical incidents and urgent assistance to other wards involved in emergency situations. Psychiatric intensive care units usually provide the most intense level of care and treatment and many patient admissions are due to the risk of aggressive behaviour.

Nurses as well as other members of the multidisciplinary team working in acute psychiatric wards often describe feeling torn between their humanistic ideals and the demand for treatment efficiency in the often harsh reality of their daily work. Unfortunately, the retention of an authoritarian, custodial ward culture, where control and confinement are prioritised at the expense of more caring approaches toward patients, remains the source of much of the criticism of the acute psychiatric wards. At the same time, the physical and psychological safety of the patients is a central responsibility and a key objective of all inpatient psychiatric care, including the freedom from fear as well as from dehumanizing and disempowering experiences. In the present study we therefore wanted to gain a deeper understanding of different caring approaches of nurses working in acute psychiatric intensive care wards.

### **Method**

A qualitative explorative design was used. Nineteen nurses from four different psychiatric intensive care units in Sweden were individually interviewed. A ladder questions method was used for the interviews in order to focus on the experiences of caring approaches and participants were encouraged to provide examples from actual situations on the wards. An interpretative description method for qualitative content analysis formed the foundation of the data analysis in which sub-themes and main themes were identified.

### **Results**

In the analysis, we found that the nurses described two distinct caring approaches that were adapted according to the individual nurse's interpretation of a particular patient's needs and behaviour. However, the approaches did not always appear as separate entities in the data but were rather interpreted as opposite ends of a continuum. One approach involved sensitive and perceptive behaviour on the part of the nurse, with the intention of generating trust and signalling a desire to provide care. The other approach was used by the same nurses, who would then become guardians of the safety and structure in the ward – sometimes by using force and coercion. The metaphors – ballet dancer and bulldozer – facilitated the understanding of the two approaches and defined the two main themes identified.

In many ways, we found the bulldozer approach to represent the opposite of the ballet dancer approach. For example, while the ballet dancer approach involved verbal and non-verbal carefully adapted ways to initiate a relationship with the patient, the bulldozer approach ensured sufficient power to manage potentially dangerous situations and to possibly overpower patients by connecting and communicating to colleagues rather than to the patient. Furthermore, the ballet dancer approach involved an interest in the

patient as an individual and person, just like the nurse, while the bulldozer approach justified the use of controlling actions by referring to patients as being different from the nurses.

## Discussion

This study mirrors the familiar and difficult choice that nurses and the members of the multidisciplinary team often face in acute psychiatric care, between allowing patients to stay autonomous and assuming a paternalistic approach in difficult situations. It has been compared to balancing on a knife-edge on which the staff may be accused of either abuse or neglect. From the perspective of many caring theories, the ballet dancer approach would be easily recognized as a caring approach and the bulldozer approach as basically a disempowering and thus uncaring approach. At the same time, although today's psychiatric care and treatment values equality, respect and the dignity of all human beings, it also values order and discipline in society and in wards. This leaves the staff with the challenge of two somewhat contradictory ideals that should be embodied within the limit-setting practices on the wards.

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# The possibilities and pitfalls in violence risk assessment and management

## *Keynote speech*

*Patrick Callaghan  
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## **Abstract**

Despite progress across Europe in the treatment of mental disorders, resulting from psychotropic drugs and effective psychosocial interventions, the incidence of inpatient violent incidents – verbal or physical aggression directed at self or others – remains a significant issue. Violence towards staff is an occupational and public health issue and a serious threat to mental health services' attempts to deliver quality care. Violent incidents injure patients and staff, lose mental health services money as staff takes time off to recover from injuries, harm the relationship between patients and staff, and damage wards' therapeutic nature. Staff are essential resources in providing quality psychiatric care but when they are assaulted they suffer prolonged damage to their quality of life, and become suspicious and hostile in their work. Staff involved in violent incidents have developed Post-Traumatic Stress Disorder. Patients who witness violence on the ward are likely to abscond from fear, and may then be left untreated in the community. It has been long recognised that violence should be minimised through effective risk assessment and management. Subsequently the last 20 years has seen increasing attention to violence risk assessment in mental health using clinical judgement and increasingly, the application of actuarial measures. The aim of this paper is to examine the possibilities and pitfalls in violence risk assessment and management in mental health. In particular, the author will examine the history of violence risk assessment, describe the methods used by clinicians and researchers in predicting violence, evaluate the use of actuarial measures versus clinical judgement and the combination of both in predicting and preventing violence and outline the possibilities and pitfalls in violence risk assessment and management.

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# Violence and Mandated Community Treatment: The MacArthur Studies

## Keynote speech

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**Keywords:** Violence, coercion, leverage, MacArthur, outpatient commitment

## Introduction

“Outpatient commitment”—a civil court order that a person with a mental illness accept outpatient mental health services, or face the alternative of involuntary hospitalization — can best be understood in the context of a broad movement to apply whatever “leverage” is available to induce people with serious mental illness to become engaged in treatment. People with mental illness are often dependent upon goods and services provided by social welfare agencies. Their access to these goods and services is often tied to treatment participation. Similarly, people with mental illness are frequently arrested for criminal offenses. Lenient disposition of their cases may be tied to treatment participation. In each of these contexts, the targeted patients face loss of a valued interest if they fail to comply with prescribed treatment. Facing such pervasive constraints on free choice, patients may attempt to maximize their own control over the treatment they receive in the event of later deterioration by executing “psychiatric advance directives;” paradoxically, they may choose to authorize treatment even over their subsequent resistance. Advocates of what might be called mandated community treatment have explicitly “sold” the approach largely by playing on public fears of violence committed by people with mental illness [1-3]. As stated by Jaffe [quoted in 4]:

*Laws change for a single reason, in reaction to highly publicized incidents of violence. People care about public safety. I am not saying it is right, I am saying this is the reality. So if you’re changing your laws in your state, you have to understand that. It means that you have to take the debate out of the mental health arena and put it in the criminal justice/public safety arena.*

Little hard information exists regarding the actual prevalence of different forms of mandated community treatment for people with mental disorder, how leverage is implemented, or what the measurable outcomes of using leverage are for different types of patients. While the debate has begun with regard to the many vexing human rights and health policy issues raised by mandated treatment, the central empirical questions are only now being addressed.

The John D. and Catherine T. MacArthur Foundation in the U.S. has sponsored a Research Network on Mandated Community Treatment to develop an evidence base on whether, and—if so—how, to require certain people with mental illness to adhere to treatment in the community. That Network is now concluding its research, and the central findings to date are summarized here [5].

## I. Mandated community treatment: Prevalence

How widely are the various types of mandated community treatment being used in practice? Until very recently, basic information was lacking on the actual use of mandated community treatment in any country. The first study of the prevalence of treatment mandates, conducted at five sites across the U.S. [6] reached the following conclusions: Approximately half of all patients — 44 to 59% across the 5 sites — have experienced at least one form of leverage. Half of these patients have experienced two or more different forms of leverage. The most common forms of leverage are obtaining subsidized housing (32% of all patients) and avoiding jail (23%) and the least prevalent forms of leverage are obtaining disability benefits (12%), and outpatient commitment to avoid hospitalization (15%).

## II. Mandated community treatment: Outcomes of leverage from the social welfare system

Two social welfare benefits to which some people with mental illness are entitled under current laws are disability benefits and subsidized housing:

*Money as Leverage.* Recipients of disability benefits typically receive checks made in their own names. However, a “money manager” may be appointed to receive the checks if it is determined that this is in the beneficiary’s best interests. (In the U.S., these money managers are called “representative payees.”) Some people who receive benefits for a mental disorder and who have a money manager believe that there is a quid-pro-quo relationship between their adherence to treatment and their receipt of welfare benefits from the money manager. Key findings from the MacArthur research include:

- Patients assigned a money manager are more likely than other patients to experience “financial coercion” to participate in outpatient treatment, but also more likely to adhere to outpatient treatment [7].
- Both consumers and their money managers demonstrate deficiencies in basic arithmetic abilities necessary to create a simple budget, and this often leads to conflict [8].
- Having a family member act as a money manager doubles the likelihood of the patient engaging in family violence. The more a patient interacts with a family member who is a money manager, the more likely the family violence [9].

*Housing as Leverage.* To avoid widespread homelessness, governments often subsidize housing for people with a mental disorder. No one questions that landlords can impose generally applicable requirements—such as not disturbing neighbors—on their tenants. However, landlords sometimes impose the additional requirement on a tenant with mental disorder that he or she be actively engaged in treatment, on pain of being evicted for lack of treatment adherence. Among the findings of recent research are:

- Housing is often used in combination with money as leverage, because it is usually landlords, rather than clinicians, who impose adherence to treatment as a requirement of obtaining housing, and the landlords require that they be named the patient’s money manager in order to assure that the rent gets paid [10].
- The use of housing as leverage often increases patients’ perceived coercion [10].
- Housing programs that do not require treatment as a condition of occupancy (called “Housing-First” programs) are becoming increasingly common and achieve a level of patient satisfaction with housing and with treatment comparable to that of programs that use housing as leverage to obtain treatment adherence [11].

## II. Mandated community treatment: Outcomes of leverage from the legal system

People with serious mental disorder are sometimes required to comply with treatment by judges or by other legal officials (e.g., probation officers). Even without a formal judicial order, patients may agree to adhere to treatment in the hope of avoiding an unfavorable resolution of their case, such as being sentenced to jail or being committed to a hospital.

*Jail as Leverage.* Making the acceptance of mental health treatment in the community a condition of sentencing a defendant to probation rather than to jail has long been an accepted judicial practice in many countries. In addition, a new type of criminal court—called, appropriately, a “mental health court”—has been developed in the U. S. that makes even more explicit the link between criminal sanctions and treatment in the community. These courts offer a defendant with a mental illness intensely supervised treatment in the community as an alternative to jail. The MacArthur studies concluded:

- Specialty probation agencies that have smaller and exclusively mental health caseloads, and that use problem-solving strategies rather than threats of incarceration, are more effective than traditional probation agencies in reducing the risk of probation violation [12]. New paradigms for reducing recidivism among probationers are emerging [13].
- When given a choice, 95 percent of mental ill defendants in one Florida county chose to have their cases heard in a mental health court rather than in a regular criminal court, and the defendants who chose a mental health court reported much less experience of coercion, and were much more satisfied with the court process, than were mentally ill defendants in the criminal court [14].
- In the 18 months following enrolment in a mental health court or in a usual criminal court, defendants with a mental illness whose cases were processed in the mental health court had fewer arrests and fewer days incarcerated than defendants in the usual court group. Defendants who “graduated” from the mental health court had lower rearrest rates than defendants who failed to complete the mental health court process [15].

*Hospitalization as Leverage.* Outpatient commitment, as described above, refers to a court order directing a person with a serious mental disorder to comply with a prescribed plan of treatment in the community, under pain of being hospitalized for failure to do so if the person meets statutory criteria. An evaluation of the largest outpatient commitment program in the U.S., in New York State, concluded:

- African Americans were more likely than whites to be involuntarily committed for outpatient psychiatric care in New York State. However, candidates for outpatient commitment are largely drawn from a

population in which African Americans are overrepresented, that is, psychiatric patients with multiple past involuntary hospitalizations in public mental health facilities. Whether this overrepresentation under court-ordered outpatient treatment is racially discriminatory depends on one's view of whether outpatient commitment is best seen as providing increased access to treatment in a setting that is less restrictive than hospitalization, or whether it is best seen as a deprivation of personal liberty [16].

- While patients were under an outpatient commitment order, they experienced a substantial reduction in psychiatric hospitalizations and were more likely to consistently receive psychotropic medications. If the outpatient commitment order was in effect for one year or longer, these benefits continued after the order had expired [17].
- Patients on outpatient commitment felt neither more positive nor more negative about their experience with psychiatric treatment than did voluntary patients. More specifically, there were no significant differences between patients on outpatient commitment and voluntary patients in perceived coercion, the therapist-patient alliance, treatment satisfaction, or life satisfaction [18].

One way to establish a person's preferences regarding future treatment, should the person become unable to make or to communicate those preferences in the future, is for the person to "mandate" the preferred treatment him or herself.

*Psychiatric Advance Directives.* Usually, advance directives pertain to medical care at the end of life. But increasingly people with mental disorder are creating advance directives for psychiatric treatment. These directives allow mentally ill but competent persons to declare their preferences for mental health treatment, or to appoint a surrogate decision maker, in advance of a crisis during which they may lose capacity to make healthcare decisions themselves.

- Approximately half the mental health professionals in one survey agreed that psychiatric advance directives are helpful to patients. Clinicians have more positive attitudes about psychiatric advance directives when they correctly recognize that they are not required by law to honor a directive in which a person refuses appropriate psychiatric or psychological treatment. However, a majority of clinicians have practical concerns about getting access to psychiatric advance directives in a crisis. Other concerns include the problem of inappropriate treatment requests in psychiatric advance directives [19].
- There are important differences among patients, family members, and clinicians on several aspects of psychiatric advance directives: 44% of patients (compared to only 14% of family members) believe that patients should be able to change an advance directive "even when they are ill." Three-quarters of patients believe that a psychiatric advance directive will help them avoid unwanted treatment, but only one-quarter of clinicians agree. [20]
- Patients can complete a psychiatric advance directives with a one-hour facilitation session, but otherwise do not complete them: 79% of the patients randomly assigned to have someone help them complete a psychiatric advance directives actually completed one, compared to only 6% of the subjects in the control group who had to complete the directive on their own [43]. The completion of a psychiatric advance directive is associated with significant reduction in the use of coercive interventions such as police transport, involuntary commitment, seclusion and restraints, and involuntary medications during mental health crises [21].

Kahan et al [22], in a large web-based survey of American adults, tried to go beyond left-right political ideology to explain public views of mandated community treatment in cultural terms. Using Douglas' [23] theory of "cultural cognition," they found that outpatient commitment was supported by people who are *hierarchical and communitarian*—that is, people who value authority, who trust experts, and who believe that securing conditions of societal well-being is a societal duty that takes priority over individual interests. People who are *egalitarian and individualistic*—that is, people who resent stratification, who distrust authority, and who place the prerogatives of individuals ahead of those of the collective—were more likely to oppose outpatient commitment. Because on many issues egalitarian and communitarian orientations converge on liberal policy stances, and hierarchical and individualistic orientations on conservative ones, they believe that it is not surprising that public opinion on outpatient commitment bears little relationship to conventional liberal and conservative ideological categories [see also 24].

## Conclusions

In addition, recent American work has addressed the use of child custody as leverage to assure that parents with mental illness adhere to outpatient treatment [25], education as leverage to increase the likelihood that university students with mental illness will adhere to outpatient treatment [26], licenses as leverage to induce professionals (e.g., physicians, lawyers, and airline pilots) with mental illness to accept outpatient psychiatric services [27], and employment as leverage to secure the adherence of (non-licensed) employees with mental illness with outpatient treatment [28]. (For research mandating children with mental illness to adhere to treatment, see [29]).

Unwanted institutional treatment for mental disorder remains a crucially important clinical, legal, moral, and fiscal issue throughout the world. Early in the 21<sup>st</sup> century, however, unwanted treatment in the community is replacing unwanted institutional treatment as a growing object of controversy. Unwanted community treatment may take many forms, with negative events, such as incarceration or hospitalization being avoided, or positive events, such as placement in subsidized housing or the receipt of disability benefits, being obtained, contingent on whether a person adheres to outpatient treatment. A majority of patients in public-sector outpatient mental health treatment in the United States have experienced the application of at least one—and often more than one—of these forms of “leverage.” Research on the outcomes associated with mandated community treatment is in its infancy, but there are suggestions that, if properly implemented, it may have value in increasing treatment adherence. Different forms of mandated community treatment may raise different legal and moral issues, and these issues are likely to vary greatly in different political and cultural contexts [30]. One necessary but not sufficient prerequisite to the success of any form of mandated community treatment in any country is the ready availability of evidence-based mental health services. What the government of Scotland concluded when it recently initiated community treatment orders is true more broadly: Where society imposes an obligation on an individual to comply with a programme of treatment or care, a parallel obligation is imposed on health and social care services to provide safe and appropriate services and ongoing care [31].

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# Be the agent of the change you want to see in the world: Reducing restrictive interventions in human services

## Keynote speech

Sharon Paley  
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**Keywords:** Standards, positive behaviour support, intellectual disabilities/autism, Human Rights.

## Introduction

Since 1996 the British Institute of Learning Disabilities ( BILD) has developed and delivered a range of projects aimed at enhancing the lifestyles of people with intellectual disabilities, specific to those people who may exhibit socially invalid behaviour, often commonly referred to as ‘challenging behaviour(s)’

Work has included an range of publication, delivery of conferences as well as setting standards across the UK in relation to the care and support of those who exhibit behaviours that can be difficult to manage.

In 2009 BILD launched a mission for supporting the work in this important field and we are now encouraging increased reliance on positive behaviour support and developing staff skills of behaviour assessment and intervention.

## Objectives

The aims of this paper are to:

- present the history of the work of BILD.
- discuss the achievements of BILD to date in the field of behaviour support.
- explain why BILD has now changed the approach taken towards restrictive practices and how we hope to further influence the agenda Nationally in the UK.
- present a framework for influencing change in organisations towards implementing PBS approaches and reducing the use of restrictive practices.

## Discussion

It is possible to suggest that approaches to challenging behaviour can be split into two distinct categories, firstly those that achieve short term control over challenging behaviour and the development of adaptive functionally equivalent behaviours in the longer term. The second category, are behaviour management strategies that focus on recognising triggers and defusing behaviour whenever possible. Reactive management strategies also include reactive restrictive physical interventions (restraint), when the risk is significant.

People with intellectual disabilities who challenge services are at high risk of being exposed to the use of restrictive physical interventions (restraint) (Emerson 1995, Sturmey 1999, Baker 2000). There is also widespread concern related to the abuse of people with intellectual disability and the use of restrictive practices, including chemical restraint, seclusion, mechanical restraint and policies that infringe basic human rights, this has been highlighted by investigations undertaken by the Healthcare Commission in England (2006, 2007). There have been a number of deaths associated with the use of restraint; Paterson et al (2009) highlighted 22 such deaths that have occurred in the UK since 1979, within health or social care settings.

In 1996 the British Institute of Learning Disabilities published *Physical Interventions: a policy framework*, Harris et al (1996) A second edition was published in 2008, this was a seminal publication, being used by a large number of providers in the sector who were ‘positive’ about the usefulness of the publication, Murphy et al (2003). The publication was welcomed by professionals working in the field who had struggled with practice issue related to the use of aversive practices; the aim of the publication was to highlight practice issues related to the use of restrictive physical interventions and start to create a framework for professionals to use. This work led to BILD developing a national reputation as leader in the field in

relation to the use of aversive practice within health and social care in the UK, with reference to people with intellectual disability and autism.

This work was built on by numerous publications; BILD worked on national guidance for Government Departments and also developed an accreditation scheme for providers of training in restraint/ physical intervention. This may have been less helpful to the overall objective and aims that BILD, as an organisation had set out to achieve.

In 2008 BILD launched a mission in relation to positive behaviour support:

1. Make sure that all people with learning disabilities can exercise their human rights and be valued members of their local communities.
2. Focus on vulnerable and disadvantaged groups including:
  - People with complex needs
  - People from black and minority ethnic communities
  - People with autism
  - Offenders and those in the judicial system
3. Work in partnership with families, carers, friends and the key individuals in people's lives.
4. Ensure that people's individual communication needs are positively addressed.
5. Develop and promote an evidence base for practice.
6. Develop a framework of good practice guidance that focuses on positive behaviour support and person-centered planning.
7. Identify, disseminate and promote good practice in reducing the use of restrictive practices and the implementation of positive behaviour support.
8. Educate all stakeholders that the use of restrictive practices is potentially dangerous.
9. Eliminate the use of unnecessary restrictive and aversive practice.
10. Ensure that appropriate training and learning opportunities are available for all staff and supporters

## Conclusions

In terms of driving change in the field, there is a feeling that the work of BILD has highlighted the need to develop non aversive approaches to supporting, preventing and managing challenging behaviour. However it (BILD) may also have inadvertently given a message that as long as 'we restrain better' or 'to a certain standard' then any restraint is OK. This is clearly a message that is inconsistent with the aims and objectives of BILD. The speaker/ author is keen to address this through the development of frameworks that support staff to develop skills to enable increased understanding of behaviour and skills of behaviour assessment and the development positive interventions models.

In 2009 BILD launched a restraint reduction message. This was supported initially by a mission statement which can be found at the BILD website [www.bild.org.uk](http://www.bild.org.uk). In 2010 the first International Positive Behaviour Support Conference was held in Dublin, attended by over 180 delegates from the UK, Australia, Eire, USA and Europe this promoted alternative approaches and non aversive strategies of support for people with intellectual disabilities and autism. In 2011 we will be publishing a review of the literature on restraint reduction this will form the basis of some research that will evaluate how to reduce restrictive practices in services for people with intellectual disabilities and autism. The second International Conference for Positive Behaviour Support will be delivered in May 2012 in Cardiff.

The author believes the principles of positive behaviour support can as easily be introduced to a wide range of human services, not just those that support people with intellectual disabilities and autism.

## The presentation

The author will...

- reflect on her own experiences as a young nurse recounting an incident that had a huge impact over her future career and work in the field.
- explain how BILD and the work she has undertaken over the past 10 years, has attempted to influence the agenda across the UK as discussed in the main abstract.
- present a framework developed to achieve the implementation of positive behaviour approaches across human services. She will argue that behavioural and cultural change needs to occur within the 'service' and for/ by those employed to support people if real positive outcomes are to be achieved for people who exhibit socially invalid behaviour(s).
- conclude that we can influence and change practice through our own actions and achieve real change for individual people.

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# Schizophrenia, treatment adherence, substance use, and violence

## Keynote speech

Jan Volavka

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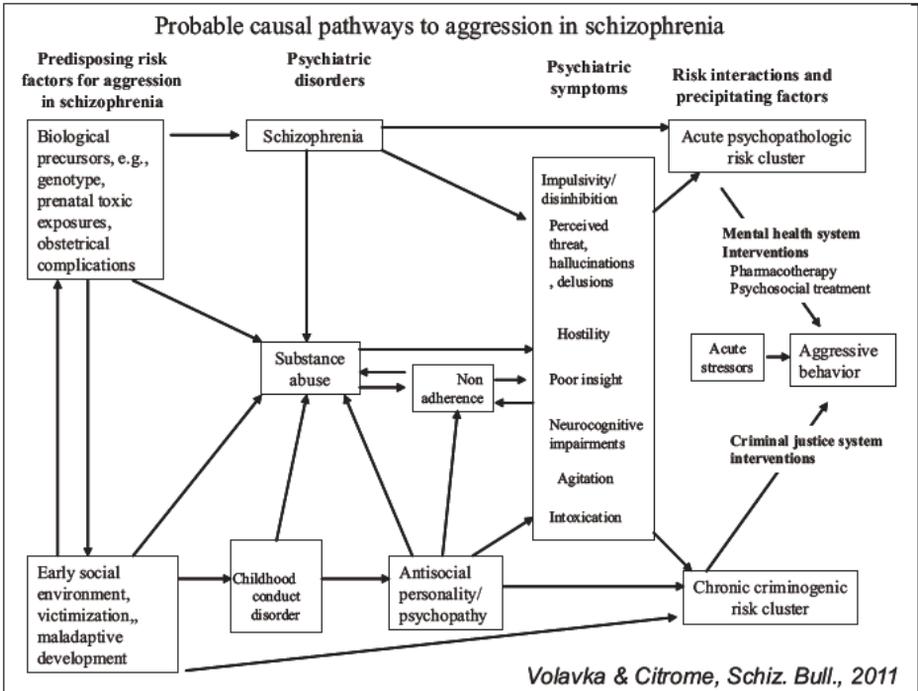
**Keywords:** Schizophrenia, aggression, violence, substance use, adherence

## Introduction

Robust epidemiological evidence indicates that schizophrenia is associated with elevated risk for aggressive behavior and violent crime<sup>1-4</sup>. However, the reasons for that association are less clear. What are the causes of violence in schizophrenia patients? That question will have multiple answers. We need at least some partial answers in order to develop better methods to prevent and treat aggressive behavior in schizophrenia.

Clinical and epidemiological literature suggests that violence in schizophrenia arises as a result of multiple effects that interact with each other. Treatment non-adherence and substance abuse play a central role in the development of violent behavior in schizophrenia. A model of probable causal pathways is displayed in Figure 1.

Figure 1



## Treatment non-adherence

### Definitions

*Adherence* to pharmacological treatment is defined as the extent to which the patient's medication intake conforms to a prescription provided by a physician. *Compliance*, defined in the same way, implies a passive acceptance of treatment recommendations<sup>5</sup> and therefore the term has been gradually replaced by *adherence* which has a more neutral connotation with respect to the patient's attitude. *Persistence* may be defined as continuously refilling prescriptions in accordance with the suggested duration of therapy<sup>6</sup>. Patients may be persistent in refilling prescriptions and receiving medications, but at the same time they may be non-adherent to treatment when they do not use the received medication as prescribed.

Non-adherence to pharmacological treatment can be subdivided into two major classes: complete cessation of medication, and partial non-adherence. It is the second class that presents definition problems.

An expert consensus statement stipulated that patients taking at least 80% of prescribed medication may be considered fully adherent, those taking 50-79% are partially adherent, and those taking less than 50% are non-adherent<sup>7</sup>. Medication gaps, described as specific contiguous time periods off medication during a certain interval, were also endorsed as a possible definition of non-adherence. The experts agreed that a medication gap of at least one week during a period of 3 months should be considered as an adequate definition of non-adherence<sup>7</sup>.

### Medication factors affecting adherence and persistence

#### *Adherence and persistence with oral antipsychotics*

Adherence to second generation antipsychotics (SGA) was significantly higher than to the first generation antipsychotics (FGA) in a study using prescription refill review,<sup>8</sup> but not in other studies<sup>9,10</sup>.

Persistence (or lack of it) was measured in The Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE)<sup>11</sup> as the time to discontinuation of treatment for any cause. In Phase 1 of the CATIE, that time was longer in patients receiving olanzapine than in those on quetiapine, risperidone, perphenazine, and ziprasidone; the superiority of olanzapine over quetiapine and risperidone reached the level of statistical significance.

Amisulpride, haloperidol, olanzapine, quetiapine, and ziprasidone were compared for persistence on treatment (as time to discontinuation) in the European First Episode Schizophrenia Trial (EUFEST) study<sup>12</sup>. Olanzapine was associated with the highest persistence. Clozapine showed superior persistence on treatment compared to other antipsychotics in observational studies<sup>6,13</sup>.

#### *Adherence and persistence with depot formulations of antipsychotics*

The use of depot formulations eliminates covert non-adherence, and overt non-adherence becomes immediately obvious to the caregivers. However, randomized controlled trials comparing adherence with depot versus oral formulations have not demonstrated the expected superiority of the depot. A recent meta-analysis of such studies has found no significant difference in adherence between depot and oral formulations of antipsychotics in published trials of schizophrenia patients. However, depot preparations were superior in preventing relapse<sup>14</sup>. The patients in the trials included in this meta-analysis were generally adherent, thus the hypothesized effect of depot on non-adherence could not be demonstrated.

An observational study that was not included in the Leucht meta-analysis<sup>14</sup> yielded important data<sup>13</sup>. Discontinuation of treatment for any cause and rehospitalizations were studied in 2230 adult patients in community care after the first hospitalization for schizophrenia or schizoaffective disorder in Finland. Patients were followed up for an average of 3.6 years. Number of patients who discontinued their initial treatment can be seen as a measure of persistence for that treatment. FGA and SGA were included among the treatments.

Relative risk (RR) for discontinuation was calculated for each treatment with oral haloperidol as the comparator treatment. Highest persistence (lowest discontinuation rate during the follow-up period) was observed with clozapine, followed by depot perphenazine. The risk for discontinuation for oral perphenazine was similar to oral haloperidol, and significantly higher than for depot perphenazine.

A recent study using a different cohort of Finnish patients (N=2588) focused particularly on the comparison of depot and oral formulations of the same antipsychotics<sup>15</sup>. In a pairwise comparison between depot injections and their equivalent oral formulations, the risk of rehospitalization for patients receiving depot

medications was significantly smaller than for patients receiving oral medications. In an analogous pairwise comparison the risk for discontinuation for any cause in patients receiving depot versus patients receiving oral formulation was significantly smaller. Thus, these observational studies demonstrated superiority of depot over oral formulation for persistence with treatment and for prevention of rehospitalizations.

## Predictors and consequences of non-adherence

Adherence depends, to a large extent, on the patient's willingness and ability to take medication as prescribed. Patient's willingness to take medication can be reduced if he thinks he does not need the medication, if the medication has adverse effects (such as parkinsonism, weight gain, or loss of libido) or if it is not effective, and if the therapeutic alliance between the patient and his doctor is poor. Lack of family support for the treatment will also undermine patient's willingness to take medication.

A recent short-term randomized clinical trial in 599 patients has shown that higher hostility levels (assessed as one of the PANSS items) may be associated with non-adherence to medication in schizophrenia patients<sup>16</sup>. Specifically, the level of hostility was found to predict non-adherence during this 8-week study. Greater level of hostility at a particular assessment was associated with a greater likelihood of non-adherence at the subsequent assessment. However, rising hostility itself may be the result of inadequate treatment or inadequate antipsychotic response, which in turn leads to non-adherence.

Inadequate insight into mental illness is a strong predictor of non-adherence<sup>7,17</sup> and this is a potential mechanism through which it may increase the risk of violence in schizophrenia. However, in a forensic sample of individuals with psychotic disorders poor insight into illness and non-adherence to medications had independent associations with severity of violence<sup>18</sup>. However, better insight was associated with better outcome even when schizophrenia patients were treated with long-acting risperidone injections so that covert non-adherence was not possible<sup>19</sup>. Thus, insight may affect outcome through a pathway independent of adherence.

Poor insight and hostility were related to non-adherence in a re-analysis of the data in 445 patients participating in the (EUFEST) (Czobor et al., in preparation).

Ability to take medication may be reduced by cognitive impairment or depression. Ability to obtain medication may be constrained by financial problems and logistic difficulties such as poor access to a remote pharmacy for patients without a car.

A prospective study of 1579 patients with schizophrenia aimed to identify predictors of non-adherence<sup>20</sup>. Adherence with any oral antipsychotic medication was assessed using patient self-reports and medical record prescription information. The best single predictor of future non-adherence was non-adherence during the 6 months prior to enrollment. The best set of predictors of non-adherence included prior non-adherence, recent illicit drug use, recent alcohol use, prior treatment with antidepressants, and greater patient-reported, medication-related cognitive impairment<sup>20</sup>. History of violent behavior and incarceration were also significantly more frequent in non-adherent patients. Taken together with the data on substance use mentioned below, this suggests that non-adherence in schizophrenia patients may be in part engendered by a comorbid personality disorder.

Thus, non-adherence to treatment is of central importance among pathways to violence in schizophrenia. As depicted in Figure 1, it is closely related to substance use disorder. Furthermore, impaired insight and probably increased hostility are among the symptoms that are impairing adherence. Also, comorbid antisocial features are linked with non-adherence.

Furthermore, recent evidence indicated that antisocial features also moderate the effect of adherence on antisocial outcomes. An analysis of the CATIE data showed that adherence to antipsychotic medication did not significantly reduce violent behavior in patients with childhood antisocial history. This finding is consistent with the view that much of the violence in these patients was not caused by their psychosis, and thus was not likely to be reduced by antipsychotic medications<sup>21</sup>.

Further analyses of the CATIE data<sup>22</sup> led to a more specific hypothesis stating that violence in schizophrenia may follow two pathways— one associated with premorbid conditions, including antisocial conduct, and another associated with the acute psychopathology of schizophrenia. These formulations based on epidemiological findings are consistent with clinical subtyping of violence in schizophrenia to be reviewed below<sup>23</sup>.

Although the pathways involving non-adherence and aggression are complex, it is clear that relapse and rehospitalization are the principal consequences of non-adherence<sup>7,24</sup>. Antipsychotics reduce hostility<sup>25</sup> and aggression<sup>26</sup> in schizophrenia, and it is not surprising that non-adherence to antipsychotic medication

treatment increases the risk of aggressive behavior<sup>27</sup>. The combination of alcohol or other drug abuse problems with poor adherence to medication results in further increase of that risk<sup>28</sup>. Comorbid substance use disorders<sup>29</sup> and homelessness are associated with poor adherence to antipsychotic treatment.

Disentangling the effects of substance use and non-adherence on aggressive behavior would be necessary for clear understanding of causative relationships. Currently available data are based on cross-sectional studies that address risks in terms of correlations. Such data cannot resolve the temporal sequence of events and are therefore not informative for the purpose of an analysis of causes. Longitudinal prospective studies (rather than cross-sectional studies) are needed to resolve these issues. In the meantime, it is probably safe to assume that non-adherence may lead to substance abuse and vice versa.

## Substance use disorders

As indicated in Figure 1, substance use disorders have a central role in the etiology of violence in patients with schizophrenia. (By the way, this is also true in persons without mental illness<sup>30</sup>).

There is no question that the use of alcohol and illicit drugs by schizophrenia patients elevates the risk of aggressive behavior<sup>1 30 4</sup>. Furthermore, schizophrenia elevates the risk for substance use disorders. The lifetime prevalence of a substance abuse diagnosis in persons with schizophrenia or schizophreniform disorder in the United States was 47.0%, the odds ratio was 4.6 versus the rest of the population<sup>31</sup>. There are several mechanisms by which co-occurring substance abuse may be implicated in violence risk in schizophrenia<sup>32</sup>. Acute pharmacological effects of alcohol and certain drugs may exacerbate psychiatric symptoms. Violence risk increases when substance abuse is added to the combinations of impaired impulse control and symptoms such as hostility, threat perception, grandiosity, and dysphoria. Substance use disorders are also associated with treatment non-adherence, which increases the risk for violence in patients with schizophrenia.

The question is, does schizophrenia without comorbid substance use disorder elevate the risk for aggressive behavior? The answer to that question has implications for treatment, policy, and stigma. If there is no important contribution of schizophrenia to aggressive behavior unless the patient also uses alcohol or illicit drugs, then the prevention and treatment of aggression could be re-focused on the management of substance use disorders. Scarce resources could be reassigned accordingly. Furthermore, since fear of patient violence contributes to the stigma of schizophrenia, a finding that schizophrenia *per se* does not cause violence may sound reassuring. It would remove part of the stigma from schizophrenia and transfer it to substance use disorders.

To answer the question of relationship between schizophrenia, substance abuse, and aggression using epidemiologic methods, large numbers of schizophrenia patients showing aggressive behaviors need to be studied. Two such studies were conducted in Scandinavia. The rate of arrest for violent crime in a Danish birth cohort (N=358,180) was 2.7%. There was a total of 1,143 male schizophrenia patients, 11.2% of whom were arrested for violent crime. Odds ratio for arrest was 4.6 (CI 3.8-5.6). Of the 1,143 schizophrenia patients, a total of 846 did not have comorbid substance abuse diagnosis, and only 7.1% had a history of arrest for violent crime (odds ratio 2.8, CI 2.1-3.6). The prevalence of arrest for violent crime was considerably higher in patients with comorbid substance abuse. The numbers for females showed a similar trend, with lower proportions of violent patients overall<sup>3</sup>. A study using Swedish registers compared risk of conviction for violent crime in 8,003 schizophrenia patients with 80,025 general population controls. In patients with schizophrenia, 1054 (13.2%) had at least 1 violent offense compared with 4276 (5.3%) of general population controls (odds ratio 2.0; CI 1.8-2.2). The risk was mostly confined to patients with substance abuse comorbidity (of whom 27.6% committed an offense), yielding an increased risk of violent crime among such patients (odds ratio 4.4, CI, 3.9-5.0), whereas the risk increase was small in schizophrenia patients without substance abuse comorbidity (8.5% of whom had at least 1 violent offense (odds ratio 1.2; CI, 1.1-1.4)<sup>4</sup>.

Comparing these two large studies, we observe that the proportions of schizophrenia patients arrested or convicted for violent crime are similar (11.2% and 13.2%, respectively). Regarding the subset of schizophrenia patients without history of violent crime, the proportions are also similar (7.1% and 8.5%, respectively). The odds ratios, however, are substantially lower in the Swedish sample. This difference seems to be related to the fact that the general population rate for conviction for violent crime in Sweden (5.3%) was twice as high as the analogous number for arrest in Denmark (2.7%).

All the odds ratios abstracted here from the two Scandinavian studies are statistically significant, although the effect sizes are not large. Does schizophrenia without comorbid substance use disorder elevate the risk for aggressive behavior? These studies indicate that this effect can be reliably detected, but leave open

the question of its importance. However, small effect sizes do become important when the outcomes of interest include serious bodily harm or death.

In a large US epidemiological study, data on mental disorder and violence were collected as part of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a 2-wave face-to-face survey conducted by the National Institute on Alcohol Abuse and Alcoholism. A total of 34 653 subjects completed NESARC waves 1 (2001-2003) and 2 (2004-2005) interviews. Wave 1 data on severe mental illness (such as schizophrenia, bipolar disorder, and major depression) and risk factors for violence were analyzed by Elbogen and Johnson to predict wave 2 data on violent behavior<sup>33</sup>.

Statistical analyses revealed that severe mental illness alone did not predict future violence. Instead, violence was associated with historical (past violence, juvenile detention, physical abuse, parental arrest record), clinical (substance abuse, perceived threats), dispositional (age, sex, income), and contextual (recent divorce, unemployment, victimization) factors. Most of these factors were present more often in subjects with severe mental illness, but severe mental illness did not independently predict future violent behavior<sup>33</sup>.

Thus, these authors have confirmed the importance of various well known risk factors for violence in mental illness (including substance abuse); some of these factors are depicted in Figure 1 of the present paper. However, they were unable to confirm an independent role of mental illness *per se* in the causation of violence. From this failure, they infer that "... it is simplistic as well as inaccurate to say the cause of violence among mentally ill individuals is the mental illness itself..."<sup>33</sup>(p.159).

This conclusion is inconsistent with the current consensus view which posits a direct causal relationship between severe mental illness and violence. This paper<sup>33</sup> elicited critical comments focusing particularly on the role of comorbid substance abuse in violence<sup>32</sup>.

Furthermore, a recent re-analysis by Van Dorn et al<sup>34</sup> of the same NESARC data came to different conclusions than those reached by Elbogen and Johnson. Those re-analyses differed from the Elbogen and Johnson approach in several important aspects, some of which are relevant for schizophrenia. First, unlike Van Dorn et al., Elbogen and Johnson included in their comparison group thousands of people with substance abuse or dependence, with mental illness and substance abuse or dependence comorbidity, and with personality disorders. Second, unlike Van Dorn et al., Elbogen and Johnson included past, lifetime violence as an independent variable and found, not surprisingly, that this predicted future violence; with past violence in the multivariable model, severe mental illness alone was not a significant predictor.

Elbogen and Johnson then interpreted these results to mean that severe mental illness alone was unrelated to violence. This interpretation is correct if one is interested in "predicting" violence. However, this result cannot be interpreted to explain the cause of violence. Saying that future violence is predicted by past violence is a statistically meaningful but scientifically inadequate explanation of violent behavior. More importantly, the inclusion of past lifetime violence as an independent variable in the multivariable model has obscured the significant causal relationship between severe mental illness and violence. There were other differences between Van Dorn's and Elbogen and Johnson approach to analyses that will not be reviewed here.

Unlike Elbogen and Johnson, Van Dorn et al. have confirmed a statistically significant, yet modest relationship between serious mental illness and violence that was independent of substance abuse status. In bivariate analyses, the odds ratio for any violence in patients with severe mental illness without comorbid substance use disorder was 3.55 (CI 2.71-4.65), whereas for patients with severe mental illness with comorbid substance use disorder it was 12.20 (CI 8.97-16.60). The analogous numbers specific for schizophrenia were 5.84 (CI 1.97-17.32) and 19.87 (CI 7.16-55.14). The findings in multivariable analyses were similar, except that the odds ratio for schizophrenia without comorbid substance use disorder failed to reach statistical significance. These findings are in agreement with the view that assigns direct causal role to serious mental illness, and probably specifically schizophrenia, in the development of violence, and with the generally accepted important role of comorbid substance use disorder in generating violence.

Epidemiological studies usually have limited information about clinical factors, particularly regarding treatment. Clinical observations and considerations may complement their results. If aggressive behavior in schizophrenia patients is caused, for all practical purposes, by comorbid substance use disorder, what would be its mechanism of action? Acute pharmacological effects of alcohol, cocaine and other drugs may exacerbate psychiatric symptoms such as hostility, and further impair inhibitory control of patient's behavior. Furthermore, illicit drug abuse is associated with aggression related to conducting illicit transactions, need to obtain funds for drug purchases, and similar criminogenic factors.

Remarkably, there are many schizophrenia patients exhibiting aggression while hospitalized on locked wards of inpatient facilities<sup>30</sup>. Aggressive behavior may persist for months or even years, while these patients generally have no access to alcohol or illicit drugs. Although some of these patients have a history of substance abuse, it is not clear how that could cause aggressive behavior long after the last ingestion of any alcohol or illicit drug<sup>32</sup>.

Approximately 20% of assaults on inpatient wards appear to be caused by positive psychotic symptoms such as delusions or hallucinations; the balance is associated with confusion, impulsiveness, or psychopathic features<sup>23</sup>. Thus, although there is a robust statistical association between substance use disorder and aggression in schizophrenia, it is possible that the association is not causative. There may be a third persistent factor that may cause both substance abuse and aggressive behavior in schizophrenia; that factor operates relatively independently of the current level of alcohol or drug ingestion.

One such factor may reside in patient's earlier development. Conduct disorder history was associated with aggressive behavior and alcohol and drug abuse in adult schizophrenia men; the relationship with aggressive behavior remained significant after controlling for lifetime diagnosis of substance abuse. History of conduct disorder was also associated with earlier onset of schizophrenia<sup>35</sup>.

Evidence of conduct disorder with onset before 15 years is of course a DSM-IV-TR diagnostic criterion for antisocial personality disorder. The prevalence of a substance abuse diagnosis in persons with antisocial personality disorder is very high<sup>30</sup>.

Taken together, this evidence suggests that the association between substance use disorder and aggressive behavior in schizophrenia is complex. It could be partly direct causative effect that depends on the acute pharmacological activity of the substances and the associated criminogenic factors, partly an epiphenomenon that is independent of the pharmacological effects: it is the antisocial personality/psychopathy that causes aggression, while co-varying with substance use disorder. Statistical analyses that do not account for personality disorder then show a strong association of substance use disorder on aggression, but a major part of that association is not causative<sup>32</sup>.

This perspective has implications for the management of aggressive behavior in schizophrenia. First, prevention and treatment of comorbid substance use disorders should be an integral part of care for schizophrenia patients. However, we should not expect that this will be adequate for all cases of aggressive behavior in schizophrenia. Early treatment with clozapine or perhaps another antipsychotic with proven antiaggressive action is indicated for persistent aggression in schizophrenia<sup>26</sup>. The results of the Krakowski study<sup>26</sup> as well as emerging evidence<sup>25</sup> suggest that olanzapine might be a candidate for such indication. Finally, a substantial proportion of schizophrenia patients will continue with their aggressive behavior in spite of treatments for substance abuse and psychosis. Many of these treatment resistant patients will have a history of conduct disorder and exhibit current features of psychopathy. Until recently, there was little we could offer these patients. However, recently developed long-term psychosocial interventions using cognitive behavioral approaches are surprisingly effective in reducing persistent aggressive behavior in psychotic patients<sup>36,37</sup>. These programs are expensive to administer, and they should receive more support.

## Conclusion

There is general agreement that schizophrenia is associated with elevated risk for aggressive behavior and violent crime. However, the reasons for that association are less clear. Violence in schizophrenia results from multiple effects that interact with each other. Treatment non-adherence and substance abuse play a central role in the development of violent behavior in schizophrenia.

Non-adherence to medication treatment elevates the risk of violence. Patients' willingness and ability to adhere to prescribed treatment depends on multiple factors. Poor insight and hostility are associated poor adherence. Among oral antipsychotics, olanzapine showed somewhat higher persistence with treatment than other medications. Depot formulations are superior to oral antipsychotics in persistence with treatment.

Comorbid substance use disorders substantially elevate the risk of violence in schizophrenia. Epidemiological and clinical evidence published over the past two decades indicates that a modest elevation of risk of violence exists even in the absence of this comorbidity. However, recent epidemiological studies appear to suggest that severe mental illness, including schizophrenia, is not associated with violence in the absence of substance use disorder comorbidity. The evidence for this is dubious and has been refuted empirically. Prevention and treatment of comorbid substance use disorders should be an integral part of

care for schizophrenia patients who need it. Early treatment with clozapine is indicated for persistent aggression in schizophrenia. Psychosocial interventions are useful in persistently aggressive schizophrenia patients with inadequate response to medication.

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# Measuring and managing short-term risk: Making the START work in practice

## Keynote speech

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**Keywords:** risk, short-term risk, structured professional judgement, violence, self-harm, suicide

## Introduction

In the last twenty years, since the development of a number of standardized measurement guides, the practice of clinical risk assessment has advanced a great deal. Such guides – also known as risk assessment instruments or tools – are based on research identifying the variables most frequently or strongly associated with the harmful outcome of interest (Otto & Douglas, 2010). For example, mental health problems and substance misuse are associated with both harm to self and harm to others (e.g., Leitner & Barr, 2011; Whittington, McGuire, Steinert & Quinn, 2011). Consequently, mental health problems and substance misuse are risk factors for future harm to self and others in several risk assessment guides (e.g., the HCR-20 and the START). Essentially, risk assessment guides provide lists of risk factors that the relevant research has suggested are associated with the specific outcome to be prevented. Guides vary in content based on the outcome they are intended to prevent (e.g., violence, stalking, domestic violence, sexual violence, suicide, and so on) and on the research selected to justify the inclusion of individual risk factors and, if applicable, the weight given to each. Practitioners are required to examine their client in relation to all the risk factors listed in the risk assessment guide they have elected to use and to denote through a rating whether the factor is present or not and if present, the extent to which it is present (e.g., partially, definitely).

Once all risk factors have been examined, some form of risk estimate or judgement – generally an indication of level of risk, expressed as high, medium/moderate or low risk – is then derived. This risk estimate may be based on the number of risk factors present in the client's past or recent history; scores given to present risk factors are summed and the total score related to a level of risk derived from data from similar others (e.g., recidivist violent offenders) measured on the same risk factors. Thus, clients who have lots of risk factors that the research suggests are also present in recidivist violent offenders are regarded as more likely to re-offend (their risk estimate may be medium or high) compared with those who have only a small number of risk factors in common with recidivist offenders (their risk estimate may therefore be low).

An alternative way of deriving a risk estimate or judgement is to make a structured professional judgement about the individual's potential to be harmful in the future based on an appraisal of all the present factors. This judgement may be structured very simply by the professional appraisal of the risk factors that are present – the judgement of high, medium or low risk is deduced from the pattern of risk factors identified and the significance given to them by the practitioner undertaking the assessment (Douglas, Webster, Hart, *et al.*, 2001; see also Pedersen, Rasmussen & Elsass, 2010). However, the risk judgement can be more substantially structured by involving a formal process of formulation (Lewis & Doyle, 2009; Hart & Logan, 2011; Logan, Nathan & Brown, 2011), which organizes the information derived about prior harmful conduct into an explanation for why it happened as it did and when, and therefore the circumstances in which it could potentially happen again. In such structured formulations, risk estimates or judgements (high, medium or low risk) are in fact obsolete because what is prepared is a plan of action for continuously monitoring risk and adjusting risk management. This latter process is structured professional judgement.

As stated above, the ultimate goal of clinical risk assessment is the prevention of harmful outcomes. The very fact of doing a risk assessment heightens the awareness of practitioners about the possible risks posed by an individual client. It also demonstrates to others that risk has been considered; it forms evidence of attention to risk in the event that disaster does happen and the post-incident review or subsequent litigation proceedings search for oversights and omissions on which to blame the unprevented offence. However, risk assessments that produce risk judgements based on summed scores or on an appraisal based on the risk factors that are present have only a loose link to risk management. Assessments generating conclusions about level of risk – high, moderate, low – imply a volume of risk management although not necessarily its focus. Therefore, clients judged to be a high risk of harmful behavior are likely to receive more restrictive

risk management interventions (e.g., imprisonment or involuntary detention in a mental health facility) than those rated as low risk.

In many circumstances, this blunt matching of risk assessment findings to risk management interventions is all that is required, such as where a practitioner is asked to offer an opinion to the Court about level of violence risk in order to inform sentencing. However, there are many circumstances where a closer link is required between risk assessment findings and risk management interventions; for example, where a practitioner in a prison or forensic mental health facility is required to engage with a client to understand and address specific relevant risk factors in order to manage risks day to day or as a condition of their release from detention and subsequent monitoring in the community. The latter form of risk assessment described above, which produces a formulation of past harmful conduct and future potential to harm, produces a detailed evaluation in which assessment findings are linked directly to often long-term prevention strategies, namely risk management. This is structured professional judgement (SPJ) at its most refined.

## Operationalising SPJ in risk assessment and management

The application of SPJ guidelines for risk assessment and management involves discrete steps (Doyle & Dolan, 2008). Here we will describe a six-step approach. In the first step, information is gathered from a variety of sources, including the client, if he or she chooses to collaborate in the assessment. The information gathered pertains to the past offending behaviour and lifestyle of the client and its identification is prompted and its interpretation framed by the risk factors described in the guidelines. In the second step, practitioners determine whether and the extent to which each of the risk factors identified in the guidance being used is present in the client. In the third step, practitioners determine whether and the extent to which in their opinion those risk factors that are present are also *relevant* to the client's potential to be harmful again in the future. (For example, one client may only have committed his or her offences in the context of substance abuse, making substance abuse both present and potentially relevant to any future offending. However, another client may have a history of substance abuse but his or her offending post-dates that experience and is not relevant to future potential. A risk factor can, therefore, be present in a client's history but not be relevant to offending behaviour. This critical judgement of relevance is what is required at this step).

In the fourth step, the risk factors identified as relevant are added to with clinical judgements about potential protective factors (e.g., positive attitudes towards treatment and risk management) and all are woven together into a formulation – an understanding – about future potential for harm. This critical step, which directly links risk assessment with risk management, will be described in more detail below. In the fifth step, risk management strategies are identified. Strategies – covering the main areas of treatment, supervision, monitoring, and victim safety planning – are linked directly to the risk formulation derived from the identification of the most relevant risk and protective factors. These strategies – hypotheses for ensuring the prevention of future harmful conduct by the client – are intended to influence the operation of relevant risk and protective factors on overall risk potential, diminishing it in the short-term. Finally, in the last step, summary judgements are made regarding the urgency of action or case prioritization, risks in other areas (e.g., self-harm or suicide, non-sexual violence, and so on), any immediate action required, and the date for next case review including re-assessment of risk.

## Short-term risk

The *Short-Term Assessment of Risk and Treatability* (START) is a brief clinical guide for the dynamic assessment of risks, strengths and treatability (Webster et al., 2004). The START operationalises the SPJ approach in order to inform the evaluation of multiple risk domains relevant to everyday psychiatric clinical practice (Webster et al., 2006). Although it may be applied in a variety of mental health settings, the START was developed with forensic mental health services in mind.

The START consists of twenty items. These items reflect dynamic characteristics of the individual, which may change in the short term such as to produce changes in risk of harm to self or others. Such changes may result in an elevation of risk necessitating immediate action. Alternatively, changes may result or ensure a reduction in – the management of – risk. Therefore, the twenty items in the START have the capacity to be considered as *both* risk factors *and* strengths and evaluators are encouraged to do just this. For example, item 6 addresses mental state. Mental state can be a risk factor for harm to self or others in the event that the individual hears voices commanding him or her to inflict damage to someone standing nearby. However, mental state can be a strength if the person now thinks clearly and rationally and has the capacity to withstand command hallucinations safely. In contrast, Item 11 can be both a risk and a strength at the same time; this item would be rated as a strength if the client has family members who visit and

provide for the client, socially, emotionally and materially. However, if that family is criminally oriented and encourages the client not to take prescribed medication or follow the rules of the unit he or she is living in, then social support would also be a risk. In this way and across the twenty items of the START, evaluators have the opportunity to make a balanced judgement about the role of individual characteristics in the context of the client's living circumstances.

The focus of the START is on risks and strengths that have the capacity to change in the short-term. This means that the START is different from, for example, the HCR-20 violence risk guide, which consists of risk factors that are enduring and evaluates risk over the medium to long term – months, up to a year or so. The focus of the START is on dynamic characteristics that may change in a matter of hours or days or weeks making it a much more suitable tool to use to assist in short-term risk management planning, such as in decision-making about activity participation, leave of absence trips, visits with family and friends, and so on. Consequently, the range of risks and strengths included in the instrument are relevant to risk in the number of different areas and the domains informed by a START assessment are risk to others, suicide, self-harm, self-neglect, substance misuse, unauthorized leave, and victimization.

How does the START work? The process of completing the START involves consideration of an individual's current mental state, behaviour and functioning as described in the 20 items making up the measure. (See Table 1 for a list of the START items). Evaluators are required to examine each item and compare their client's presentation over the last few weeks against the item descriptions in the START manual. Ratings are given for the extent to which each item represents a risk and a strength in the client at the time of the assessment. Once all 20 items have been rated, the evaluator has the opportunity to include any case-specific items, which are relevant only to this client. Then the evaluator determines the most critical risk factors and the key strengths in the client, then identifies the signature risk signs, thereby creating a very individual assessment of short-term risk. Subsequently, the evaluator makes ratings of the level of risk in each of the seven domains listed – risk to others, self-harm, and so on – where each are rated low, moderate or high risk. The outcome of this process, therefore, is better understood risk and a finer appreciation of the balance between risks and strengths in the client over the short-term, which should enable better decision-making about therapeutic and supportive interventions in the following hours, days and weeks.

*Table 1. Risk factors and strengths in the START*

Number	START items
1	Social skills
2	Relationships
3	Occupational
4	Recreational
5	Self-care
6	Mental state
7	Emotional state
8	Substance use
9	Impulse control
10	External triggers
11	Social support
12	High density sex offences
13	Multiple sex offences
14	Physical harm to victim(s) in sex offences
15	Uses weapons or threats of death in sex offences
16	Escalation in frequency or severity of sex offences
17	Extreme minimization or denial of sex offences
18	Attitudes that support or condone sex offences
19	Lacks realistic long-term goals
20	Negative attitude toward intervention

Preliminary evaluations in clinical populations have demonstrated that the START has the potential to be a valuable guideline to inform clinical practice (Webster et al., 2004; Webster et al., 2006; Nicholls et al., 2006) and more recent studies have provided evidence for the reliability and validity of the START in a range of settings and different countries (e.g. Braithwaite et al., 2010; Desmaris et al., 2010; Nonstad et al., 2010; Wilson et al., 2010; Doyle et al., 2008).

The START provides much to the evaluator of risk in the short-term. The very process of considering the risks posed by the client in the many areas of interest in mental health – and forensic mental health – services heightens everyone’s awareness of its importance. However, there are some important limitations to the START in its present form. First, the START manual does not define low, moderate or high risk when it is very likely that practitioners use these terms in quite different ways. In the absence of guidelines on how these important terms might be defined, there is scope for confusion and uncertainty. Second, the assessment process leads to a risk judgement – high, moderate, or low risk – but the process of going from one to the other is not defined or clear. This is problematic because there is no direct link between the judgement and the ratings given on each of the items – and there is no formulation of risk, no understanding of the risks posed and therefore clarity on what has to happen to manage it. This process of formulation is critical in clinical risk assessment and management, and should not be neglected. How could the evaluation of short-term risk be improved by considering risk formulation?

## Risk formulation

The critical fourth step in SPJ is that of risk formulation. Clinical formulation is an organisational framework based on theory and evidence used to produce a narrative description that explains the underlying mechanism involved in the generation of the presenting problem, which is in turn used to generate hypotheses regarding action to facilitate change (e.g., Bruch & Bond, 1998; Johnstone & Dallos, 2006; Persons, 1989; Tarrier, 2006). *Risk* formulation is very similar. Risk formulation is an organizational framework for producing a narrative description that explains the underlying mechanism involved in the generation of harmful behaviour and for proposing hypotheses regarding action to facilitate change (that is, harm prevention or managed risk). The evidence base for risk formulation is provided by the list of carefully selected risk factors (e.g., mental state, social support) examined in the earlier steps of the SPJ process. The theory underpinning risk formulation is decision theory (Hart & Logan, 2011) supported by scenario planning (Chermack & Lynham, 2002; van der Heijden, 1994), which ensures that the risk formulation is relevant to future harm potential rather than just an explanation for past harm.

What does risk formulation involve exactly? Its starting point is clarity about what is to be prevented – an answer to the “risk of what?” question. Answering this question is an essential first step because many clients present multiple risks that can have multiple antecedents – risk to others and self-harm, risk to others and substance abuse. Identifying several answers to this question informs the practitioner undertaking the assessment that multiple scenarios will have to be plotted and risk management plans prepared to take all into account. The answer to this question – “risk of what?” – is equivalent to the identifying the presenting problem(s) or chief complaint that characterizes clinical formulation.

Next, information is collected about risk factors and strengths, using risk tools like the START as a guide. Those factors thought to be most relevant to a specific client’s potential to be harmful again in the future are identified and the formulation process proceeds in the following way. First, a decision theory framework is used to interrogate the information collected about relevant risk and protective factors in order to determine why the individual made the choice to be harmful in the past. The use of decision theory is based on the assumption that individuals make a choice to be harmful, however rapidly that decision is made, that harmful conduct is purposive behaviour intended to achieve a goal or goals (Hart & Logan, 2011). The process of making such a choice includes a number of key stages: (1) the idea of being harmful towards oneself or another person is experienced consciously and not dismissed; (2) one or more possible positive consequences of being harmful are identified; (3) possible negative consequences are considered and the costs judged to be acceptable or affordable; and (4) options for being harmful are considered and one or more are regarded as feasible and achievable. Finally, a course of considered action is implemented when it is judged that the conditions are right. Therefore, the first part of the risk formulation process is to use the information collected about relevant risk and protective factors to determine *how and why has this person made the decision to be harmful before* and to understand the specific roles of factors as motivators or drivers, destabilizers, and (dis)inhibitors in relation to specific harmful acts (Hart & Logan, 2011).

In the second stage, scenario planning is used to project this decision-making process into the future to answer the question *under what circumstances could this person decide to be harmful again in the future?* (Hart & Logan, 2011). Scenario planning “is a process of positing several informed, plausible and imagined alternative future environments in which decisions about the future may be played out, for the purpose

of changing current thinking, improving decision-making, enhancing human and organization learning and improving performance” (Chermack & Lynham, 2002, p.366). It is a particularly useful technique to use in situations in which there is uncertainty yet a strong need to prepare for all or the most serious eventualities (van der Heijden, 1994), such as in a military operation where the consequences of inadequate preparation and anticipation of problems could be measured in lives lost and serious injuries sustained. Scenarios are descriptions of possible futures; in the case of risk to others, possible ways in which a client might be violent again in the future given what is known about his (or her) past and current situation and decision-making processes. Therefore, scenarios are not predictions. Instead they are forecasts based on what and an understanding of why the client has acted in a similar way in the past. As a consequence of their uniqueness to the client’s personal circumstances, preferences, and decision-making, only a limited number of scenarios are likely to be plausible. And it is these scenarios, with their origins laid bare by the evidence-based risk assessment and formulation process, which underpin risk management. Formulation, therefore, is a critical stage between evaluating individual risks and strengths and generating a view about overall risk in different areas. What should be done about the risks identified, however?

## **Risk management**

Risk management is the action that is taken to prevent the identified future scenarios from occurring. Risk management strategies include direct *treatment* interventions for factors linked to risk (e.g., substance use), *supervision* strategies like restricted contact with potential victims, the active *monitoring* of risk factors and strengths through their surveillance in the course of supportive and supervisory contacts, and *victim safety planning* in the event that a past victim could be re-victimised or the client may come into contact with new potential victims (e.g., a female supervising officer). Risk management *per se* has not been subject to a great deal of research (Heilbrun, 2001), certainly nothing commensurate with the research carried out into risk assessment. This is unfortunate – whilst it is the case that on the whole, mental health care in forensic services have had a positive impact on the frequency and severity of violence and harm to self, it is not yet clear what works best for whom under what circumstances to prevent harm. The potential for risk management – for example, involuntary detention – to exceed the risks presented by the individual is significant. This situation as regards evidence is only likely to change when the link between risk assessment and risk management processes is better conceptualised.

### **Treatment**

Treatment strategies for risk management are those active interventions that are intended to repair or restore deficits in functioning linked to risk. Therefore, treatment strategies are intended to diminish the potency of risk factors linked to harmful conduct and include but are not limited to medication for the symptoms of the mental illness that disinhibit the client, treatment for the substance misuse problem that causes the client overwhelming problems with managing distress or conflict with others, and treatment for the range of interpersonal, cognitive, emotional and social deficits experienced by many people in forensic mental health services. In addition, treatment strategies are intended to enhance the power of protective factors, such as couple or family therapy to improve the client’s capacity to utilise and benefit from social support, and interventions to compensate for cognitive or learning difficulties that limit the effectiveness of other treatments. Broadly, treatment strategies encapsulate psychopharmacological interventions (e.g., anti-psychotic medication, mood stabilizers), psychological therapies (e.g., cognitive-behaviour therapy for mood problems, cognitive-behavioural interventions for criminogenic needs), and psychosocial interventions (e.g., detention in a therapeutic community or in a setting offering neurocognitive rehabilitation or compensation).

### **Supervision**

In risk management terms, supervision targets the environment or the setting in which the client is currently based or likely to be based in the future in order to limit the potency of risk factors and enhance the effectiveness of protective factors or strengths to diminish risk potential. Supervision refers to two types of intervention. First, supervision refers to those restrictions imposed on the client’s activities, movements, associations, or communications that are intended to limit his or her access or exposure to the circumstances that could trigger one (or more) of the hypothesized scenarios (Hart *et al.*, 2003). Examples of supervisory risk management strategies include a ban on drinking alcohol or drug-taking, residency curfews, restriction orders, and non-association lists as part of conditional release requirements. Second, supervisory strategies can also refer to those adjustments – enhancements – to the individual’s lifestyle that are intended to improve the effectiveness of protective strategies. Examples of this kind of supervisory strategy include support to secure and maintain suitable paid employment that offers routine, purpose, financial reward, and a social role, as well as regular contact with an understanding person.

## Monitoring

Monitoring as a risk management activity is first, the identification of early warning signs of a relapse to harm, ideally derived from the client through their engagement with treatment and supervision. Second, monitoring refers to the preparation and implementation of plans to be vigilant for evidence of the presence of these early warning signs. Such plans would include the actions to be taken to prevent early warning signs from evolving into harm, like the ones mapped out in the scenario-planning stage. Plans might include a reduction in leave or an increase in the frequency of meetings with a supervisor or therapist. Monitoring strategies are intended to be implemented by the client and by others (e.g., nurses, therapists, psychiatrists, etc.), where others will be relied upon more if the client's insight into his or her harmful behaviour is limited or their motivation to engage only partial. Monitoring in risk management terms differs from supervision because monitoring focuses on surveillance rather than controlling or managing the client's activities, making monitoring much less intrusive although just as essential.

## Victim safety planning

Finally, victim safety planning refers to the action that might be recommended to a past or possible future victim of the client in order to keep them safe. The client may have victimized a potential victim in the past but future contact is nonetheless possible or desired by both parties (e.g., an abusing parent and an abused child) or required (e.g., between former intimate partners who have to stay in some kind of contact with one another because they have children together). A potential victim could also be an as yet unknown partner (e.g., a future girlfriend or boyfriend) or provider of treatment or supervision (e.g., a psychologist, social worker or nurse) who may become victimized when, for example, they make emotional demands on the individual or endeavor to enforce the limitations that were an agreed requirement of conditional release. Victim safety plans could include provision of emergency safety procedures or personal alarms, prohibition of unaccompanied meetings, and so on.

## Concluding comments and practice recommendations

The START focuses on short-term risks, the characteristics of the individual that, if subject to change for whatever reason, may create a change in risk – an increase or decrease. The START is ideal for use in mental health services, and in forensic mental health services in particular. It models the SPJ approach but with a few small but important limitations; risk formulation and risk management are not clearly described. Their description in this paper adds scope to the START, enabling it to sit alongside the other SPJ tools like the HCR-20 and RSVP. But the strength of the START, its focus on short-term changes in risk, is critical. Only the START encapsulates potential triggers, the characteristics that switch risk on at any given time in a client's daily life on a hospital ward or unit. Tools like the HCR-20 and RSVP focus overly on variables that create vulnerability to harmful conduct (e.g., substance dependence), rather than on the triggers to an actual incident of harm (e.g., intoxication). In this way, combining the START with the HCR-20 and ensuring consideration is given to formulation and risk management created the most comprehensive risk assessment and risk management planning opportunity possible currently.

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# Markers and prediction of violent behavior in general population

## **Keynote speech**

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# The effective care and control of patients with psychopathic Personality Disorder: challenges and solutions

## **Keynote speech**

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## **Abstract**

The Comprehensive Assessment of Psychopathic Personality (CAPP) has been developed to assess the symptoms of psychopathic personality disorder (PPD). Two important features distinguish the CAPP from other tests of PPD; it is comprehensive and it is dynamic. The CAPP covers the full domain of PPD symptomatology. This means the CAPP is potentially useful in a variety of settings (e.g., correctional, forensic psychiatric, civil psychiatric, community and family), rather than being optimized for use in a single setting. The CAPP can be used to assess the severity of symptoms over discrete time periods, in addition to lifetime severity. This means the CAPP is potentially useful when it is necessary to measure changes in the severity of symptoms over time (e.g., when studying their developmental course, response to treatment, reaction to situational changes or variation in relation to the course of an axis one disorder). At present it is unclear to what extent traits of personality disorder change over time (if at all) or why they might change, but it is impossible to answer these questions empirically without a test that is (theoretically) sensitive to change.

The CAPP actually comprises a family of tests – all currently under development, and therefore experimental in nature – based on the same model of PPD. The current version, the Institutional Rating Scale or CAPP-IRS, is designed for use in secure treatment facilities (e.g., forensic psychiatric hospitals, civil psychiatric facilities, special hospital, prisons) where severe PPD symptomatology is relatively common and where important decisions (e.g., classification, programming, and release) may be based in part on apparent changes in PPD symptomatology over time. The CAPP-IRS permits trained observers to rate the recent severity of PPD symptoms; the time frame for rating symptoms is 6 months, and for each symptom we provide a list of behavioural indicators relevant to institutional adjustment. This family of instruments will include a Staff Rating Scale Version and a Life-Time Version.

The CAPP has been developed by David Cooke, Stephen Hart, Caroline Logan and Christine Michie.

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# Chapter 3 – Assessment and treatment of sexual violence

## Identifying risk of sexual aggression through phallometric testing

### Paper

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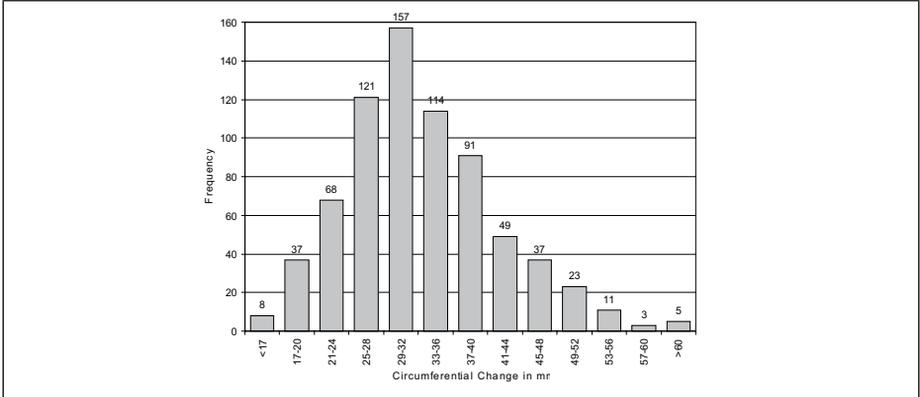
**Keywords:** Sexual offenders; sexual aggression; phallometric assessment; plethysmography; sexual violence

In the 1950s the communist government of the former Czechoslovakia sought a means to determine which men were seeking to avoid military service by falsely declaring themselves to be gay. Dr. Kurt Freund developed a technique to measure sexual arousal and thus provide a possible answer to this question, though he eventually left Czechoslovakia and moved to Canada where he applied this technique more usefully to the investigation of sexual offenders. Since that time what has come to be known as phallometric assessment (or plethysmographic assessment) has become more widely recognized throughout the world, though it's actual use is principally in Canada, the United States, England, New Zealand, and Australia.

Phallometric testing involves the precise measurement of circumferential change in the subject's penis from flaccidity to full erection in response to both 'normal' and deviant sexual stimuli. Although volumetric devices were originally used to measure sexual arousal, circumferential change in the penis was eventually determined to be an easier and more reliable measure of sexual arousal. The actual measurement is accomplished by means of a mercury-in-rubber strain gauge which is placed by the subject around the shaft of his penis, and strain gauges ranging in size from 5-10 cm (in 0.5 increments) are available. What makes this technique particularly useful is the fact that circumferential change in the penis is *the only pure measure of sexual arousal*. While the use of many other physiological measures of sexual arousal has been examined independently and jointly (e.g., blood pressure, heart rate, GSR), these have commonly proven to be both unreliable and likely invalid, their validity being suspect because they are of course influenced by other arousal states such as fear and anger and anxiety. The use of circumferential change as the measure of sexual arousal is facilitated by the fact that normative data are available with regard to the change associated with sexual arousal in the average male. As indicated in Figure 1, research on a population of 724 incarcerated offenders at a number of North American prisons has revealed that circumferential change during sexual arousal approximates a normal distribution with a mean of 32.6 mm and a standard deviation of 8.8 mm (see Howes, 2003). These normative data are particularly helpful in interpreting sexual arousal in cases where full arousal has not been achieved, for it is possible to indicate at specific probability levels (i.e.,  $p < .05$ ,  $p < .01$ ) whether the measured circumferential changes are clinically significant.

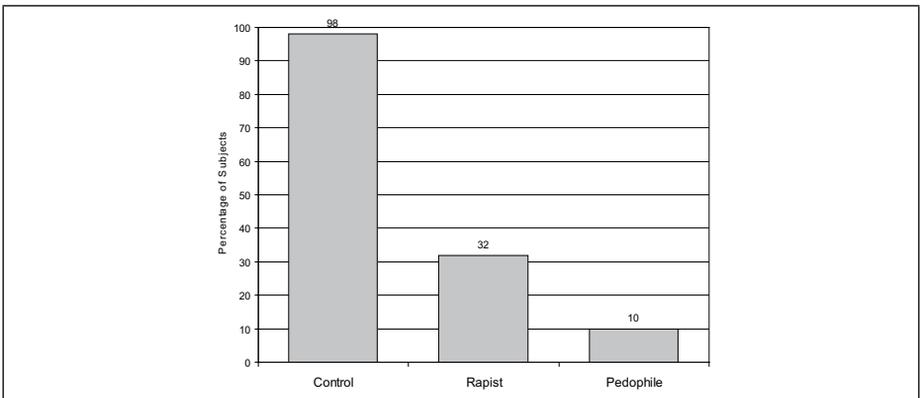
The phallometric testing procedure is typically accomplished in a single session of two to two-and-a-half hours with the participant ideally being alone in the viewing room. Throughout testing the participant should be monitored on video camera to ensure his attention to all the stimuli (i.e., not simply the preferred stimuli). While there isn't universal acceptance of what should be included among the stimuli used, a factor which has tainted this procedure, a preponderance of clinicians appear to use stimulus sets which include the following categories: consenting adult heterosexual; consenting adult homosexual; adult heterosexual rape; adult female bondage; heterosexual pedophilia; homosexual pedophilia; and neutral themes. The use of all of these categories is likely necessary for phallometric assessment to best achieve its purpose, namely determining an individual's age and gender preference and the level of risk an individual represents to commit an act of sexual aggression. By measuring the extent to which a man is dominated by sexual arousal to deviant stimuli we obtain an empirical foundation for making predictions about whether or not he is a high risk or a low risk to engage in sexual violence (i.e., rape or pedophilia).

Figure 1 Circumferential change in the penis from flaccidity to erection in a North American prison sample (N=724)



While the use of some stimuli (e.g., child pornography) is admittedly and understandably controversial, at least in Canada legislated protection is afforded the use of such materials when this use «has a legitimate purpose related to the administration of justice...» (section 163.1 of the Criminal Code of Canada). Clearly the use of child pornography in phalometric assessment is *not* an offence in Canada, although many other jurisdictions (including the United States) do not offer such protection. Again on moral grounds the use of these materials invites an almost visceral reaction in some people, but as sympathetic as we might well be with this concern a compelling argument can be made that since the sole purpose of using these stimuli is to identify high-risk sexual offenders who can then be kept incarcerated the best interests of the community are served by allowing this. There may also be secondary applications of this procedure in the treatment of impotence (i.e., when it would be helpful to determine specifically what elicits sexual arousal and the extent of this arousal). It has even been suggested that this procedure might be used as a tool for screening those seeking employment in any occupation which involves working with a vulnerable population (e.g., child care workers, teachers). Considerably more research needs to be done and normative data obtained before this can be seriously considered, however. At the present time phalometric assessment is used almost entirely to determine whether those convicted of sexual offences are still dangerous or if they might be safely returned to the community. In an earlier published study which compared the sexual arousal profiles of 40 incarcerated rapists with 50 incarcerated nonsexual offenders (the control group) it was determined that the differences between these two groups were in most respects statistically and clinically insignificant (see Howes, 1998). The value of phalometric assessment was affirmed, however, when as a final task in the testing procedure these inmates were required to demonstrate their ability to inhibit arousal to the deviant stimuli which first elicited this arousal, and a group of pedophiles was also assigned this task. As indicated in Figure 2, the three groups (rapists vs. pedophiles vs. the nonsexual offender control group) revealed marked differences in their ability to inhibit deviant arousal.

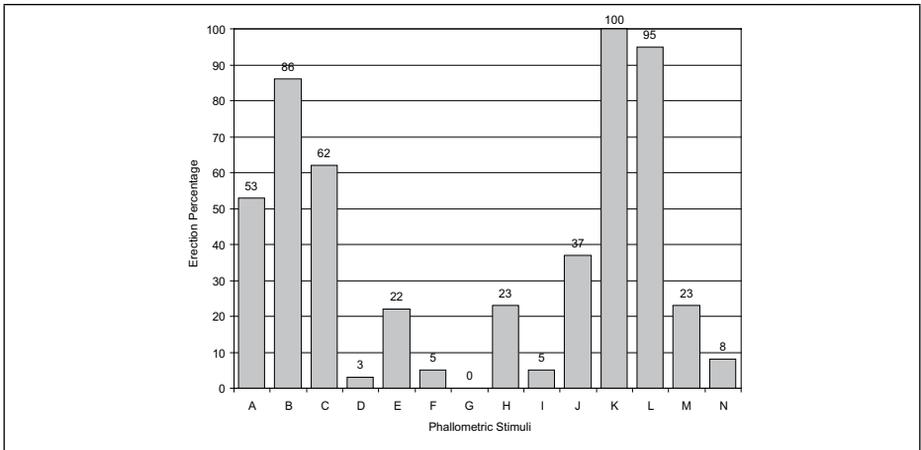
Figure 2 Ability to inhibit deviant arousal



In this study only 32% of the rapists and 10% of the pedophiles were able to inhibit their deviant sexual arousal, whereas 98% of the control group readily demonstrated this ability. It is apparent that those convicted of sexual offences not only demonstrate deviant sexual arousal but they have what might be conceptualized as some sort of impulse control deficit, and it is only through the use of phalometric testing that the extent of this deficit will be evident.

Current, ongoing research demonstrating the value of phalometric assessment is perhaps best evidenced in examples such as the real-life profile of a convicted heterosexual pedophile (see Figure 3). It is readily apparent that there is much about this sexual arousal profile which is troubling, for it clearly identifies a high risk of sexual aggression (in this case a high risk of sexually molesting young girls). This convicted heterosexual pedophile revealed a Percent Full Erection (PFE) score in response to girls under 6 years old of 54 and in response to 7-10 year old girls his PFE score is 88. When these levels of arousal are compared with his arousal to adult women (i.e., only 4 PFE) it is manifestly obvious that his sexual preference is for young girls. The other marked elevations in his profile are in response to depictions of sexual assaults of young girls, in the first case a high score of 96 PFE in response to a depiction of sex between a male adult and a young girl (who is ostensibly cooperating) and in the second case a high score of 90 PFE in response to a depiction of sex between a male adult and a young girl where overt violence is used to subdue the victim. The use of violence to subdue child victims is not something which diminishes this man's sexual arousal, and this is a particularly malignant finding. When his high arousal to child victims (i.e., 96 PFE) is compared with his low arousal to consenting heterosexual adult sexual practices (i.e., 23 PFE) it is once again clear that his sexual preference is for girls rather than women. To put this another way, this man's arousal to sex with children is more than four times higher than his arousal to sex with adult women. This profile also reveals that he has low arousal to male stimuli, whether boys or men, which is of course consistent with the identification of him as a heterosexual pedophile.

Figure 3 Sexual Arousal Profile Percent Full Erection (PFE) Scores of a heterosexual pedophile



### Legend

- A - girls under 6
- B - girls 7-10
- C - girls 12-16
- D - adult female
- E - boys under 6
- F - boys 12-16
- G - adult male
- H - consenting adult heterosexual
- I - consenting adult homosexual
- J - adult heterosexual rape
- K - heterosexual pedophilia (coercive)
- L - heterosexual pedophilia (violent)
- M - adult female bondage
- N - homosexual pedophilia

Though not shown in Figure 3 the most disturbing aspect of this man's sexual arousal profile is his inability to inhibit deviant arousal. When one of the stimuli (i.e., heterosexual pedophilia) was shown to him a second time at the end of the testing session along with directions to avoid becoming aroused, he was unable to reduce his arousal in any meaningful way (i.e., reducing it only from 96 PFE to 92 PFE). This is almost astounding, for the demand characteristics of the testing situation are so apparent (e.g., the individual is in jail, he is on camera, he is being assessed to determine the extent of his sexual deviancy, his release may be dependent on the results of this testing) every participant must surely be highly motivated to do well and look 'normal'. Any failure to do so, participants would certainly realize, would most likely destroy any prospects for an early release on parole. It has properly been argued that if an individual is unable to inhibit deviant arousal in such a controlled clinical setting with so many demand characteristics there is small likelihood of him evidencing control in the community.

In brief summary, phallometric assessment offers a means of clearly identifying any individual's sexual preferences (in terms of gender, age, and level of violence). Equally or perhaps even more important, phallometric assessment provides a means of determining the extent to which the individual is able to inhibit his deviant arousal. Predictions of level of risk to engage in acts of sexual violence (e.g., heterosexual pedophilia, homosexual pedophilia, adult rape) are rendered much more accurate by the inclusion of objective data from this procedure.

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# Chapter 4 – Biological determinants and factors of violence

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## Post-stroke anger proneness is related to MAO-A gene in acute stage of stroke

### Poster

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### Abstract

#### Background and purpose

Post-stroke anger proneness (PSAP) is a frequent complication after stroke. PSAP has been reported to hinder functional recovery and decrease patients' quality of life. Moreover, it has been reported to be a challenging behavior to caregivers, and to increase caregiver burdens. This study was conducted to show the prevalence of and the related factors to PSAP in early stages following stroke. We also sought to investigate whether PSAP is related to the serotonin transporter protein genes and Monoamine oxidase A (MAO-A) gene polymorphisms.

#### Methods

A total of 535 patients with acute ischemic stroke admitted to Asan Medical Center in Korea were screened for PSAP at admission and 3 months after stroke, with the use of modified Spielberger Trait Anger Scale. Other neurological dysfunctions and risk factors were also obtained. Blood samples were collected from each participant for DNA extraction and genotyping. The promoter of serotonin transporter protein (5-HTTLPR), the variable number of tandem repeats polymorphism within intron 2 (VNTR STin2), and MAOA-VNTR were genotyped.

#### Results

PSAP was present in 15.5%, and 23.6% at admission, at 3 months post-stroke, respectively. The factors related to PSAP at admission were previous stroke, motor dysfunction, sensory dysfunction, and MAO A gene polymorphism. Multivariate analyses showed that the presence of sensory dysfunction and MAO-A high activity were the factors related to PSAP. At 3 months post-stroke, sensory dysfunction and smoking were the independent factors related to PSAP in multivariate analysis.

#### Conclusions

Our results show that PSAP is relatively prevalent in both acute and sub-acute stages of stroke. The factors related to PSAP are similar but not identical between the two stages, suggesting different mechanism of PSAP. The MAO-A gene appears to be involved in the development of PSAP whereas the serotonin transporter genes are not.

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# Can mobile skin conductance assessments be helpful in signalling imminent inpatient aggression?

## Paper

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## Abstract

A well-know technique to assess (psychological) arousal is to measure the Skin Conductance Level (SCL). Although widely used in experimental psychological research, this technique has not been used often in (locked) psychiatric admission settings on patients who are at a high risk of engaging in aggressive behaviour. One of the obvious reasons for this is that measuring skin conductance, until recently, required a substantial amount of equipment. As technology progressed, however, it became possible to develop small wearable devices in the form of regular watches to measure the SCL as well as other psycho physiological parameters. To explain how SCL works, the presenters of this paper will wear the watches, which were developed by Philips Research, themselves during the presentation, and their skin conductance levels in response to the audience, and the stress of presenting, will be made visible in real time on a screen during the presentation.

To illustrate the potential these mobile assessments of the SCL may have for the prevention of aggression, the results of a pilot study in which patients residing at a crisis intervention ward of GGZ Eindhoven were wearing these watches, will be presented. Some of the patients participating in the pilot study became aggressive, as was assessed with the Social Dysfunction and Aggression Scale (Wistedt et al., 1990), while wearing these watches. The results of these cases will be described. One case description of a patient who became physically aggressive while wearing the skin conductance measurement device, will be discussed in detail. Interestingly, the SCL of this patient had been rising sharply well before the first overt signs of aggressive behaviour were visible.

## Educational goals

1. To explain, and make visible to the audience of the presentation, what Skin Conductance Levels are, and how they can be assessed with a device in the form of a watch.
2. To discuss the value online assessments of SCL may have for crisis intervention and research on the causes and prevention of aggression.

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# Neurobiological aspects of individual violent behaviour

## Paper

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**Keywords:** Epigenetics, amygdala, MAO-A, orbitofrontal cortex, ventromedial prefrontal cortex

## Introduction

Progress in biology resulted in an understanding of the diversity of species and individuals within a given species. Especially genetic findings demonstrated why individuals deviate from each other and how genetic variation may affect body and brain. Aside from such general observations that generally across mammals males are bigger, have more muscles, and are more aggressive than females, more specific variations were detected in the last century. For instance, individuals with Down syndrome show certain features of their brain which do not exist in normal subjects (3,23,33,34). Furthermore, it was speculated that other genetic deviations, such as two Y genes or a fragile X gene affect behaviour (18,31). From general and genetic biology it was only a small step to look into the brain and try to identify specific features which might be related to specific expressions in behaviour. So, it is established since long that a degenerated brain surface – as in Alzheimer’s disease – leads to intellectual deterioration or that damage to the frontal lobes may affect foresight, planning behaviour, wilful acts and moral judgment, and may lead to tendencies of disinhibition and perseveration (14,15,30,44,45). Persons with antisocial personality tendencies and murderers may even show structural abnormalities in their prefrontal cortex (36,37).

These observations given, it was, of course, only a small step to look for deviations which might be related to offending and delinquent behaviour (24,25). The present state of this research – which will have implications for prevention as well (40) will be outlined in this short survey.

## Genetic indices for violent behaviour

Genetic factors contribute considerably to the formation and function of neuronal networks (38). Quantitative studies in behavioural genetics indicate that the heritability of physical-aggressive behaviour amounts to roughly 50%. Hereby, forms of social aggression (e.g., verbal attacks) are less heavily genetically influenced than physical aggression. Furthermore, the heritability of instrumental forms of aggression seems to be genetically determined to a higher degree than those of impulsive aggression. Social behaviour is generally determined by a number of genes (“polygenetic effects”) whereby each gene contributes only to a minor degree. Therefore it is more adequate to speak of interactive genetic predispositions instead of responsible genes (42).

Progress in molecular genetics (linkage-analysis, candidate gene studies and genome-wide coupling analyses) allowed the identification of certain gene variants, which are associated with an increased risk for antisocial personality disturbances and are associated with a tendency for violence (13). Among the transmitter systems, especially serotonin (5-HT) was in focus, as it is involved in the modulation of emotions and in impulse control. A reduced release of 5-HT was observed in patients with personality disturbances and aggressive behaviour (39). Already in 1993, Brunner et al. (4) observed in a Dutch family tree a single defect – a nonsense-mutation – of the X-chromosomal monoaminoxidase-A-gene, which in males, but not in females, was associated with impulsive-violent behaviour and reduced intelligence. Impulsive outbreaks of violence (raping the sister, attempt to override the boss, setting fire, exhibitionism) were observed in this family. The gene defect was only of influence in males as they possess only one set of X-chromosome genes.

More important than genetic mutations are the much more frequent genetic polymorphisms which occur when there is more than one allele for a specific gene locus. By definition it has to occur in more one percent of the population (as otherwise it would be a mutation). A multitude of reports point to the role which an interaction between a specific polymorphism in the promotor(-regulating) region of the MAOA-gene and environment-controlled factors plays for violence. There exists a widely spread polymorphism in the promotor region of the MAOA-gene, which either leads to a high (MAOA-H) or a low (MAOA-L) *in vitro* expression of the MAOA-gene. Caspi et al. (6) showed that a combination of early child maltreatment

experiences and the polymorphism in the promotor region of the MAOA-gene, which causes a weak expression of the MAOA-gene, is associated with a heightened tendency of violence. These results were confirmed in a meta-analysis (20).

Functional and structural neuroimaging data in subjects with different polymorphisms of the promoter region of the MAOA-gene demonstrated that the weakly expressing genetic variant (MAOA-L) had a sex-specific influence on morphology and functions of specific brain structures which are involved in emotion and impulse regulation (5,29). Meyer-Lindenberg et al. showed that male and female persons with the MAOA-L variant was associated with volume reductions in limbic brain regions (amygdala, cingulate gyrus, hippocampus). Furthermore, it is associated with hyperactivity of the amygdala towards emotional stimuli and a reduced regulation of the amygdala by the orbitofrontal and anterior cingulate cortex (9). Compared to females, male possessors of this polymorphism have an increased volume of the lateral orbitofrontal cortex. Furthermore such men have a higher activation of the amygdala in certain emotion-related tasks, as well as an increased functional coupling between amygdala and ventromedial prefrontal cortex (VMPFC) (5,10,29). The more intense connectivity between amygdala and VMPFC was furthermore associated with certain personality features, as increased tendencies for rage and frustration and heightened reactivity towards threat postures.

In conclusion it can be stated that though the weakly expressing polymorphism of the MAOA-gene is not directly indicative for violence or delinquency, it still is related to structural and functional brain changes as well as to certain personality features which, in combination with certain negative life experiences, can – especially in men – lead to the development of a heightened impulsive aggressiveness and may dispose to a readiness for violence (1,2,43).

The effects of the MAOA-gene vary between ethnics, which rises the question of their generalizability. For example, a murderer of Algerian origin lived since more than a dozen years in Italy. His conviction evoked much international attention, as the court took into consideration that he possessed the lowly active variant of the MAOA-gene; because of this, his punishment was reduced. This judgment points to an up to now little discussed field, namely that of possible interactions between genes, environment, and brain.

## Epigenetics

The study of interactions between environment and gene expression is the field of a newly established discipline – that of epigenetics (7,8,28,41). Epigenetics stresses the fact that we are equipped with a large number of genes, many of them, however, may remain silent in the body life-long, while others are switched on (“expressed”) on the basis of environmental influences and then guide our behaviour. As most of the “sleeping” genes are activated from the early postnatal life onwards, this means that the developmental period is of strong influence for later and for life-long behaviour: The older we become, the more we are rigidly determined by our genes (35).

Recent data show that early maltreatment may have lasting negative effects. One such initial study was done by Fries et al. (11) who showed that children who had been subjected to poorly equipped orphanages during their first 3 or 4 years of life, still showed less release of binding hormones at ages 6 or 7, though they in the meantime had been adopted by US-American parents and integrated in their families.

Similarly, studies from Dorothy Lewis show that nearly all 18 year-old convicted murderers had been maltreated during their development, had had no father and mother and had had numerous psychiatric and neurological illnesses within their short life (21,22). It is also known youth with conduct disorder or callous-unemotional traits manifest changes in their brain: They may show amygdalar hypoactivity which prevents them from a proper recognition of fear expressions in the faces of others, or may show other deficits in emotion processing (10,16,17,19,26,27). Viding et al. (43) could show that in children with a specific genetic constellation antisocial and instrumental-aggressive behaviour could not be treated with methods such as time-out which otherwise are effective to correct social behaviour. These children show a low emotional reactivity, reduced anxiety, and a reduced ability to detect distress in others. Interestingly, a recent study found that reduced levels of fear conditioning during childhood are a significant predictive factor for later criminal behaviour during adulthood (12).

## Conclusions

It should have become clear from the above that a complex interplay between genetics, epigenetics, environmental stimulation and current life conditions is crucially determining the well-being and behaviour of an individual (22,23). Preventing criminality is therefore dependent on proper social, biological, and psychological constellations which may be in effect already from prenatal life onset on. The earlier there

is a chance towards proper environmental life conditions, the better appears to be the prognosis for an individual (32). Vice versa, the longer and the more there are adverse influences on an individual, the more likely it will become delinquent (21,22).

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# The relationship between COMT rs4818 polymorphism and serious violence behavior of male schizophrenic patients in Turkish population: A preliminary report

## Poster

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## Abstract

### Background and Aim

Despite many attempts to understand the biological basis of serious violence behavior in schizophrenic patients, the progress has really been slow so far. High heritability characteristic of schizophrenia and familial tendency of violence behavior provide a genetic basis for investigating the relationship between the violence behavior and schizophrenia. The role of catecholamine metabolism in the etiology of schizophrenia and close relationship between violence and brain regions (particularly prefrontal cortex) on which these catecholamines are effective have brought priority to COMT gene in that kind of researches. The role of COMT gene on violence behavior in schizophrenic patients could not be revealed consistently in the studies conducted so far. rs4818 is a polymorphism which shows a strong relationship with schizophrenia and causes a significant alteration in the function of COMT gene on the prefrontal region. The relationship between this polymorphism and serious violence behavior in schizophrenic patients has not been investigated by now. The aim of our study is to investigate whether or not rs4818 polymorphism of COMT gene is a determiner on violence behavior of male schizophrenic patients in Turkish population.

### Method

This study is a cross sectional case-control study. Thirty-seven schizophrenic patients who have committed serious violence behavior (homicide or life-threatening injury) and eighty-three schizophrenic patients who have not committed violence behavior are included in this study. The polymorphism was analyzed using polymerase chain reaction and restriction fragment length polymorphism assay. Genotype and allele frequencies were analyzed with chi-square test.

### Findings

Schizophrenia patients who have committed and have not committed serious violence behavior do not show a statistically significant difference in terms of genotype and allele frequencies of COMT gene (rs4818 polymorphism).

### Conclusions

It seems likely that the rs4818 polymorphism of COMT gene which shows a strong association with schizophrenia in general, does not show a significant relationship with severe violence behavior in Turkish male schizophrenia patients. However, large sample studies might be needed to refute or to confirm this conclusion.

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## **Educational goal**

1. To understand biological and genetic basis of violence behaviour in schizophrenia.

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# Chapter 5 – Ethical and legal perspectives on violence

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## The collaboration between mental health workers and the local police in the management of imminent aggression and violent behaviour: The complementarity between two different approaches and assignments

### Workshop

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### Abstract

The basic assumption of the interactive workshop is that (1) the prevention of destructive and imminent violence is an assignment of different players and (2) it is appropriate to make a clear distinction between “treatment” and “order enforcement”.

We will report on the collaboration between the University Psychiatric Centre of the Catholic University Leuven, Kortenberg (B) and the local police HerKo. HerKo is one of the smallest of the 196 police zones in Belgium (65 employees, 51 operational police officers and 14 civilian staff). The University Psychiatric Centre in Kortenberg is a psychiatric hospital with more than 15 specialised treatment programs (460 treatment places, 500 employees).

Within the hospital the nursing expert group “Coping with Aggression” (CWA) has a core mandate in the area of prevention of incidents of aggression and the reduction of restrictive procedures. This group consists of a dozen of nurses, who offer monthly training sessions for all employees and a yearly prevention training for the nursing staff on each ward. The main focus of their contribution is not on defence techniques but on prevention and interactive skills. The members of the CWA are nurses, who go to wards as colleagues to analyze situations. This has two important advantages: they avoid defensive reactions, as they are not in a hierarchical relationship, and they are sufficiently familiar with the specific interventions. The course, which was initially mainly theoretical, explaining the principles and assumptions (Crisis Development Model) has gradually focussed more on skills development through role-playing.

However, sometimes situations are escalating and outside help is needed. This support is based on the core assumption that it is appropriate to make a clear distinction between “treatment” and “order enforcement”. This way, caregivers can hold on to the role of clinical practitioners, and can more easily restore the therapeutic contact and continue the treatment. Setting limits to severe physical threat or severe aggression belongs to the specific expertise of the police.

The hospital regularly calls for assistance from HerKo, i.e. in case of alarming disappearances and severe incidents of aggression. Furthermore, the police intervenes in cases of compulsory admission, conflicts between patients and neighbours, complaints from patients about theft, sexual offences, etc. From this point of view the psychiatric hospital and HerKo can be seen as partners in the pursuit of an integrated security.

Therefore the leaders of the police corps contacted the hospital management to negotiate working arrangements and job demarcation. Steps were taken to involve the staff of both organisations maximally in the development of this process. The aim was to get a better view on the specificity of both organisations

and their responsibilities and duties, expectations and limitations. Confronting prejudices, incomprehension and misunderstanding regarding each other's role, it became possible to work out common procedures in 2 important domains: interventions for severe incidents of aggression and alarming disappearances.

In the interactive workshop this democratic process and the concrete results of this cooperation will be presented. The basic assumptions and differentiation of specific contributions of policemen and caregivers will be discussed.

## **Educational goals**

1. learn to elaborate an optimal cooperation between psychiatric care and police, based on clearly defined focus and orientation, in particular treatment versus order enforcement
2. the development of common procedures by the employees of both organizations

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# Instrumental violence in relation to a selective serotonin reuptake inhibitor

## Paper

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**Keywords:** Instrumental violence, legal aspects, SSRI, classification

## Introduction

Sometimes more than one expert advises the court and different opinions are reported about the case they examined. For the court to be able to get an overall impression, it must at least be aware of the methods of the various expert witnesses and actors (public prosecutor, accused and behavioural expert, medical specialist) in order to arrive at a meaningful integration. In the determination of accountability the following questions come up: 1 Was there a pathological disorder at the time the punishable offence was committed, 2 If yes, is the causal relationship between the disorder and the punishable offence adequately plausible, 3 If yes, what assessment should be given to accountability—in the light of the first two questions and all circumstances of the case? A disorder contributes to recidivism in this point of view, whereas in the pattern of questions of the behavioural expert, the question of recidivism is only asked after the question about a relevant disorder. In criminal court cases it is important to examine whether the crime is or is not premeditated since premeditated crimes are punished more severely. If a person's (instrumental) violent behavior can be associated with a mental disorder the court may pronounce a verdict involving diminished responsibility and possibly court supervision (Mobbs, et. al., 2007).

In this case we like to discuss the relation between use of the anti depressive drug paroxetine, a selective serotonin reuptake inhibitor, and a fatal tragedy as a result of instrumental violence in a family where the mother was suspect to kill her husband and daughter a few days after use of the selective serotonin reuptake inhibitor. After that she tried to kill herself but survived the crash with her car.

## Description of the case

The woman had been suffering from bouts of depression since 1996, for which she received medicinal treatment every time, since 2003 with the drug paroxetine (SSRI). She also suffered a sub-arachnoid haemorrhage, the exact location of which was never determined. Since June 2008 she was once more in a seriously depressed state and on 6 August the locum GP prescribed once again paroxetine 20 milligram's once daily. She did not fill this prescription. When she consulted the locum GP she had discussed her need of psychological aid and her daughter very much wished she would accept this kind of assistance. She had promised her daughter she would agree to this kind of treatment, but only after discussing it with her own GP, which was the reason why she had not yet taken the prescribed drug. On September 3 she consulted her own GP and as in the meantime no improvement had been seen in her depressive complaints the prescribed dose of paroxetine was augmented to 20 milligrams twice daily. Arriving home, for unknown reasons, she started at once with three tablets of paroxetine and also two tablets of oxazepam. The following day she took two more pills of paroxetine, but no more oxazepam.

In the night of 4 and 5 September, after midnight, the woman met her daughter at Schiphol Airport. Her daughter inquired after the discussion with the GP. She said she had chosen the drug and not the psychological assistance, unlike her earlier promise to her daughter. The daughter got very cross with her. This conflict created a bad atmosphere in the home and after her husband and her daughter had gone off to bed, she was very shaken and sad.

She sat on her settee and was caught by the overwhelming feeling that she did not want to live any more. At the same time she felt that she could not cause the grief about her suicide on her husband and daughter and she decided to take them with her in death. She then made fairly extensive preparations of her farewell and subsequently went looking in the home for a means to kill them with: she found an axe in the garage. She struck her husband in the head several times and then thought: "two more to go", meaning herself and her daughter. After having killed her daughter as well, she tried to commit suicide by running her car into a tree. She had by then already called the emergency number (4.59 am) and announced that she had

committed murder. She got wounded in the collision with the tree and was taken to hospital. At 9.05 am blood samples were taken, which were later analysed by the NFI (Dutch Forensic Institute). In the blood traces ( $< 10$  ng/ml whole blood) of paroxetine were found.

According to the verdict the locum GP had prescribed once again paroxetine to the woman in a dose of once daily 20 milligram's (1 tablet), but that she did not fill the prescription. This was confirmed by the fact that the prescription was recovered in the woman's home, and also by the pharmacy's records which showed that no medication had been delivered to the woman between 17 December 2007 and 3 September 2008.

In the consultation with her own GP on 3 September 2008 the dose was augmented, because she (the GP) indicated that she had supposed the 20 milligram's had not been effective. Had the woman started her medication on 6 August, she would have been taking one tablet daily of the drug for 4 weeks, and there would not have been any improvement after 4 weeks' medication. According to the standard GP guideline doubling the dose was then indicated. The woman later testified that she had taken three tablets of paroxetine on 3 September and two more on 4 September.

The toxicological analysis by the Dutch Forensic Institute (NFI) showed traces of paroxetine in her blood and the conclusion of the NFI was that the concentration was so low that it could not have influenced her behaviour. But later, during the trial pharmacological experts agree that the conclusion is wrong in several respects. On the basis of one single measuring of whole blood and quite some time after the drug has been ingested, it cannot be determined how high the concentration was quite soon after taking the drug. Furthermore, in the use of serotonin reuptake inhibitors (occasional) cases are known where normal *short-term* use was followed by an outburst of violence.

## Discussion and conclusion

If it is so that violence, as a side effect, is linked to the presence in the blood of a relevant quantity of the serotonin reuptake inhibitor, then her violent behaviour could be explained by the use of the drug. Paroxetine has for instance a dose-dependent effect on the dilation of the pupil (Nielsen et. al., 2010). We have to add that only in those cases when at the time of the actions the accused lacked any insight in the scope of her actions and their possible consequences, such a situation could lead to acquittal because intent is lacking in those specific cases. Such cases are rare, evil intent can then not to be proven. Also conditional intent can then not to be proven. It must be evident that she did not know and could not know that such consequences might result after taking the drug. However, mostly some insight in the scope of his actions can be found in the accused. The legal practice shows that in such cases an intent defence is often unsuccessful.

Sometimes the intent defence is unsuccessful, because own culpability is taken as the starting point. Intent is then assumed on the basis of *culpa in causa*. Own culpability might be assumed if it is determined that the accused has taken more medication than was prescribed, and that she also is aware, or can be aware, that a higher dose might lead to committing violence.

If in the case under discussion the woman took three tablets on her own accord, because she thought that 'there was no harm in that' and also that she has not heard or read anywhere that there could be harm in that, own culpability is out of the question. But in the case that it was known to the woman that this side effect, in this case violent behaviour, may occur, that she was aware of this, then ingesting the dose can be seen as own culpability and intent can be assumed. The discussion during the trial will then probably be whether or not the side effect is a rare one. If the side effect hardly ever occurs with users of the drug, it is reasonable for the defence to plead that own culpability is out of the question. When the concentration in the blood is of no importance and she never had a similar reaction in previous treatments, taking three tablets instead of the prescribed two cannot be held against her in relation to the violence against her daughter and her husband.

In trying to establish a relation between the violence and the use of paroxetine the experts disagree on several topics. Was it a violent subtype of depression or the overdose of paroxetine the second day after starting the drug? Was it a delusion the thought she had that the only way to protect her husband and daughter from the experience that she wanted to end her life was to kill them. Or was it a state of depersonalization caused by heavy stress, sleep deprivation. Was it the side effect acathisia with dysphor feelings? Was it a sub-arachnoid haemorrhage made her more susceptible to an undesired effect of paroxetine?

The woman had the time and the opportunity to reflect on and to account for the consequences of her intended actions. It is remarkable that obviously in the period that she was preparing her actions the horrible nature of her intentions did not make her correct herself. Apparently she was convinced that her actions would spare more grief. The question is whether she did not experience the appalling nature of her intended actions as such because of the effect of the paroxetine on certain areas of the brain that usually have a correcting effect. Antidepressants have effect on certain psychological functions short after intake. Harmer and colleagues (2006) found antidepressant drug treatment modifies the neural processing

of non conscious threat cues. Volunteers receiving citalopram showed decreased amygdale responses to masked presentations of threat. Paroxetine single acute administration diminished brain activity induced by motivation in healthy subjects (Marutani et. al., 2011).

To sum up: depending on the advice the experts, a wide range of possibilities is presented which only enter the picture when a disorder is suspected and when that disorder is linked to the facts the accused is charged with.

In conclusion, when paroxetine has an unknown, recorded, direct effect (distortions of perception, cognitive distortions, depersonalisation, acathisia) but is not dose-dependent; the woman could have been acquitted because intent is lacking. But if the effect turns out to be dose-dependent and she was aware or could have been aware of this, culpability, culpa in causa, enters the picture: an unintended or unpursued effect but nevertheless the result of an initial overdose. If, as an element of the affliction, a temporary delusion exists (caused by the drug) then complete unaccountability can be put forward, resulting in criminal disposition. If that is not the case and only the affliction depression contributes to the action, she can only be held partly accountable. Should the chance of re-offending be deemed small, detention in a mental hospital as a possible court decision is to be deserted and ordinary punishment remains.

There are many models of violence and aggression and according to Weinschenker and Siegel (2002, 237-250) many of these models can be brought back to the bimodal classification with instrumental (predatory attacks) and impulsive (affective defense) components. In this case the type of violence was instrumental, it was planned and careful executed. There are more cases like this for instance the case of Joseph Wesbecker who shot several people in the morning of 14 September 1989.

More attention must be paid to the mental debilitating influence of medication on certain psychological functions shortly after intake. Although a monocausal relation is a necessity for a clear judgment we believe that is never the case. How to judge the accountability in this case depends on the position the expert takes and the reader can ask himself what would I advise the court when a woman in her sixties, with no history of violence, killed her husband and daughter a few days after taking paroxetine in a state of depression.

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# Violence risk assessment: Striking a balance?

## Paper

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## Background

Workplace violence has increasingly been accepted as all too common in healthcare. Research papers discuss the concept using terms like epidemic and draw comparisons between health care workers and police with respect to risk for violent encounters. Specific areas of healthcare are particularly vulnerable to acts of violence, namely psychiatry/mental health programs. Several strategies to address the issue of violence have been introduced nationally and internationally with mixed results. Not uncommonly, change in health care is influenced by pressures from outside agencies or the public in reaction to a dramatic or serious incident of aggression. Such external forces can direct the response from health care institutions and may limit the ability to formulate processes in a thoughtful and systematic way. Strategies put in place to address the issue of violence can be very effective clinically while simultaneously troubling from a legal and ethical perspective.

Reducing the incidence of aggression and maintaining the safety of patients and staff is impacted by resource availability. Urging staff to focus greater attention to an issue such as violence prevention without support or sufficient resources may ultimately impact the rights of those involved. Implementing strategies that address specific aspects of violence or serve to fix a particular problem risks narrowly focusing on one piece of a larger puzzle, ultimately impacting the legal rights or ethical principles of those involved.

## Violence Prevention Strategies

Typically strategies focus on the patient (or visitors/families), staff, or the institution (Lanza et al., 2009). Interventions focused on the patient can include assessments or flagging health care records of those with previous violent/aggressive incidents (Lanza et al., 2009), while staff focused interventions often include training and education on violence risk assessments and strategies to engage with patients and visitors (Lanza et al., 2009). Finally, interventions also occur at the institutional or organizational level through the development of facility wide policies such as “zero tolerance policies” (Lanza et al., 2009). While each of these strategies may be effective at reducing aggression they may also raise specific ethical questions or legal concerns for the patients and the staff. Using an ethics framework to guide us as we explore the issue of violence may allow us to better appreciate the context in which the violence and aggression occurs. Using an ethics lens we can consider whether or not we are treating individuals fairly as we pursue new initiatives to improve safety. Have we considered the preferences of the patients, the staff and the organization? Have we considered whether we might do harm, or are we doing good? Is it possible we are exploiting others or being paternalistic? Adopting an ethics framework to assess our violence prevention strategies may identify opportunities within our existing strategies and help to inform future initiatives as we continue striving to improve safety.

## Patient Focused Opportunities

### Clinical Assessment

Raising awareness of the issues of violence and aggression can increase vigilance and decrease tolerance. Maintaining safety for patients, visitors and staff while simultaneously avoiding the over-examination of an individual’s personal history or applying significant restrictions on their legal rights can present challenges. Conducting risk assessments requires the collection and ultimately the dissemination of sensitive patient information. How we collect this information, how long we rely on it, and who we share these assessments with are important questions fraught with ethical considerations. Despite the attention paid to developing risk assessment tools, the skills in accessing the information in a manner that recognizes the potential vulnerabilities of the patient in the process is only more recently being addressed in the literature, as in the example of trauma informed care. Using an ethics framework to critique our current assessment tools or their revision and as a resource when new tools are being considered may help to reduce future ethical and legal conflicts for those involved.

Engaging Patients

### **Community Meetings**

Opportunities for engaging our patients on the topic of violence also exist. Community meetings on inpatient units have long been used although inconsistently across mental health programs. The purpose typically is to provide an opportunity for sharing and to establish a forum for raising issues and concerns related to service delivery. Although short stays in hospital and increasing patient acuity have likely influenced the perceived usefulness of this strategy, community meetings may help increase our understanding of the context of violence. Giving voice to all members of a community addresses ethical principles such as justice and autonomy.

During a recent search of the violence literature, only one paper was found that specifically linked community meetings with violence reduction. The study found empirical support for the use of community meetings in reducing violence in fact, an 85% reduction was recorded from pre-treatment to treatment. Additionally, the unit studied reported an average length of stay of 5-14 days and the reduction in violence was demonstrated over a 20 week period suggesting a reduction in violence and aggression can occur despite high patient turnover (Lanza et al., 2009).

### **Expectations/satisfaction surveys**

It is well understood from various programs of research that implementing changes in practice fails when the culture of the team/program acts as a barrier to effective or thorough integration of new ideas. In order for change initiatives to achieve success involvement from all members of the team is essential. In health care organizations the team often refers simply to the healthcare team. Patients and more specifically patient behaviour is often front and center in the discussion related to violence and aggression yet patients are inconsistently included in the dialogue regarding strategies to reduce the prevalence of violence.

Satisfaction or expectations surveys are not without their own methodological limitations. Questions can be misunderstood, response rates can be limited and the information gathered can be undervalued in program planning. Despite these limitations asking patients for their thoughts in a timely manner and providing them a safe mechanism by which to share their observations recognizes their role in the community while addressing ethical principles. Large organizations often rely on broad institutional surveys, regrettably, specific unit or program representation can get lost. Specific units may wish to ask patients to voluntarily complete their own unit based surveys specific to the issue of violence and aggression, particularly when new policies or initiatives are being implemented.

### **Relationships**

In order to overcome the limitations of survey methodology as it relates to capturing patient satisfaction one significant factor to consider is the quality of the relationship. Despite the association of risk for violence and the therapeutic alliance (Hamrin, Iennaco, & Olsen, 2009), establishing a therapeutic relationship is a skill that should not be assumed to exist among all mental health staff in the same way. Various levels of experience or educational preparation can impact the skill level of each staff member. Although educational strategies can increase skills in establishing therapeutic relationships among staff, providing opportunities to practice these skills and receive feedback from their colleagues or supervisors in a safe and constructive manner fosters both competence and confidence. Additionally, research suggests that staff often misidentify the factors that precipitate violence as being strictly patient related and are less insightful about their contribution to the interaction (Hamrin et al., 2009). Using an ethical framework to guide our violence prevention programs would perhaps encourage staff to explore their own personal attributes and experiences. Providing both the techniques and the opportunities to address the need to reflect on their own values and beliefs may further enhance the quality of therapeutic relationships.

## **Staff Focused Opportunities**

### **Clinical Assessment Skills**

Implementing the use of specific scales for assessing risk is one method of attempting to standardize assessments and improve their accuracy. Despite the support for assessment tools, research has concluded clinicians disagree with one another when conducting risk assessments (Elbogen, 2002). It has been suggested that the context in which the risk assessment occurs may influence the risk factors being utilized by clinicians (Elbogen & Huss, 2000). Simply providing training to staff on the assessment tool may not improve our ability to accurately predict which patients will become violent or aggressive. Higher rates of agreement among clinicians using assessment tools seems to increase accuracy, thus models that seek consensus among clinicians may produce better predictions (Elbogen, 2002). Developing consensus requires effective team communication and a willingness to listen to alternate perspectives when making a decision. Using an ethics framework to guide team discussions can help to identify alternate perspectives and provide cues for facilitating a healthy discussion.

### **Training/Education**

Many programs and initiatives aimed to reduce violence/aggression in psychiatry have focused on staff related factors, specifically the need to provide greater opportunities for training on assessment skills and strategies for safe intervention. Many of these programs have been successful however “staff training should not be considered a panacea” (Livingston, Verdun-Jones, Brink, Lussier, & Nicholls, 2010, p15). Violence prevention programs will be most effective if they judiciously recognize the influence of the individual, the environment and the clinical variables (Livingston, 2010). Using an ethics lens may help to make those observations more routine.

Strategies broadly capable of addressing these multiple influences include our ability to communicate with our patients. One such strategy is *motivational interviewing* (MI) (Karzenowski & Puskar, 2011). The models basic principles of change include: expressing empathy, avoiding arguments, supporting self efficacy, rolling with resistance and developing discrepancy (Karzenowski & Puskar, 2011). These principles are supported through the eight steps of MI that promote the therapeutic process including establishing rapport and sharpening the focus specifically on what the patient wants to change (Karzenowski & Puskar, 2011).

MI proved to be overwhelmingly effective among research reports investigating its usefulness in the clinical setting (Karzenowski & Puskar, 2011; Madson, Loignon, & Lane, 2009), particularly if used over long term periods. Interactions as brief as 15 minutes have also proven useful, suggesting that MI could easily fit within an inpatient setting. Significantly, none of the research reported harm or adverse events associated with the use of MI (Karzenowski & Puskar, 2011). Perhaps most compelling is the patient centeredness of the technique; the focus is on empowering the patient to work toward change (Karzenowski & Puskar, 2011), and the benefit of that to violence reduction (Hamrin et al., 2009). Investing in staff training on techniques like MI has the potential to improve the quality of the therapeutic relationship thereby reducing the risk for violence. Focusing on the patient’s goals rather than our own or discussing areas of disagreement respectfully while recognizing diverse perspectives may become common practice among teams using an ethics framework.

### **Communication**

In order to improve communication skills with patients staff first need to be able to communicate effectively with one another. Dedicated time and resources to develop and practice communication skills including listening (Hamrin et al., 2009) are important components of addressing violence in healthcare. Communicating with our peers is in many ways dependent on our ability to reflect on our own personal communication styles. Our ability to acknowledge our own personal reactions and vulnerabilities can assist us as we attempt to employ techniques such as MI or disengage from situations that are provoking non-therapeutic responses. Mental health units that treat both staff and patients with dignity and respect “produce more humanistic treatment for all individuals and, thus, decrease interpersonal violence” (Hamrin et al., 2009, p221).

### **Attitudes**

Differences in what is perceived as violent or aggressive behaviours exist among all individuals involved. This is reflected in varying degrees of tolerance for patient behaviour. According to one paper, what constitutes violence or aggression often relates to how the particular care provider “felt” (i.e., threatened or not) in response to a particular behaviour, rather than on the patient’s behaviour itself (Reimer, 2009). What makes us feel threatened can be the result of our own experiences either professional or personal. Providing opportunities to explore these reactions and practice skills to restructure our responses will no doubt have an impact on the level of violence and aggression on the unit while also maintaining staff wellness and preventing job dissatisfaction.

## **Organizational Opportunities**

### **Policies**

Many organizations have adopted zero tolerance policies, typically intended as a step toward supporting staff who had long believed violence was “part of the job”. Policies on zero tolerance often included communication campaigns such as public signage indicating that facilities were “violence free”. More recently, the language of zero tolerance and how consistently the concept is defined and understood is being questioned. Furthermore, researchers are observing that such policies can “attribute blame to patients and encourage intolerance by healthcare workers (Holmes, 2006). Behr, Ruddock, Benn, & Crawford (2005) recognize the tension that can exist when conflict arises about how and when zero tolerance policies should be instituted. The authors argue that an ethical framework is needed to provide opportunities to consider multiple points of view (Behr et al., 2005).

Restraint minimization policies and respectful workplace policies are also increasingly common but will no doubt face similar conflict as they attempt to fulfill their purpose. Both examples have a body of research evidence to support their development and implementation. Despite the evidence as these policies are operationalized and specific situations are addressed either in the clinical setting or in the public discourse, questions will be raised regarding the legal and ethical implications of such documents.

## Conclusion

The issues of violence and attention to safety will no doubt remain constant aspects of service delivery in healthcare and specifically in mental health. Significant accomplishments have been made in strategies specific to patients, staff and the broader organization. In order to continue moving forward we should consider developing processes that consistently recognize the ethical and legal implications of violence in our work. Adopting an ethics framework may help balance our responses to violence prevention and reduce the chances of doing harm while trying to accomplish good. The constant pressures both within the system and outside are also likely to remain constant; recognizing the inherent ethical issues present in human interactions and developing structures to address them may help to maintain both the safety and the health of staff and patients.

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# Prevalence, nature and criminal prosecution of aggressive incidents in psychiatry

## Paper

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**Keywords:** Prosecution, prevalence of violence, nature of violence, criminal law

## Introduction

In psychiatry, health care workers have to cope with a lot of violence [1-2]. These aggressive incidents have led to a large amount of research, which mainly focuses on the prediction and prevention of violence. Nevertheless, the number of aggressive incidents is high. It also appears that a relatively small group of patients cause a majority of the violent assaults on wards and that these patients are responsible for most of the serious injuries [3]. Efforts in the aggression management in this group of patients might reduce the amount of aggression substantially. Especially for these patients who repetitively cause violent incidents (the threat of) prosecution might result in the prevention of future violence [4].

In this study we examine the literature on the prosecution of psychiatric patients who commit a violent offence on the ward. Subsequently, some empirical results of a study on prevalence, nature and criminal prosecution of violent incidents on psychiatric wards in The Netherlands are presented.

## Literature

A literature research shows that the possibility of seeking legal action against violent patients has hardly been studied. In the past 25 years only seven studies discussed this question, including only two studies that describe some empirical data on case studies [5-6]. A possible judicial reaction starts with the report to the police. Studies do show that victims seldom report incidents to the police [7-8](see also Harte, Theuws & Van Leeuwen, elsewhere in these Proceedings). But if an incident is reported to the police, the judicial authorities are reluctant in investigating the incident and in prosecuting and convicting the patients. Public prosecutors sometimes argue that prosecution is needless, since the offender is already incarcerated [9]. Another argument is that psychiatric patients belong in a hospital, and not in jail. Regularly, it is concluded (without consulting an independent expert in psychiatry) that the offender was not guilty by reason of insanity [10-11]. Quite frequently violence is regarded as a risk that comes with the job in psychiatry [9-10].

In certain cases, however, there can be good reasons to investigate a violent incident committed by a psychiatric patient or to even prosecute this patient. First of all, despite the mental disorder, the patient can be competent in many ways [9, 12]. Moreover, by bringing the incident into court, a treatment in a forensic hospital might be imposed. In that case, the aggressive patient is placed in a more secure facility with more intensive treatment options. This treatment is mainly aimed at bringing down the risk of recidivism and protecting society. Investigating or even prosecuting can also have a deterrent effect. The offenders, as well as their fellow patients, are confronted with the consequences of violent behavior[4]. In addition, investigating or even prosecuting the offence shows that the victim is supported and that the incident is taken seriously.

However, in practice it seems that there is a lack of clear guidelines and policy: incidents are handled in divergent ways. Therefore, a research project started, called Violence in Psychiatry that aims to develop guidelines about the possible involvement of criminal justice. A first step in this project is a systematic research on the prevalence and nature of violent incidents in psychiatry.

## Method

Dutch health care workers in psychiatry were requested to fill in an online questionnaire on their personal experience with violent physical incidents caused by patients in the past five years. Possible consequences of these incidents, like injuries, medical treatment and sick leave were also registered, as well as possible judicial reactions, like reporting to the police, prosecution and conviction.

In order to approach the care workers, a national campaign was started. For this campaign a website was developed ([www.gewelddindepsychiatrie.nl](http://www.gewelddindepsychiatrie.nl)) with information about the research project. This website also

presents a Committee of Recommendation, which is a group of prominent persons in the field of psychiatry who endorse the importance of this research, and information about other stakeholders and parties who support this research. Flyers about the research were distributed and a Facebook-page was opened. Respondents were also approached with help of a union for nurses (NU'91) and with announcements in newsletters of the Dutch Association for Mental health and Addiction (GGZ Nederland). Respondents who contacted the researchers as being interested to participate received an e-mail with a direct link to the questionnaire and a request to send this further to colleagues and other acquaintances, working in psychiatry. In this way, also a so-called snowball effect was put in motion.

The questionnaire was online in June, July and August 2011. This means that at time of writing this paper the data collection still proceeds. The response and reactions are overwhelming. After one month about thousand care workers in psychiatry completed the questionnaire. The researchers also received many emails from victims who wanted to share their experiences.

## Preliminary results

While writing the paper, the data collecting is still going on. To have a first glance, the data of the first hundred respondents were examined. As can be seen in Table 1, 60 percent of the respondents were victim of at least one physical violent incident in de past five years. The hundred respondents experienced in total 178 incidents. This means that the average number of incidents over the past years is 1.78.

*Table 1 Number of incidents in the last 5 years (100 respondents)*

Number	Frequency
No incidents	40
1 incident	14
2 incidents	13
3 incidents	10
4 incidents	6
5 incidents	5
>5 incidents	12
Total number of incidents	178

Table 2 shows the nature of these incidents. The most frequent incidents were threatening with an assault (with or without an object or liquid). Quite a number were victimized by a severe offence, like hostage, attempted stabbing, strangling or biting. The respondents were allowed to give more answers per incident.

*Table 2 Nature of the incidents (178 incidents)*

Nature:	Frequency
Threatening physically	58
Beating, kicking	60
Threatening with object, liquid	46
Throwing with object, liquid	37
Fire setting	16
Hair pulling, scratching	10
Attempted stabbing	5
Attempted strangling	4
Hostage	3
Biting	2
Assault sexually	1
Various	3

As can be concluded from Table 3, a majority of the incidents didn't result in physical injury. At the same time Table 3 shows that quite a number of the incidents were severe.

*Table 3 Nature of physical injury (178 incidents)*

Nature:	Frequency
No injury	103
Bruising	54
Balance disorder	2
Concussion	1
Fracture	1
Burns	1
Bites	1
Stab wounds	1
Damage to teeth	1
Injured back	1
Unconscious	1
Piece of finger amputated	1
Torn muscle	1

A first and necessary step for prosecution is the report by the victim or his employer of the incident to the police. In Table 4 it appears in 54 of the 178 cases (30,3%), the offence was reported to the police (see also Harte, Theuws & Van Leeuwen, elsewhere in these Proceedings, for reasons (not) to report an incident to the police). In 22 cases the incident was further investigated by the police or the public prosecutor. This may implicate that the offender or witnesses have been heard. In the end, three of the 178 incidents were brought into court. At the moment of writing this paper, two offenders had been convicted.

*Table 4 Reaction to 178 incidents*

Reaction:	Frequency	Percentage
Reported to the police	54	30,3 %
Incident investigated by police or public prosecution	22	12,4 %
Incident brought into court	3	1,7 %
Offender convicted	2	1,1 %

## Conclusion and discussion

The results presented here are only a small selection from a large scale empirical research on the prevalence, nature and criminal prosecution of aggressive incidents in psychiatry. It can be expected that the collected data are in some way selective. Care workers who experienced severe incidents, are probably more willing to cooperate in this research. Therefore, it cannot be concluded that about 60 percent of the Dutch care workers in psychiatry have been the victim of at least one physical violent incident. The data do show, however, that violence is a serious problem that can cause severe psychological injuries.

The aim of the project is to develop guidelines to support the decision making processes in reaction on a violent incident, like on reporting to the police and prosecuting or not. It seems that judicial authorities hardly have an idea of the severity, extent and consequences of violent incidents in psychiatry. To show the seriousness of this problem, a study on the prevalence and nature of the incidents was performed. Data from more than thousand respondents have been collected, making it possible to describe the nature and consequences of violence on psychiatric wards as well as (the underlying reasons of) the actions in response to these incidents. By facing the problems and dilemmas and developing an appropriate prosecution policy, a contribution to a safer (work)place for care worker and patient can be achieved.

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# Reasons (not) to report a violent incident in psychiatry to the police

## Paper

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**Keywords:** Reporting to the police, violence on the ward, criminal law

## Introduction

The number of (severe) violent incidents against staff caused by psychiatric patients is high. Judicial authorities are often reluctant in prosecuting and convicting the patients. A possible judicial reaction to a violent incident generally starts with the report of the victim to the police. However, there is evidence that only a minority of the violent incidents is reported [1-2]. In this study we examine what the reasons for victims are (not) to report an incident to the police. For that purpose, we consult the criminological literature on willingness to report, of victims in general. We complement these conclusions with reasons that are relevant for the victims in psychiatry. Moreover, some preliminary results of a descriptive study on the prevalence of violent incidents in psychiatry are presented. We will focus on the considerations of care workers, who are the victim of an incident, in their decision (not) to report this incident to the police.

## Literature

The process before the decision (not) to report to the police can be viewed from an economical, psychological or a sociological perspective. According to the economical perspective, the victim makes a cost benefit analysis in order to make a rational decision [3-4]. If the costs are higher than the benefits, the victim won't report an incident to the police, and vice versa. The severity of the incident, and the chance that the report will result in a prosecution, are factors of great importance making reporting more relevant to the victim [5-9]. Also, if necessary for a payment by an insurance company, reporting is likely. A cost factor might be the time it takes to report the incident [3].

In psychiatry, the chance that reporting an incident to the police results in prosecution is quite small [10]. Although the incidents in psychiatry can be very severe, judicial authorities seem to be reluctant to prosecute psychiatric patients for several reasons. First, they might argue that psychiatric patients are already incarcerated and are therefore no risk for society [11]. Or they conclude (without consulting a psychiatrist) that the suspect is not guilty by reason of insanity, because of his psychiatric problems [12-13]. Moreover, some prosecutors think that being a victim of a violence incident is a risk that comes with the job [11-12]. However, in certain cases prosecuting can be useful. Despite a mental disorder, a psychiatric patient may be competent in many ways. Treatment in a forensic hospital might be imposed, aimed at protecting the society by reducing the risk of recidivism. Moreover, prosecuting can have a general as well as individual deterrent effect [14].

Psychological factors also play a role in the decision to report or not. If the offender and the victim are known to each other, the victim more often prefers to settle the problem informally [4]. In some cases the victim doesn't want to disturb the therapeutic relation, or thinks that he is responsible for the incident [11-13, 15]. Some others fear any retaliation by the offender. It is also unlikely that the incident is reported, if people in the direct environment are not supportive, or if victims already have unpleasant experiences with contacting the police [9]. Victims, however, are willing to report if they believe that the offender needs to be punished [3] or to make clear that this behavior is unacceptable. The victim should realize, however, that in practice the chance that the offender is prosecuted and punished is quite small.

Social structures also influence the willingness to report. It appears that the policy of the institution has a large effect on the willingness to report to the police. In organizations that have rules or protocols in case of aggression, the victim is more likely to report the incident to the organization and not to the police [4, 8]. If the employer doesn't indicate the possibility of a report to the police, it might not come to the victim's mind. Sometimes employees have divergent ideas about whether or not violence should be seen as part of the job. It is the employer's task to create an environment where individual opinions are accepted.

Apart from the economical, psychological en sociological factors, it appears that care takers in psychiatry, who become the victim of a violent incident, are reluctant to report to the police because of their fear to break the rules of professional confidentiality [13, 16]. It is also the employer's task to inform and support the employee on this matter.

## Method

For the study Violence in Psychiatry, Dutch care workers in psychiatry were asked to fill in a questionnaire on their experience with violence on the ward in the past five years (see also Harte, Van Leeuwen & Theuws, elsewhere in these Proceedings). The data collection took place in the period June, July, and August 2011. In this paper we present a preliminary analysis of the first hundred responses.

## Results

Exactly 60 of the first hundred respondents who completed the online questionnaire on violence in psychiatry had been victim of in total 178 violent incidents on the ward (over the last 5 years). Apart from the nature of these incidents and the physical injury (see also Harte, Van Leeuwen & Theuws, elsewhere in these Proceedings), respondents were asked whether or not these incident had been reported to the police. In a majority of the cases, 124 of the 178 incidents (69.7%), the victims decided *not* to report the incident to the police. The victims were asked for what reasons they had decided not to report this incident to the police. The results are displayed in Table 1. The respondents were allowed to give more answers per incident.

Table 1: Reasons not to report an incident to the police

Reasons:	Frequency
Reporting was not necessary	54
Incident was not severe enough to report to the police	31
The incident was handled within the institution	26
Aggression is seen as an occupational hazard	18
Didn't come to the victim's mind	12
Fear of retaliation	14
Reporting to the police is seen as useless	13
Victim has bad experiences with reporting to the police	10
Victim was afraid to disturb the therapeutic relation	9
Patient was seen as irresponsible because of mental illness	5
Reporting was to stressful for the victim	3
Lack of time	2
Victim thought he was self to blame for the incident	1

From the results in Table 1 it can be concluded that the reasons not to report are mainly economical. It was argued that reporting was not necessary (n=54) or that the incident was not severe enough (n=31). Some had experienced that reporting is useless (n=13) or they had bad experienced with reporting (n=10). Some concluded themselves that the offender was not to blame because of his mental illness (n=5) and few said that they had had no time to report (n=2).

Certain victims didn't report to the police because they feared retaliation by the offender (n=14). Other psychological reasons not to report were the fear to disturb the therapeutic relation (n=9), the stressfulness of reporting (n=3) and the fact that the victim thought he was self to blame for the incident.

That the institute plays quite an important role in de decision not to report can be concluded from the fact that the incident has frequently been handled by the institution (n=26) or the fact that the victim didn't thought of the possibility to report (n=12). The fact that incidents are seen as an occupational hazard (n=18) might also be the result of the instituted policy against violence.

In response to 54 of the 178 incidents (30.3%) the victim reported to the police. These victims were asked what their motive was to contact the police. The results are presented in Table 2. The respondents were allowed to give more reasons per report.

**Table 2: Reasons to report an incident to the police**

Reasons:	Frequency
To set a limit on this behavior	28
To build a file	25
The patient was repeatedly violent	20
To protect others against the patient's behavior	17
Reporting is the institution's policy	16
To cope with the incidence emotionally	5
The patient deserves punishment	3
The insurance asked for a report to the police	2

In Table 2 it can be seen that in quite a number of cases the victim contacted the police because they wanted the offender to stop the violent behavior. They said they wanted to build a file (n=25), the patient was repeatedly violent (n=20), they wanted to protect others against this patient (n=17), or they thought that this patient deserved punishment (n=3). In two cases reporting was necessary for a payment by an insurance company. There were also more psychological reasons to report: victims wanted to set a limit (n=28), or said that reporting was a way to cope with the incident (n=5). In 16 cases the incident was reported because this was the policy of the institution.

## Conclusion and discussion

In the foregoing it appeared that economical reasons play an important role in the decision to report an incident to the police or not. It seems that victims quite often make a rational decision, after weighing the costs and benefits of reporting. There are however, also more emotional reasons that can play a role. Emotions as fear to disturb the relation with the patients or fear for retaliation can prevent victims from reporting. Some have had bad experiences with the police or see reporting as to stressful.

The care worker who is victimized by an incident on the ward is shocked, fearful and maybe even injured. It is the employer's task to support the employee with practical as well as emotional matters, inform about the possibility to report an incident to the policy without breaking the rule of confidentiality, while respecting the victim's opinion and wishes. In general, it is also the employer's task to create good contacts with the police and the public prosecution. Moreover, it is his task to make clear, to care workers and to patients, that violence is not acceptable.

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# Capacity in adult and intellectual disability psychiatry - have we become too lenient?

## Poster

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## Abstract

Clinicians regularly overestimate patients' capacity to make decisions. This may jeopardise the protection of autonomous decision making. It may increase poor clinical outcome for patients and have potential adverse legal consequences for the clinicians involved. There is also a clear need to use the legal principles of the Mental Capacity Act more rigorously.

The process of assessing capacity in people with mental disorder and those with intellectual disability can potentially lose touch with some of the fundamental principles underlying the legal and conceptual frameworks of capacitous decision making. Clarity with regard to the actual and specific decisions that need to be made may be lacking, with a number of concepts conflated together leading to global decisions rather than those that are situation and time-specific. The need to enable individuals to exercise all their potentials in decision making may be disregarded or incomplete. This presentation will focus on how practitioners might develop approaches that empower the individual rather than restrict or invalidate them.

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# Overestimating patients' capacity

## **Paper**

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## **Abstract**

Clinicians regularly overestimate patients' capacity to make decisions. Evidence for this comes from comparisons between senior clinicians estimates of capacity and formal tests of patients' capacity with validated instruments. Whilst this evidence is so far indirect it is still striking. Rather than underestimating patients' ability to make choices clinicians seem to overestimate it. This may jeopardise their autonomous decision making, as many patients may be allowed to make decisions despite having no meaningful capacity to do so. This may lead to poor clinical outcomes for patients and has potential adverse legal consequences for clinicians. There is a need to define the legal principles of decision making without capacity and apply the law more rigorously where such legislation exists.

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# Legal perspectives on violence: The significance and implications of the United Nations Convention on the rights of persons with disabilities

## Paper

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**Keywords:** Convention on the Rights of Persons with Disabilities; international human rights law; mental disability law; expert witnesses; counsel

As of May 2008, the UN Convention on the Rights of Persons with Disabilities became binding international law. The Convention – for the first time – applies international human rights protections to persons with disabilities, including people with psychosocial disabilities who are institutionalized in psychiatric institutions and in correctional institutions, and recognizes the right of people with disabilities to equality in most every aspect of life. It furthers the human rights approach to disability and recognizes the right of people with disabilities to equality in most aspects of life. “The Convention responds to traditional models and situates disability within a social model framework and sketches the full range of human rights that apply to all human beings, all with a particular application to the lives of persons with disabilities” [1]. It provides a framework for insuring that mental health laws “fully recognize the rights of those with mental illness” [2]. It categorically affirms the social model of disability [3] by describing it as a condition arising from “interaction with various barriers [that] may hinder their full and effective participation in society on an equal basis with others” instead of inherent limitations [4], reconceptualizes mental health rights as disability rights [5], and extends existing human rights to take into account the specific rights experiences of persons with disabilities [6].

Among the specified rights are:

- respect for inherent dignity [7],
- non-discrimination [8],
- “equal recognition before the law” [9],
- equal “access to justice” [10],
- “the right to liberty and security of [the] person” [11],
- “freedom from torture or cruel, inhuman or degrading treatment or punishment” [12],
- “freedom from exploitation, violence and abuse,” [13] and
- a right to protection of the “integrity of the person” [14].

There has been scant caselaw that has yet interpreted this Convention [15], and it is still highly unclear how these rights will be interpreted by regional human rights courts and commissions [16]. However, it is clear that the articulation of these rights will bring new focus on institutional forensic psychiatry worldwide. It is necessary for psychiatrists and other mental health professionals who work in institutional forensic settings (especially for those treating and caring for individuals charged or convicted of serious violent offenses) to begin to take seriously this Convention, with special focus on these sub-issues:

- How will the Convention affect the treatment of violent offenders in correctional institutions and in forensic mental health institutions?
- What will the Convention’s implications be for expert witnesses who testify in cases involving such offenders?
- To what extent will new developments in risk assessment have an impact on the interpretation of the Convention with regard to this population?
- What are the Convention’s implications for attorneys representing such offenders? How will the ratification of this Convention alter the “landscape” in nations that have not yet ratified the Convention?
- What implications will the Convention have on ethical issues that surround the practice of institutional psychiatry in the treatment of such individuals?
- What will (or what should) the role of organized psychiatry be (if any) in such cases?
- How, in cases involving violent offenders, will regional human rights courts and commissions likely decide cases in which the Convention is raised?

We know that conditions in forensic facilities in many (perhaps most parts of the world) stand in glaring violation of many of these Articles . Persons in the forensic system [17] receive - if this even seems

possible - less humane services than do civil patients. Professor Gostin refers – without contradiction -- to the near-universal “inhuman and degrading” treatment of forensic patients [18]. By way of example, in Australia, Professors Boyd-Caine and Chappell conclude that there is “simply no scrutiny of the [decision-making] process” in New South Wales in forensic cases [19]. In many nations, there is not even a forensic psychiatry department in any medical school [20].

Some examples are, for want of a better word, stupefying [21]. In Hungary, until relatively recently, convicted prisoners from Budapest Prison were used to “keep an eye on” patients in IMEI (Hungary’s only high security forensic psychiatric institution) “with high suicide risk” [22]. In Albania, persons with mental disabilities who have been charged with a criminal offense reside in a prison unit and must comply with prison rules while institutionalized. “Although Albanian law stipulates one year of treatment to be followed by a re-evaluation, the average length of stay is five years” [23].

In Kyrgyz, there are no statutory provisions to deal with cases of persons who are potentially incompetent to stand trial [24]. As a result, persons with severe mental illness who are charged with crime have no opportunity to be treated in an effort to improve their condition so as to become competent to stand trial [25]. In insanity cases, although Kyrgyz law allows for an independent evaluation of a defendant prior to trial, “legal aid attorneys [said] that they have never retained an independent expert because they have no money to do so” [26]. This right thus becomes illusory. Although, in Hungary, patients have the right to a retention hearing following a finding of non-responsibility for a criminal act (insanity), such “[p]roceedings are over in less than 5 minutes, and the issues remain untested: similar to detention hearings under civil law, lawyers do not meet their clients or take instructions” [27]. Experiences in other nations are depressingly similar [28].

This is a very bleak picture. I believe though, that the ratification of the UN Convention may be an important ray of light. Consider again the questions I raised a moment ago in the context of both these sorry facts and the Convention ratification. I believe that the Convention -- that applies to all individuals with disabilities, no matter where they are housed -- will force policymakers to re-evaluate the treatment of violent offenders in correctional institutions and in forensic mental health institutions. I believe that expert witnesses will need to familiarize themselves with the Articles of the Convention since they, inevitably, will become the “best practices” in this area [29]. There is a robust literature on risk assessment – both in community and in institutional settings [30]; both institutional mental health professionals and expert witnesses will have to have the facility to contextualize this literature with the new Convention mandates. There is no question that the Convention will have major impacts on the ethical issues that surround the practice of institutional psychiatry in the treatment of such individuals. In a recent article, along with my colleague, Prof. Astrid Birgden, I argued that, given the Convention’s mandates, forensic psychologists and psychiatrists were compelled to “devise an ethical framework that is based on enforceable universally shared human values regarding dignity and rights” [31]. I believe that the time for this action has come. In this context, the time is also right for organized psychiatry and organized psychology to assume a leadership role in this area, and demand that forensic facilities and penal facilities housing mentally disabled offenders comport with Convention mandates [32]. Also, it should go without saying that attorneys representing individuals in forensic facilities will also have to incorporate the Convention’s principles into their representation of offenders, both those in penal and those in forensic facilities [33].

At least two of the questions I listed earlier that cannot yet be answered: We have no way of knowing the extent which (if at all), the ratification of this Convention will alter the “landscape” in nations that have not ratified it. However, we do know that nations – such as the United States – that have signed but not yet ratified the Convention, and that have also ratified the Vienna Convention on the Law of Treaties – are obligated to “refrain from acts which would defeat [the CRPD’s] object and purpose” [34]. But it is still impossible to make even educated guesses as to the impact, if any, in non-signing, non-ratifying states.

We also do not yet know how, in cases involving the population we are considering here, regional human rights courts and commissions will likely decide cases in which the Convention is raised? Regional human rights courts are kinds of engines that provide real and practical meanings of each provision of international human rights law to citizens, and that can universalize these meanings. These universalized meanings can be adopted and incorporated in an almost symbiotic way by other regional courts and tribunals. This engine of social and political change thus dynamically sharpens and clarifies a normative and practical meaning of international human rights law [35]. There is a robust body of international human rights/mental disability law caselaw in the European Court of Human Rights, some important decisions in the Inter-American Court and at least one decision in the African Commission [36]. But there are still very few cases construing the CRPD [37], and none of these deals with the issues I am discussing here today. I think though that it would be a grave error for policymakers, ranking mental health professionals and political leaders to shrug off these courts and commissions as potential change agents [38].

This is all, very obviously, a very new area of law, policy and discourse. I am never surprised when I give a presentation about the CRPD and find that very few in the audience are familiar with it (although, the further I go from the US, the more likely it is that audience members *will* know of it and about it). But I think that now -- with over 100 nations having ratified the Convention, and more than three years having elapsed since the Convention went into effect – it is time for all to begin to take it seriously. I know that I am.

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# Coercive and restrictive measures in nursing care of restless and aggressive patients: Theory and Practice

## Paper

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**Keywords:** Restrictive measure, standard, nurse, attitude, conditions, education

## Study aims

The study aims were to verify whether restrictive measures in psychiatric inpatient units and inpatient wards of other medical disciplines are being used in accordance with the standard of nursing care of patients restrained in bed, to analyze the current standards of nursing care regarding the use of restrictive measures and to find out nurses' attitudes regarding the application of restrictive measures.

## Methodology

A quantitative survey was conducted. The questionnaire with 21 closed questions was sent by post to nurses on turn of the years 2009/2010. Consent for realization of this survey was given during the personal contact of head nurses of the hospitals under scrutiny. The anonymous questionnaire was developed based on the author's own clinical experience and on literature sources. Data were processed in Microsoft Excel. 300 questionnaires were sent out. The survey sample comprised 264 nurses working in one psychiatric hospital and five general hospitals (open and closed units) in two regions of the Czech Republic.

## Background

Enormous progress in medical research as in nursing science was made throughout the last decades. More and more is heard and the onus is put on the concept of quality. The requirements regarding nursing care are increasing. However, in spite of such developments it seems that "time has stopped" with regard to the nursing of restless, aggressive and mental ill persons.

Monumental discussions about the use of restrictive and coercive measures occurred in the Czech Republic from 2003 to 2005 (Trešlová, 2009). Discussions started in a group of laymen and then were brought to the notice of professionals and politicians. By definition restrictive instruments (devices) are understood as therapeutic and preventive measures restricting free movement and patients behavior including the restriction of movement in closed units without the consent of the patient, placing the patient in a (safeguarding, protective) net bed, placing the patient in an isolation room, physical restriction of movement (protective belts), strapping the patient to a bed, using safety devices (protective coat), parenteral administration of psychopharmac medication without patient consent and application of electroconvulsive therapy without the consent of patient (Raboch, Andres, Prasko, Hellerova, 2006; Valentova, 2004; Workman, Zvonickova, Bennett, 2006). Even though the formal guideline of the Ministry of Health of Czech Republic about the use of restrictive devices for patients in psychiatric institutions was published in 2005, both its interpretation and its actual approach in daily use are inconsistent. Another bulletin published by the Ministry of Health of Czech Republic in 2009 revised the principals of the use of restrictive measures. Even here heterogeneous opinions could be found and empirical studies about what is better or worse are lacking.

## Results and discussion

Two hundred and sixty four (100%) completed and valid questionnaires were analyzed of which 213 (80.7%) we received from open wards (OW) and 51 (19.3%) from closed wards (CW). The use of protective belts was noted by 199 (75.3%) nurses as the most frequent restraint measure (76% OW, 72.5% CW). These figures are quite surprising especially for the CW, because psychiatric wards have many more possibilities to use various types of restraint aids than the other wards. This result is also surprising given the contemporary trend towards a reduction in the use of measures restricting free movement as acknowledged by data from other countries. The second most frequent restraint measure noted by 157 (59.5%) respondents was the administration of psychopharmaca without patient consent (68.8% CW,

57.3% OW). This higher percentage of psychopharmaca use on closed wards might be associated with the effort to induce a desired therapy process and to target the therapy effect of the patients. This fact is underlined by the theory of Baudis et al.(2006) who notes that "The application of psychopharmaca against patient consent is not the restraint measure in the meaning of this construct. This skill could be pointed as a treatment measure" (p. 160).

A further restraint measure is the use of seclusion (also called isolation or therapy room). Seclusion use was reported by 90 (34%) respondents. The proportion of closed and open wards differs highly with 24.4% nurses from OW and 74.5% nurses from CW reporting using seclusion on their wards. On the base of doctor's prescription for seclusion without the patient consent 16 (2.8%) nurses on the OW and 32 (62.7%) nurses on CW reported taking care of patients in the seclusion room. These figures show that the legal regulations about the hospitalization without patient consent are not adhered to.

The discussion regarding the use of net beds is quite controversial (Burkertova, Treslova, 2005.) This kind of restraint is reported by 15 (7%) nurses on OW and 26 (51%) on CW. Given the current opinion of society on this issue the author regards this result as quite propitious. However, it can be questioned whether it is reasonable to have net beds on standard, not specialized psychiatric wards. The use of net beds may be appropriate for injured drunk persons on traumatology or surgery wards. The use of net beds is deemed necessary to avoid more injury to patients and others involved. Other types of restraint measures – bed sideboards, soft belts, strait jackets, protective panties, belts on hands, and fixation in chair – were reported less frequently i.e. by between 1 and 20% of respondents. These findings give evidence of insufficient nurses' awareness in this area both on CW and on OW, because – with the exception of the strait jacket – none of these techniques are defined as restraint measures according to Raboch et al. (2006) and Baudis (2005). The use of restraint is everyday practice for 57 (26.8%) nurses from OW and 33 (64,7%) from CW. These findings demonstrate that the use of restraint methods in health care institutions is quite common practice. Therefore the question arises as to whether these measures are used really only to avoid injury or harm to patients.

These findings underscore the necessity for a uniform legislation regarding the use of restraint measures to guide medical and nursing practice. Uniform legislation should apply to all involved which includes those who administer restraint methods, doctors who prescribe restriction, and the guardian of the patient's rights. Also exactly defined criteria and control mechanisms aiming to avoid misuse should be set up. This vision unites both opponents and supporters of restraint measures as indicated by Valentova (2004) and Tosnerova (2004). Steps in this direction are currently being developed in the framework of the research project EUNOMIA (Kalisova, Novotna, Raboch. et al., 2005, 2008).

## Standards

The survey revealed interesting and contradictory findings about the existence, awareness and the realization of standards of nursing care of restrained patients. 252 (95.5%) respondents stated that standards exist on their wards – 201 (94.3%) from OW and 51 (100%) from CW. Eleven (5.2%) nurses from OW do not know whether this standard exists on their ward. It is difficult to imagine good nursing care for restrained patients given the restrictions in freedom and human rights. Various reasons come to mind such as human factor failure, the insufficient and unsystematic handover of information on the ward, or insufficient control of the provision of nursing care etc. But the author is convinced that the reasons for such an attitude are much simpler: Plain unconcern, the lack of interest in one's own profession, and the lack of interest in the human being. The author questions whether interest in patients is possible to learn, or whether it is an intrinsic personality trait.

Another interesting outcome is that 244 (92.4%) nurses adhere to the standard regarding the nursing care of restrained patients, 7 (2.7%) nurses do not proceed according to it and 6 (2.3%) did not know whether they do or do not proceed according to the standard. Two (3.9%) nurses from CW did not know it at all. These results show that to have standards on the ward (95.5%) does not guarantee the desired quality of care.

## Management and education

Nurses are not the only ones who are represented these results. Insufficient information and control from senior workers and management is addressed To ensure the best practice for patients management should ensure that staff be educated in restraint techniques. Management should control staffs' knowledge and skills regularly not only "on the paper" but in "bed-side situations" in order to ensure that patients receive due respect and dignity and in order to ensure the safety of patients and personnel. 181 (68.6%) respondents agree that educational measures regarding use of restraint measures should be mandatory for incoming personnel. 141 (66.2%) OW and 40 (78.4%) CW nurses know of proceedings stipulating that training has to be provided at least once a year for all personnel applying restraint measures. These figures are surprising given directives on the use of restraint measures as stipulated by the Ministry of Health of the Czech Republic in 2009. This

public report is mandatory not only for psychiatric wards but for all hospitals and health care institutions in the Czech Republic. Nevertheless 5 (9.8%) of the nurses from CW answered “no” or “do not know” to the question whether education in restraint techniques are provided regularly, even though on these wards it should be the obvious and regular practice. 221 respondents (83.7%) feel that the educational measures are effective enough and 38 (14.4%) have the opposite opinion. The author assumes that the schooling efficacy is in the hands of management. If 95% of the respondents are acquainted with the standard and the same amount confirmed the existence of the standard on their ward, we would expect there to be an audit and control system. However, audits are conducted only on 70% of the wards. Ten percent of respondents have had no experience with audits concerning information and the use of restraint measures and 20% of the respondents’ answer was “I do not know” whether such an audit has been conducted on the ward. These findings contradict the recommendation of the Board for Development of Nursing which is one body of Ministry of Health of the Czech Republic. The awareness of nurses regarding legal regulations on restraint methods offers a similar picture. Only 48% of the nurses are familiar with them (47% from OW and 55% from CW). But when asking about some precise document the answer was negligible. Somewhat embarrassing was the finding that the mandatory public notice from the Ministry of Health regarding the use of restraint aids was not mentioned at all. This implies that management is not transferring important information to their employees and it brings into question how the best quality of care is being provided.

## Nursing process and complications

To provide the best quality care means to take care of basic somatic and mental needs of restrained patients. Thus, questions regarding interventions to minimize mental stress and overburden were addressed in the survey. 190 (72%) nurses minimize this burden by ensuring the “accessibility of personnel” and 69 (26.1%) by supplying the permanent presence of a healthcare worker at the patients bed. 12 (5.6%) nurses from OW noted that they do not provide any measures to decrease patients’ mental stress and overburden. This finding shows there is a room for the improvement of the quality of care. One possible improvement could be to establish a therapeutic relationship with the patient. Nurses were also asked what kind of feedback they receive from patients. The most frequent answer – 151 (57.2%) – was that “the patient does not understand why the restraint occurred”. The next most frequent reply of 85 (32.2%) nurses was that “the patient does not say anything about the restraint”. Other answers include that some patients do understand the reasons for restriction or some patients clearly express their disapproval with the restraint process. The percentage difference between OW and CW was minimal. Feedback is very important and useful for the nurse to understand patient’s behavior and reactions and also is good for working toward achieving the patients’ confidence which is necessary for further therapeutic success on the base of cooperation. Confidence helps motivate the patient towards treatment and increases the reinforcement of self-respect and self-esteem.

The nursing care of restrained patient requires meeting the basic needs and preventing possible health risks. Among the most important nursing skills of the restrained patient is changing the patient’s body position to prevent pressure sores, monitoring vital signs, assessing the level of consciousness, monitoring the condition of the respiratory system especially the airways, assessing the risk of aspiration and the status of circulation of fixed extremities. About 90% of the respondents report that they apply these skills. In spite of this positive result there is still room for improvement. Following a restraint episode a monitoring period is recommended. The reported monitoring duration is between 2 (31.1% of answers) and 6 hour or longer (42.4% of answers) and fulfills the recommendation of Baudis et al.(2006). Some respondents reported that they do not monitor the patient after the termination of restraint.

Restraint may induce complications. Injuries to patients or staff were reported by 123 (46.6%) nurses – 86 (40.4%) from OW and 37 (72.5%) from CW. Other complications reported were straps sitting too tightly, psychic traumatization of the patient, pressure sores, patients catching a cold, impairment of the therapeutic relationship, harm of the patient restrained in bed by another patient, and embolism (noted by one respondent). Thirty nine (14.8%) the respondents did not report any complication during patient restraint. The documentation of nursing care is mandatory in the Czech Republic and is especially necessary during and following restraint episodes. 78% of the responding sample of nurses do record the use of restraint on patients. However, the special documentation form is only available to 58% of the nurses. This also contradicts the above mentioned Ministerial directives. The reasons leading towards patient restraint are documented by 93.6% of the sample with reporting occurring marginally more (1%) on OW than on the CW.

## Nurses

In the Czech Republic one or two nurses are responsible for care on wards with approximately 20 to 35 patients. It is thus hardly surprising that restraint measures are the first choice to assure the safety of patient and others including the nurses themselves. Although all the nurses in the sample believe that the use of restraint may be necessary in some particular situations they perceive restraint as an ethical problem. Some

prominent professional psychiatrists e.g. Hoschl, Raboch, Libiger, Svestka hold the same view (2000). 67% of the respondents could appreciate the importance of the use of restraint because they feel that it may help the patient (53.4%) who is influenced by pathological motivation and thus must be safeguarded. On the other hand 44.7% of nurses are worried about the health of restrained patients and 36.7% nurses are worried about their own health.

## Conclusion

The results indicate many shortcomings regarding the nursing care of restrained patients but also indicate areas for improvement. The results to the individual questions show that the care of psychiatric patients is inconsistent in terms of restrictive measures, and therefore standardization of this care and audits are highly desirable. These results are influenced by the position of psychiatry and psychiatric nursing in society, by the approach of society and medical professionals, by psychiatry and nursing education, by the approach of middle and top management in healthcare and in nursing, by insufficient research probably due to the lack of knowledge of foreign languages, and by insufficient interpersonal, multidisciplinary professional communication skills. Last but not least the reality is that there are 0.6 nurses for the patient meaning approximately two nurses on shift caring for 20 to 35 patients.

The outcomes of the study hypotheses are summarized below.

- Hypothesis 1 – the stay of a patient in healthcare institution without his/her consent is the most frequent restrictive instrument – was verified.
- Hypothesis 2 – the nurses are trained in the nursing standard about restriction of patient in bed repeatedly once a year – was not verified.
- Hypothesis 3 – the nurses proceed according with wording of the standard of nursing care of patient restrained in bed – was verified.
- Hypothesis 4 – the nurses consider the use of restricted devices as one of the unavoidable activities within their profession – was verified.
- Hypothesis 5 – the nurses do not consider using of restrictive devices as a source of their own personal uncomfortable feelings – was verified.

On the basis of these results the first author has developed standard of nursing care for the application of restraint measures in healthcare institutions and the audit criteria.

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# Analysis of inclusion of violence topic to Brazilian mental health care policy

## Poster

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## Abstract

Currently in Brazil, external causes (accidents and violence) rank third among the factors of general population's mortality, as the main cause of death in the age range of 5-39 years. Such events kill approximately 137,000 people and account for more than 884,000 annual hospitalizations, thus constituting a serious social problem for the country and overcharging the health sector. Notwithstanding it is a complex social phenomenon, violence is a significant problem for public health, which is the destination of its direct and indirect victims, as well as their aggressors in search of treatment of injuries, physical and mental recovery. Violence impacts are also visible in mental health care services, corroborating in the practice of such units what has been observed in studies: association between violence victimization and outburst of psychiatric disorders, such as depression, anxiety, somatization and post-traumatic disorders, in addition to suicide attempts, among others. We have made an exploratory conceptual survey to understand how the process of inclusion of violence topic in mental health care policies in Brazil has been occurring. We analyzed all laws, decrees and directives enacted in the period of 2001 through 2010 to reformulate mental health care in the country under the name of Psychiatric Reform. That reform is focused on de-hospitalization and the construction of a community care network at territory level with unrestricted access to health care in public and private psychiatric hospitalization institutions. We noted that in the initial years of the policy, violence was mostly depicted as an institutional violence. In this sense, mental health care policy in Brazil was being constructed with the purpose of redirecting assistance to patients with mental disorders to ensure their rights and promote quality, less invasive treatment. As from 2004, violence has been evidenced in terms of social risks and vulnerabilities to which patients with mental disorders are more exposed. This way, two specific groups have now become the target of complementary policies: children and teenagers, and alcohol and other drug addicts. With respect to children and teenagers, more identified violence refer to social vulnerability situations, such as no school attendance, living in areas with high criminality rates and drug trafficking, among others, family violence and risks arising from situations where there is an abusive use of alcohol and other drugs. With respect to alcohol and other drug addicts, more evident aspects are those related to risk situation, such as road traffic exposure, homeless conditions, sexual exploration and drug trafficking, among others, as well as self-violence and criminal violence. It is concluded that approach to violence in the country's mental health care policies is still under construction, even though Brazilian policies targeted to mental health care have been trying, although slowly and restrictedly, to adjust to the country's social problems and promote life quality.

## Educational goals

1. Reflections about Brazilian mental health care policy;
2. Strategies for knowledge production and promote life quality;
3. Improve assistance by the mental health care.

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# German guardianships, involuntary admissions and physical restraint measures in psychiatry: Implications for community-based psychiatry?

## Paper

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**Keywords:** Commitment law, guardianship law, coercive measures, involuntary admissions, physical restraint, outpatient clinic

## Background

Professionals in psychiatry, judges and guardians deal daily with interventions against the will of some mentally ill people [1]. Violent past in German history urges professionals to a special awareness facing this sensitive issue.

Involuntary admissions according to Commitment Law (Psychisch-Kranken-Gesetz/ Unterbringungsgesetz) as well as to Guardianship Law (Betreuungsgesetz) are statutory issues within German Civil Law (Bürgerliches Gesetzbuch/ Gesetz über das Verfahren in Familiensachen und in den Angelegenheiten der Freiwilligen Gerichtsbarkeit). Approval of physical restraint of mobility as well as of coercive measures is also regulated in mentioned laws. Guardianship Law became effective in Germany on 1992, and took the place of over a century old conventional guardianship law from 1890 [2]. Commitment Laws show some differences among German States [3,4]. Forensic commitments according to Criminal Law (Strafgesetzbuch) are another legal issue for involuntary placement [5].

It is difficult to appraise correctly avoidable violence in form of involuntary admissions and other force measures, because of differences in monitoring and in assessment of themselves. One approach is to deal with aggregated data of health monitoring system; another approach is to investigate individual data within a specific district, region or psychiatric service's catchment area.

## Aims

In this investigation we first attempt to find out relevant trends of guardianship figures, force measures and involuntary admissions in Germany since coming into force of new German Commitment Law 1992 as well as in a selected rural region in South Germany. Second, we investigate associations between tendencies in surveyed catchment area respectively district psychiatric hospital and aggregated German data. This approach could help to appraise consequences for community-based psychiatry.

## Methods

We investigate different variables according to German commitment law as well as to guardianship law on the base of monitored data from the German Federal Ministry of Justice (for 82 Mio. inhabitants) over a period of 18 years (1992-2010) [6,7] and of monitored data from a district court (1999-2010). Time series undergo a Prais-Winsten regression analyses for absolute figures, rates (per 10,000 inh. for involuntary admissions, per 1,000 inh. for guardianships) and quotas (in reference to annually absolute admission frequencies in psychiatry). These results have been compared with trends in a rural catchment area of a regional psychiatric hospital in South Germany (320,000 inh.) and respectively of a district court within (covering 185,000 inh.) by means of bivariate linear regression analyses in order to find out possible significantly associations.

## Results

Absolute frequencies and rates of new legal ordered guardianships and current guardianships, absolute frequencies of involuntary admissions according to Commitment Law as well as according to Guardianship Law and finally absolute frequency of legal ordered physical restraint measures increased high significantly ( $p < 0.001$ ) in Germany in the last two decades. On the other hand, quotas of involuntary admissions did not change significantly (see Table 1).

*Table 1 Prais-Winsten regression analysis for time series (1992-2009) at federal level in Germany. Rates for guardianships considering 1,000 inh. Rates for involuntary admissions considering 10,000 inh. b= Regression coefficient. D-W= Durbin-Watson iteration coefficient. Quotas were calculated considering all psychiatric admissions in Germany. Italics= Significant increasing or decreasing over time.*

	b	p-value	D-W
Total number of new started statutory guardianships in Germany	9,559	0.000	1.68
Rates of new started statutory guardianships in Germany	0.115	0.000	1.7
Total number of current statutory guardianships in Germany	53,986	0.000	1.17
Rates of current statutory guardianships in Germany	0.656	0.000	1.23
Total number of involuntary admissions according Guardianship Law in Germany	1,409	0.000	1.55
Rates of involuntary admissions according Guardianship Law in Germany	0.17	0.000	1.55
Quotas of involuntary admissions in Germany according Guardianship Law	0.044	0.242	1.22
Total number of involuntary admissions according Commitment Law in Germany	1,196	0.000	1.69
Rates of involuntary admissions according Commitment Law in Germany	0.14	0.000	1.69
Quotas of involuntary admissions according Commitment Law in Germany	-0.073	0.023	1.67
Rates of total involuntary admissions in Germany	0.36	0.000	1.69
Quotas of total involuntary admissions in Germany	-0.036	0.499	1.10
Total number of legal ordered physical restraint measures in Germany	5,177	0.000	1.26
Rates of legal ordered physical restraint measures in Germany	0.63	0.000	1.28

Regarding the investigated catchment area, absolute frequency, rates and quotas of involuntary admissions according to Guardianship Law did not increase significantly, but did it according to Commitment Law. All other investigated variables increased also significantly over time, whereas quotas of coercive measures on hospitalised patients almost significantly decreased (see Table 2).

*Table 2 Prais-Winsten regression analysis for time series (1992-2009) at district level in investigated region. Rates for guardianships considering 1,000 inh. Rates for involuntary admissions considering 10,000 inh. b= Regression coefficient. D-W= Durbin-Watson iteration coefficient. Quotas were calculated considering all psychiatric admissions in district psychiatric hospital. Italics= significant increasing or decreasing over time.*

	b	p-value	D-W
Total number of new started statutory guardianships in investigated German district.	22.48	0.000	1.95
Rates of new started statutory guardianships in investigated German district.	0.12	0.000	1.9
Total number of current statutory guardianships in investigated German district.	71.48	0.000	1.22
Rates of current statutory guardianships in investigated German district	0.4	0.000	1.22
Total number of involuntary admissions according Guardianship Law ordered by District Court	1.39	0.249	1.66
Rates of involuntary admissions according Guardianship Law ordered by District Court	0.069	0.308	1.64
Quotas of involuntary admissions according Guardianship Law ordered by District Court	0.13	0.357	1.43
Total number of involuntary admissions according Commitment Law by court and police in investigated district	7.86	0.004	1.78
Rates of involuntary admissions according Commitment Law by court and police in investigated district	0.40	0.008	1.8
Quotas of involuntary admissions according Commitment Law by court and police in investigated district	0.45	0.003	1.72
Rates of total involuntary admissions in investigated district	0.48	0.035	1.87
Quotas of total involuntary admissions in investigated district	0.48	0.035	1.87
Total number of annual coercive measures in investigated regional psychiatric hospital	-44.8	0.12	1.88
Total number of annual coercive measures per admission in investigated regional psychiatric hospital	-0.01	0.10	1.86
Total number of statutory approved physical restraint measures in investigated district	8.64	0.000	1.56
Rate of statutory approved physical restraint measures on mobility in investigated district	0.5	0.000	1.53

Rates of new ordered and total current statutory guardianships as well as quotas of involuntary admissions according to Commitment Law (but not according to Guardianship Law) and rate of legal approved mobility restraint measures increased significantly more in investigated catchment area by means of bivariate linear regression analyses (see Table 3). However, rates and quotas are for the two last decades for both levels similar and even lower for investigated district [2].

Outpatient clinic of the psychiatric hospital in charge of the investigated catchment area increases his activity over-proportional to Bavarian outpatient clinics ( $p=0.002$ ). Figures of admitted patients with guardianship developed sub-proportionally to new ordered statutory guardianships by local court ( $b=-6.79$ ;  $p=0.014$ ), figures for involuntary admissions according to Guardianship Law as well as to Commitment Law did it not (see Table 3).

*Table 3 Bivariate linear regression analysis for time series (1992-2009) considering investigated region and investigated district psychiatric hospital in the Federal State of Bavaria respectively Germany. b= Regression coefficient. R= Share of explained variance. Regressor= Explanatory variable in bivariate regression analysis. Italics Significantly associations at level  $p<0.05$*

	b	p-value	95% CI	R2
Development of total number of admissions (district hospital vs. Germany as regressor)	8e-4	0.117	-2.6e-4 to 2e-3	0.31
Development of quotas of involuntary admissions according Guardianship Law (district hospital vs. Germany as regressor)	2.21	0.220	-1.74 to 6.17	0.24
Development of quotas of involuntary admissions according Commitment Law (district hospital vs. Germany as regressor)	7.25	0.000	4.8 to 9.7	0.89
Development of quotas of total involuntary admissions (district hospital vs. Germany as regressor)	5.16	0.009	1.87 to 8.44	0.71
Development of total number of legal approved physical restraint measures (district hospital vs. Germany as regressor)	-87.3	0.082	-189 to 14	0.37
Development of rates of new started statutory guardianships (investigated district vs. Germany as regressor)	1.59	0.000	1.16 to 2.02	0.86
Development of rates of current statutory guardianships (investigated district vs. Germany as regressor)	0.66	0.000	0.57 to 0.56	0.96
Development of rates of legal approved physical restraint measures (investigated district vs. Germany as regressor)	0.85	0.000	0.58 to 1.12	0.83
Development of admissions with guardianship in district psychiatric hospital vs. number of new started statutory guardianships by district court	-6.79	0.014	-11.6 to 1.96	0.66
Development of involuntary admissions in district psychiatric hospital vs. number of new started statutory guardianships by district court	1.79	0.149	-0.94 to 4.88	0.31
Development of involuntary admissions in district psychiatric hospital vs. number of current statutory guardianships in investigated district	0.11	0.789	-0.88 to 1.11	0.01
Development of number of treated outpatients in investigated district psychiatric hospital vs. number of treated outpatients in the federal state of Bavaria	0.033	0.002	0.017 to 0.05	0.77

## Discussion

The aim of this investigation is to find out whether involuntary admission figures did increase at federal level in Germany as well at regional level in the last two decades. Investigated region is placed in South Bavaria and disposes of a strongly developed outpatient clinic taking in charge people suffering from severe mental disorders [8,9]. We carry out regression analyses to find out possible significant changes in time series, and respectively between federal and regional levels.

Findings point out that although total number and even rates of involuntary admissions in Germany as well as in investigated region has had increased significantly over last two decades, quotas did not; so, increasing of involuntary admissions could be considered as relative in Germany. However, increasing figures themselves have to be reflected from a sociological point of view.

Findings point also out, that activity of considered outpatient clinic has had increased over-proportionally to figures of the federal state in which it is embedded (Bavaria). In the last two decades number of admissions and mean length of stay of investigated regional psychiatric hospital remained stable after a former decreasing [8]. Admissions of patients with guardianship and figures for coercive measures

decreased in the last decade for the same hospital [8,9], likely because of continuity in care, even after admission, and because of a narrow co-operation with wards, guardians and judges within investigated district. Our investigation confirms positive effects of this co-operation because admissions of people with guardianship decrease significantly by increasing of new ordered statutory guardianships by district court. However, rates of legal approved physical restrictions of mobility increased stronger in investigated district than at federal level, otherwise were rates themselves less than half of those for Germany on average [2]. There is scarce literature about reliable epidemiology of coercion measures in Germany with exception of an expanding network in the Federal State of Baden-Württemberg since more than a decade [10].

Surprisingly, quotas of total involuntary admissions increased in investigated district stronger than at federal level in despite of a powerful community oriented outpatient clinic. The reason is the over-proportional increase of involuntary admissions according to the Commitment Law and not to Guardianship Law in investigated region. It seems that professionals have no influence on force measures applied by police services, but likely on decisions by guardians and even judges based on constructive co-operation in search for alternatives to statutory force application.

## Conclusions

Our findings point out that awareness for institutional violence in terms of involuntary admissions, quotas of admitted patients with guardianship, mobility restraint measures as well as inpatient coercive measures do not increase or even decrease by improvement of awareness facing ethical implications. A powerful outpatient clinic is able to achieve arrangements with wards, guardians, authorities and judges in order to find out community-based alternatives to admissions. Within investigated catchment area, guardianship seems to protect facing psychiatric admissions, although these patients are more impaired [11]. Unfortunately, psychiatric wards and outpatient clinic do not seem to have any influence on involuntary admissions by police; those had climbed for the last two years in despite of our efforts.

Aggregated data at federal level don't reflect necessarily care conditions and efficiency in a particular district. Comparisons between federal and regional levels or different districts themselves by means of force and pressure variables in clinical psychiatry could be more informative to explain differences in care and in application of statutory force measures.

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# Chapter 6 – Gender aspects of violence

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## A survey about knowledge and attitudes of people towards violence against women in community / family settings

### Poster

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### Abstract

In this article a brief history of violence against women in domestic settings is developed. On the whole, 18 Focus group discussion (FGD) (including 4 pilot FGDs), were conducted in southern part of Teheran Capital of Iran among different groups of people (literate, illiterate, married, unmarried, male, female). Further, 30 individual interviews conducted with violence and family affair experts such as police, forensic medicine experts, psychologists, social-workers, authorities, judges, and sociologists. Findings demonstrated a very traditional problem-solving approach to violence and violence-based issues. Moreover, violence is sometimes justified by natural superiority of men to women. It is also considered as a necessity for some purposes and therefore, it is accepted and may continue to exist among families and community for coming years. Public and private spheres are almost based according to the gender divided and formal institutions and organizations are tried to be kept away from family violence related issues. This is mainly because of a belief that domestic violence belongs to private sphere rather than public one.

### Educational goals

1. The educational goals was developing materials for educating women on violence preventive actions, in women empowerment workshops.

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# Spousal violence against women in Iran

## Poster

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## Abstract

### Background

Violence against women is considered a global phenomenon and important health problem by World Health Organization as it leads to remarkable physical, mental and social consequences in victims.

### Objectives

A cross sectional study to determine spouse violence contributed factors in Tehran.

### Methods

225 women from five Tehran forensic medicine centres recruited in the study. A detailed questionnaire and in depth interview by trained psychologists was used to gather study data.

### Results

According to the findings, most of the women were in age group of 20-39 and 85.8% married between 20- 24 years old. 70% had high school diploma or less, 28% were employed having their own income. The main physical harm was bruising and the severest one was miscarriage. Only 5.5% of the referrals made following first episode of violence while more than 61% of women reported out of count episodes of violence prior to attending in the forensic centres. "Having children" followed by "Hope for better situation" were the most common cause of complaint avoidance.

### Conclusion

The lack of adequate knowledge about women rights, feeling shame of going to the courts, the high rate of expenses that should be paid are among the main reasons that women prefer to continue living with their husbands and to devote the offence against themselves. It will be of great help to approve much stronger and more comprehensive laws to protect women against the violence and assure them of different centres which can refer to at the time of urgent danger.

### Educational goals

- To detect importance of domestic violence aspects
- To validate violence prevalence surveys

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# Prevalence of intimate partner violence (IPV) in addictive behaviours: Differential profile between addicted patients with and without associated gender violence

## Poster

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## Abstract

### Introduction

The main goals of this study were, first, to determine the prevalence rate of intimate partner aggressors among users of a drug addiction treatment programme in Navarre (Spain). Second, this study sought to know the specific characteristics of these patients and to establish the differential profile between addicted patients with and without associated gender violence. In summary, this study seeks to detect cases of intimate partner violence that appear camouflaged under a drug problem.

### Method

Sample: The sample was composed of 150 addicted male patients, who sought treatment at the Proyecto Hombre Addiction Treatment Programme in Pamplona, Spain during the period from May 2010 to August 2011. All participants were assessed at entry to the therapeutic programme in order to collect information about the presence of intimate partner violence, as well as about socio-demographic variables, addiction related variables, psychopathological symptoms and personality disorders.

### Assessment

All participants were evaluated using the Spanish versions of the following tools: a) EuropASI (Kokkevi & Hartgers, 1995), the European version of the Addiction Severity Index (ASI) (McLellan, Luborsky, Woody, & O'Brien, 1980); b) Conflict Tactics Scale (CTS-2) (Strauss, Hamby, Boney-McCoy & Sugarman, 1996); c) Inventory of Distorted Thoughts about Women and Violence (Echeburúa & Fernández-Montalvo, 1998); d) Symptom Checklist-90-Revised (SCL-90-R) (Derogatis, 1992); e) State-Trait Anger Expression Inventory (STAXI-2) (Spielberger, 1988); f) MCMI-III (Millon, 2008); g) Impulsivity Scale (BIS-10) (Barratt, 1985); h) Interpersonal Response Index (IRI) (Davis, 1980); and i) Inadaptation Scale (Echeburúa, Corral & Fernández-Montalvo, 2000).

### Results

The prevalence rate of gender violence in the addicted patients of the sample was 22.3%. Addicted patients with associated violence problems showed severe violence behaviours against their partners: psychological violence (insults, threats, broken objects, etc.) was observed in 100% of addicts with gender violence; physical violence (use of weapons, hitting, kicking, etc.) was observed in 89.4% of addicts with gender violence. Moreover, 63.2% of the addicts with gender violence have caused injuries to the partner as a consequence of their violence, being severe injuries in 42.1% of cases. A comparison of addicted patients with and without associated intimate partner violence problems showed statistically significant differences in several variables. In general, violent addicted patients showed higher severity than non-violent patients in psychopathological variables.

### Conclusions

The results of this study showed a high prevalence rate of intimate partner violence among users of a drug addiction treatment programme. These findings indicate the need to assess the presence of gender violence problems in addicted patients. Likewise, these findings suggest the need for additional studies about the effectiveness of treatment programmes for drug addicted patients who present this kind of violent behaviours.

## **Educational goals**

1. To determine the prevalence of gender violence in addicted patients.
2. To assess the need of treatment for gender violence in addicted patients.

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# Partner violence against women during pregnancy, common mental disorders during pregnancy and postnatal depression

## Paper

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**Keywords:** Common Mental disorders, postnatal depression, pregnancy, partner violence, cohort, Brazil

## Introduction

Partner violence against women is common during pregnancy and may have an adverse effect on the mental health of women during pregnancy and after delivery (1,2,3,4).

## Methods

This cohort study was conducted in an area with a high proportion of low-income families in Recife, Northeastern Brazil. The study population consisted of all (1133) pregnant women aged 18-49 years in their third trimester of pregnancy who had registered in the Primary Health Care Program (PHCP). Data from the baseline has been reported elsewhere (4). Pregnant women were identified from antenatal care records in primary care and from the records of community health workers. This allowed inclusion of those not receiving antenatal care at a PHCP unit. Data were collected between July 2005 and December 2006. The antenatal interview was most often performed at a healthcare unit, but with a few interviews conducted at home. We planned to carry out the postnatal interview between three to six months after delivery, and the precise length of follow up was recorded. This interview was performed from May to December 2006. Partner violence (PV) was assessed by using the Brazilian/Portuguese questionnaire developed by the international team of the WHO multi-country study on women's health and domestic violence (5). The respondents were asked about their experience of specific acts of psychological, physical and sexual violence by a current or former intimate male partner during pregnancy. A four level variable was used to describe the exposure to violence in pregnancy: none; any physical or sexual violence alone; any psychological violence alone; physical and / or sexual with psychological violence. Common mental disorders (CMD) were assessed in the antenatal period by using the Self Reporting Questionnaire (SRQ-20) (6). Women were asked about their personal history of mental illness. Postnatal Depression (PD) was evaluated using the Brazilian version of the Edinburgh Postnatal Depression Scale (EPDS) with a score of 12 or more on the EPDS being a case (7; 8).

Analysis was performed with Stata (version 10). Logistic regression was used to estimate odds ratios and 95% confidence intervals of the association between PV and CMD and PV and postnatal depression. These analyses were carried out with the 1045 women who had complete data on all variables included in the model.

## Results

The study achieved a high response rate, with 1045 women completing the postnatal interview. This represents 94.3% of those pregnant women who completed their assessments during pregnancy (98.9% of all 1133 eligible pregnant women). 321 (30.7%; 95% CI 27.9-33.6) reported some type of PV during pregnancy. The most frequent form of PV was psychological (28.1%; 95% CI 25.4-31.0). The frequency of physical or sexual violence alone was reported elsewhere (4). Sociodemographic variables were strongly associated with CMD (Table 1) and with postnatal depression (Table in Ludermitz et al., 2010)<sup>4</sup>, with the exception of age and race/skin color.

Table 1 Sociodemographic and other characteristics of the sample and their association with common mental disorders, odds ratio (OR) and confidence intervals (95% CI). Recife, 2005 / 2006

Variables	n (%)	Common mental disorders			p
		n	(%)	OR (95% CI)	
<b>Age</b>					
18 – 24 years	215 (20.6)	103	47.9	1.00	
≥ 25	830 (79.4)	344	41.4	0.77 (0.6-1.0)	0.088
<b>Race/skin color</b>					
White	210 (20.1)	78	37.1	1.00	
Non-White	835 (79.9)	369	44.2	1.24 (1.0-1.8)	0.065
<b>Living with partner</b>					
Yes	908 (86.9)	377	41.5	1.00	
No	137 (13.1)	70	51.1	1.47 (1.0-2.1)	0.035
<b>Years of schooling</b>					
0 – 4	235 (22.5)	122	51.9	1.61 (1.2-2.2)	0.001
≥ 5	810 (77.5)	325	40.1	1.00	
<b>Employment status</b>					
Unemployed	179 (17.1)	92	51.4	1.47 (1.1-2.0)	
Others	866 (82.9)	355	41.0	1.00	0.011
<b>Partner Communication</b>					
Good	734 (70.2)	293	39.9	1.00	
Poor	311 (29.8)	154	49.5	1.48 (1.1-1.9)	0.004
<b>Controlling behavior of the partner</b>					
Not controlling	312 (29.9)	85	27.2	1.00	
Moderate controlling	532 (50.9)	237	44.5	2.14 (1.6-2.9)	
Very controlling	201 (19.2)	125	62.2	4.39 (3.0-6.4)	<0.0001
<b>History of mental illness</b>					
No	917 (87.7)	359	39.1	1.00	
Yes	128 (12.2)	88	68.7	3.42 (2.3-5.1)	<0.0001

All forms of violence - physical or sexual, or psychological, or a combination - were more frequent in unemployed women, who were living without a partner, had four or fewer years of schooling, had a very controlling partner, had poor communication with a partner, and mental illness before pregnancy (Table presented elsewhere).<sup>4</sup> The prevalence of CMD for the sample was 42.8% (95% CI 40.0-45.8). Approximately 2/3 (76.7%) of women who reported physical or sexual violence in addition to psychological violence in pregnancy had CMD (Table 2). The association between CMD and psychological violence during pregnancy remained after adjustment for history of mental illness. By contrast, the association of CMD and physical or sexual violence alone was eliminated after adjustments for this confounding factor (OR 1.05; 95% CI 0.5-2.4) though this was a small category (N=27). Women who reported psychological as well as physical or sexual violence showed the highest association (OR 4.58; 95% CI 2.8-7.5) with CMD (Table 2).

Table 2 Odds ratio (OR) for common mental disorders by forms of partner violence during pregnancy

Forms of violence	N (%)	Cases (%)	Unadjusted OR	Adjusted OR	
			(95% CI)	(95% CI) <sup>1</sup>	(95% CI) <sup>2</sup>
None	724 (69.3)	240 (33.1)	1.00	1.00	1.00
Physical or sexual alone	27 (2.6)	12 (44.4)	1.61 (0.7-3.5)	1.13 (0.5- 2.5)	1.05 (0.5- 2.4)
Psychological alone	74(16.6)	103 (59.2)	2.92 (2.1-4.1)	2.41 (1.7-3.4)	2.37 (1.7- 3.4)
Physical or sexual with psychological	120 (11.5)	92 (76.7)	6.63 (4.2-10.4)	4.76 (2.9-7.8)	4.58 (2.8 – 7.5)
P			<0.0001	<0.0001	<0.0001

<sup>1</sup> Adjusted for age, race/ skin color, marital status, years of schooling, employment status, communication with current or most recent partner and controlling behavior of current or most recent partner

<sup>2</sup> Adjusted for age, race/ skin color, marital status, years of schooling, employment status, communication with current or most recent partner, controlling behavior of current or most recent partner and history of mental illness

Postnatal depression was detected in 270 women (25.8%, 95% CI 23.2 to 28.6). More than half (53.3) of women who reported physical and / or sexual violence in addition to psychological violence in pregnancy had depression after delivery (Table 3). The association between postnatal depression and psychological violence during pregnancy remained, though was attenuated after adjustment for history of mental illness and SRQ-20 scores during pregnancy. In contrast, there was no evidence for an association between postnatal depression and physical or sexual violence alone (OR 0.77; 95% CI 0.3-2.1). Women who reported psychological as well as physical and / or sexual violence showed the highest risk (OR 1.76; 95% CI 1.0-2.9) of postnatal depression (Table 3).

Table 3 Odds ratio (OR) for postnatal depression by forms of partner violence during pregnancy

Forms of violence	N (%)	Cases (%)	Unadjusted OR	Adjusted OR	
			(95% CI)	(95% CI) <sup>1</sup>	(95% CI) <sup>2</sup>
None	724 (69.3)	131 (18.1)	1.00	1.00	1.00
Any physical or sexual	27 (2.6)	7 (25.9)	1.58 (0.6-3.8)	1.03 (0.4- 2.6)	0.77 (0.3- 2.1)
Psychological alone	74 (16.6)	68 (39.1)	2.90 (2.0-4.2)	2.13 (1.4-3.1)	1.58 (1.0-2.4)
Physical and/or sexual with psychological	120 (11.5)	64 (53.3)	5.17 (3.4-7.8)	2.83 (1.8-4.5)	1.76 (1.0-2.9)
P			<0.0001	<0.0001	0.007

1 Adjusted for age, race/ skin color, marital status, years of schooling, employment status, communication with current or most recent partner, controlling behavior of current or most recent partner, social support and length of follow up.

2 Adjusted for age, race/ skin color, marital status, years of schooling, employment status, communication with current or most recent partner, controlling behavior of current or most recent partner, social support, length of follow up, history of mental illness and SRQ-20 scores during pregnancy.

## Discussion

As far as we are aware this is the first population-based study designed to investigate the association between CMD, PD and violence by their intimate partners during pregnancy. Psychological violence was much more common than physical or sexual violence. Partner violence is commoner in women with limited schooling and living in poverty (9) so the high frequency of PV could reflect the characteristics of the community we studied. We found that CMD and PD were associated with psychological violence, even when it occurred without physical or sexual violence. In contrast, we had no evidence to support an association between CMD, PD and physical or sexual violence alone. Some limitations are important to consider. The prevalence of CMD and PD might seem high but it is similar to previous studies in developing countries and in Brazil (10; 11). The thresholds we used were established in previous validation studies (6,10,11). The cross-sectional design limits the establishment of a possible causal relationship between CMD and PV. It is possible that women with CMD

at pregnancy had exaggerated the level of violence as a result of their mental status, and this could have led to an overestimate of the observed association. On the other hand, it is possible that violence was under-reported because of the associated stigma and shame (12). It is also possible that mental illness before pregnancy would themselves be a result of earlier partner violence, so our adjustment could have led to an underestimate of the strength of association. Episodes of PV tend to be severe and repeated, with a pattern of continuity. It is also possible that increased SRQ-20 scores at baseline would themselves be a result of earlier partner violence, so our adjustment could have led to an underestimate of the strength of association. The mental suffering of women in the antenatal period is important in its own right. During pregnancy women experience physical and emotional changes and the effect of psychological violence could be exacerbated. Schraiber et al. (2009), in Brazil, showed a decrease in physical followed by an increase in psychological violence during pregnancy (13). Even though psychological violence does not leave visible marks, it can interfere with the woman's relationship with motherhood and may lead to poor mental health for the child (14). In conclusion, our results have both clinical and public health implications. Antenatal care could provide an opportunity for detection of CMD and violence (3). Beside the identification of abused women it is necessary availability of a social network such as referral to shelters, transitional housing, legal advice, psychological support (15) and women's empowerment protocols (15;16). Also, health-care services should have good relations with women's governmental other non-governmental organizations working on violence. Interventions that might prevent maternal mental health problems or help to treat its consequences should reduce the considerable burden of CMD and postnatal depression experienced by the woman, the child and the health services.

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# Risk assessment in female forensic psychiatric patients. First results with new gender-sensitive risk assessment guidelines

## Paper

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## Abstract

Violence risk assessment in female forensic psychiatric patients is still a relatively unexplored area. In this paper, we will introduce gender-sensitive risk assessment guidelines for female (forensic) psychiatric patients, the Female Additional Manual (FAM: De Vogel et al., 2010). The FAM is an additional manual to the HCR-20 and was developed on the basis of a literature review and clinical expertise. Ten of the original HCR-20 items were adapted and nine specific risk factors for women were added, such as Prostitution, Parenting difficulties, Pregnancy at young age, Covert behavior and Sexuality. Furthermore, two new coding aspects were added to the FAM; 1) the marking of critical items; and 2) the judgment of not only the risk of violence towards others, but also the risk of self-harm, victimization and non-violent offending.

A prospective study was carried out on the psychometric properties of the FAM in a Dutch forensic psychiatric hospital admitting both men and women. The FAM - next to the HCR-20, HCR:V3 (Douglas et al., in preparation), PCL-R and the SAPROF – was coded prospectively for 42 women from a forensic psychiatric hospital and a matched group of 42 men. Findings on inter-rater reliability and concurrent validity will be presented as well as some preliminary findings on the predictive validity of the FAM for violent incidents during treatment. Furthermore, codings on the FAM and other instruments for the female sample will be compared to those of the male sample in order to assess the specific applicability of the FAM items for women.

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## Educational goals

1. To learn more about specific risk factors and risk assessment in female forensic psychiatric patients.
2. To learn more about the Female Additional Manual (FAM).

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# Systematic review of risk assessment approaches and interventions with perpetrators of domestic violence

## Paper

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## Abstract

Domestic violence (DV) is recognised as a major problem in many countries around the world. The World Health organisation reports that the proportion of ever-partnered women who have ever been subjected to physical violence by a male intimate partner ranged from 13% in Japan to 61% in Peru (Garcia-Moreno et al., 2005). Such violence is a clinical problem as exposure to DV is associated with significant mental health problems (Ludermir et al., 2008) and mental disorder may be an important factor amongst perpetrators (Winick et al., 2011). Various risk assessment approaches and clinical interventions have been developed over the past 25 years. This paper will report findings from a systematic review of 289 studies published 1985-2008 where a risk assessment approach or an intervention for DV was tested. The relationship between sample, setting, design and outcome measurement variables on the one hand and a significant outcome on the other will be examined. In this way a comprehensive and detailed overview of progress in this important area will be provided.

## Educational goals

1. To provide an overview of the global research literature on domestic violence
2. To improve practice by increasing awareness of evidence based approaches in this area

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# Chapter 7 – Impact and effect of violence on staff and caregivers

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## Frequency of assault and severity of injury of psychiatric nurses in relation to the nurses' decision to restrain

### *Paper*

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**Keywords:** Violence, nurses, restraint, assault, Injury, decision-making

### **Introduction**

Throughout the last century and into the current millennium, great strides have been made in achieving a more humanistic and compassionate approach to the care of the mentally ill. Current laws protecting the rights of this population demand that patients be treated using the least restrictive interventions. In an attempt to comply with legal and ethical standards, many professional organizations and acute psychiatric institutions caring for those with mental illness have set a goal of “zero restraint”. Huckshorn and LeBel (2007) report on international initiatives to reduce or eliminate restraint in Australia, New Zealand and multiple European Union countries. The American Psychiatric Nurses Association (APNA), in its position statement, reports that it is working with other advocacy groups toward the elimination of restraints (APNA, 2001).

Although this is a laudable ideal supported by healthcare workers, there are situations in which restraint is the only option when all other least restrictive means have been ineffective in preventing assault and injury. Unfortunately, as restraint use has decreased, assault and injury of mental health care workers has increased (Khadiji et al., 2004; Liberman, 2006). Violence against those working in acute care psychiatry is a serious global issue. Studies done in Japan (Inoue, Tsukano, Muraoka, Kaneko & Okamura, 2006), South Africa (Bimenyimana, Poggenpoel, Myburgh & van Niekerk, 2009), Israel (Yarovitsky & Tabak) the United Kingdom and across Europe (Duxbury, Hahn, Needham and Pulsford, 2008) identify alarming rates of violence against psychiatric nurses.

This purpose of this study is to examine the frequency of assault and severity of injury in relation to nurses' decision to restrain.

Consistent with the goal of restraint elimination, reduction in the use of physical restraint over the last ten years has been documented (D'Orio et al., 2004; Fisher, 2003; Smith, Davis, Smith et al., 2005). This is a positive outcome since the use of restraints has been associated with serious negative consequences for the patient. (Paterson & Duxbury, 2007; Bower et al., 2003). However, failure to restrain, when imminent danger exists and assault results, exposes the nurse to injury and/or a potential charge of negligence if others are injured (Simon & Shuman, 2007). Maintenance of safety on the unit is both a legal and ethical responsibility of the nurse as is the protection of patient rights, often putting the nurse in a “Catch 22” situation.

Violence in psychiatry is a complex issue and may be related to multiple factors. Organizational problems such as short staffing, overcrowding and restrictive policies, individual characteristics of the patient relating to their mental illness, and untherapeutic approaches by staff have been identified as contributing factors (Fisher, 2003). Fisher (2003) also discusses the role-conflict of nurses who need to develop a therapeutic relationship with the patient, yet, at the same time they are required to set limits and enforce unit policy. In relation to the decreased use of restraint, some sources identify an increase in assault of nurses and other

mental healthcare workers (Khadiji et al. 2004 ; Lieberman 2006) while others have identified a decrease in assault or no increase in assault during the period of decreased restraint use (Riemer, 2009; Sullivan et al. 2005).

Literature that examines assault and injury in relation to the decision to restrain is scarce. Only one current source was found which specifically related nurse assault and injury to restraint. In a study of 300 mental healthcare workers carried out in six state psychiatric hospitals in Texas, it was found that nurses' attitudes toward use of restraint was significantly related to their history of injury. "A significant finding was that the odds of experiencing a patient assault related injury was 2.5 times greater for respondents who believed that seclusion and restraint was not beneficial to use with patients than for respondents who held favorable beliefs about seclusion or restraint ( $p < .001$ )" (Calabro, 2007 p 6595). An earlier study, conducted by one of the authors (Moynan, 1996) prior to the institution of the "zero restrain" policies, that examined nurses' decision making found a significant relationship between history of injury and decision to restrain ( $p = .032$ ) in a negative direction indicating that those who had been injured made a later decision to restrain in the progression of aggression.

## Study Design

A mixed methods design was used in this study comprised of quantitative and qualitative segments. The following questions were posed by the current study: For nurses working in acute care psychiatry:

1. What is the frequency of nurse assault in acute care psychiatry?
2. What specific injuries have been sustained?

Three hypotheses were made.

Hypotheses 1 and 2 examined variables found in a prior study (Moynan, 1996) to be related to the decision to restrain.

1. Nurses who have a history of assault will make an earlier decision to restrain in the progression of aggression than nurses who do not have a history of assault.
2. Nurses who have a history of injury will make an earlier decision to restrain in the progression of aggression than nurses who do not have a history of injury.
3. Comparing the data obtained in the current study with data obtained from a prior study before the introduction of more restrictive restraint policies, there has been a significant increase in assault and injury of psychiatric nurses.

Ethical approval for the study was obtained from the Human Subjects Review Committees of all participating institutions.

**Sample:** A convenience sample of 110 psychiatric nurses participated in the study. Of the 110 nurses, 93 were female and 17 were male. Years of psychiatric practice ranged from 1-40 years with a mean of 14 years. Ages range from 24 to 70 with a mean of 48.4 years. Educational preparation included Diploma ( $n=9$ ), Associate Degree ( $n=38$ ), B.S. Degree ( $n=39$ ), and M.S Degree ( $n=24$ ) nurses.

**Setting:** Five acute care psychiatric facilities participated in the study. Two institutions were exclusively psychiatric facilities. Three were general hospitals with discrete psychiatric units. The institutions were located in Queens, Nassau and Suffolk Counties close to the New York City metropolitan area.

**Data Collection:** The nurses watched a 5 minute video depicting escalating aggression and then entered data on a form related to the video. Additionally, they would complete a survey which included a narrative report.

They were also given the opportunity to discuss any of the aspects of the research with them after completion of the testing. The addition of this debriefing session was encouraged by the ethics committee because some aspects of the video and or the survey could bring up emotionally charged issues for the nurse respondent. Confidential field notes made from these interviews, with the nurse-respondents permission, added additional qualitative information.

**Instrumentation:** The survey consisted of a demographic segment followed by a history of assault segment. The nature of assaults and of injuries were assessed both quantitatively (using check lists) and qualitatively in the written narrative where the assault and injuries were described.

The Moynan Assessment of Progressive Aggression Tool (MAPAT) is a video depicting escalation of aggression by a patient in a psychiatric setting which occurs over a five minute period. Patient behaviors progress from mild agitation through wild fury and

assault. Nurses respondents stop the video at the point they believe no less restrictive intervention than restraint would be appropriate to maintain safety. Scoring is obtained from the elapse of seconds (0-290), yielding a ratio level of measure. The MAPAT has a reliability of  $r = .89$  and content validity has been established (Moylan, 2009).

## Results of the Quantitative Data Analysis

### Report of Assault and Injury Frequency and Severity

Of the 110 respondents, 80% had been assaulted ( $n=88$ ). Seventy-seven percent of the females ( $n=72$ ) were assaulted and ninety-four percent of the males ( $n=16$ ) were assaulted. Frequency in types of assault were: twenty-seven percent ( $n=30$ ) had been punched, twenty-six percent ( $n=29$ ) were hit with objects, sixteen percent ( $n=18$ ) had been spat at, thirteen percent ( $n=14$ ) had been slapped, thirteen percent ( $n=14$ ) had been kicked, ten percent ( $n=11$ ) had been choked, ten percent ( $n=11$ ) had been bitten, six percent ( $n=7$ ) had been thrown to the floor. Other assaults reported at a rate between 5 and 10 percent were: twisting of body parts, hair pulling, and scratching. Three female nurses had been sexually assaulted.

Frequencies in the type of injuries sustained were: Sixty five percent of the entire sample ( $n=72$ ) had sustained injury. Of those reporting assault, ( $n=88$ ), eighty two percent ( $n=72$ ) sustained injury. Forty one percent sustained hematomas or bruising ( $n=45$ ), twelve percent received scratches ( $n=13$ ), ten percent received lacerations ( $n=11$ ), ten percent sustained eye injuries ( $n=11$ ), seven percent suffered fractures ( $n=8$ ), seven percent sustained back injuries ( $n=8$ ), five percent sustained torn ligaments and/or joint damage ( $n=5$ ), two percent were knocked unconscious ( $n=2$ ) and one respondent had teeth knocked out. Twenty nine ( $n=26\%$ ) of the respondent's injuries were serious enough to require immediate medical treatment with continued medical follow up or hospitalization and surgical intervention. All of those reporting serious injury reported substantial loss of work time.

The number of days lost from work for the total sample was: 2119 with a mean loss of 19.2 days. The mean number of assaults was 3.8. There were no significant differences in frequency of assault related to degree, position, shift or institution. There was a significant difference in frequency of assault between males and females ( $r = .209$ ,  $p = .028$ ) with males having a higher rate. A significant correlation between years in psychiatric practice and number of assaults was found ( $r = .280$ ,  $p = .003$ ).

### Report of the Hypotheses Findings

#### Decision to Restrain.

Hypothesis 1: Nurses who have a history of assault will make an earlier decision to restrain in the progression of aggression than nurses who do not have a history of assault. A t test done to identify differences in decision to restrain between those who were assaulted and those who were not did not show significance ( $p = .111$ ).

Hypothesis 2: Nurses who have a history of injury will make an earlier decision to restrain in the progression of aggression than nurses who do not have a history of injury. Using a t test, there was a significant difference between those who were injured and those who were not ( $p = .048$ ) Those who were injured made the decision to restrain at a later time in the progression of aggression than those who were not injured, in the opposite direction to the hypothesis made.

Hypothesis 3: Comparing the data obtained in the current study with data obtained from a prior study before the introduction of more restrictive restraint policies, there has been a significant increase in assault and injury of psychiatric nurses.

The data obtained in this study was compared to data obtained in a prior study done by one of the authors (Moylan, 1996). Since only females were tested in the first study, only the data for females was included in the testing of hypothesis 3. Using the Chi Square measure, no significance was found between the sample in the earlier (1996) study and the sample of the present study in relation to the variable of assault ( $p = .128$ ). However, there was a significant difference between the groups as to the rate of injury ( $p = .010$ ). In the sample of the current study, sixty three percent ( $n=59$ ) of the nurses were injured compared with forty four percent ( $n=48$ ) of the nurses in the prior study. When only serious injuries (as described above) were compared, there was also significant differences between the two sample groups ( $p = .004$ ), with the current study group sustaining a significantly higher rate of serious injury.

**A Brief Report of the Qualitative Findings:** In analyzing the content of the narratives, it was found that female nurses under-reported injuries in the quantitative segment of the study. Several nurses included descriptions of being burnt with cigarettes and hair loss from violent hair pulling but had checked "no

assault” or “no injury” on the quantitative segment of the survey and therefore were not counted in the statistical data related to assault or injury. Nurses also reported feeling pressure to avoid restraint use, feeling blamed and multiple other negative perceptions and responses to the assault.

## Discussion

This study provides current, in depth information about the nature, frequency and severity of assaults and injuries of nurses providing acute psychiatric services and the relationship between assault, injury and the decision to restrain. This study also compared rates of assault and injury with findings from a prior study.

Analysis of the data revealed that the vast majority of the nurses comprising the sample had been assaulted and the vast majority of these had been assaulted numerous times in the performance of their duties. A large majority of the entire sample had sustained injury and more than one fifth of the nurse respondents had been seriously injured. These statistics are even more alarming when considering the under-reporting of assaults and injuries which came to light in the qualitative study segment. The post-testing interviews with the nurses in this study indicated multiple reasons why injuries are not officially documented. One of these was that violence in psychiatry is to be expected and is considered routine. This is consistent with prior reports (Atkinson 2005 ; Lanza et al. 2006). From the data generated by the current study, it is clear that these nurses are working under extremely high risk conditions. Yet nurses who are most seriously affected by violence and have left psychiatric practice or are permanently disabled are missed in the statistical assessment of assault and injury rates in studies conducted in the work setting.

Although there was no significant difference found between nurses who had been assaulted and those who had not been assaulted in relation to their decision to restrain, there was a strong trend identified in the opposite direction than predicted by the first hypothesis( $p=.111$ ) There was significant difference found between nurses who had been injured and those who had not been injured in relation to their decision to restrain, in the opposite direction than predicted by the second hypothesis ( $p=.048$ ). Those who had sustained injury decided to restrain later in the progression of aggression, possibly indicating a potential for future assault. In the prior study by one of the authors (Moylan, 1996) injured nurses also restrained significantly later than uninjured nurses and this was thought to be unexpected outcome. This finding is surprising in that it would seem a reasonable expectation that someone who had been injured would become more cautious. In order to maintain unit safety for patients, staff and others, it is important that the nurse exercise prudent and expert intervention when dealing with aggressive patients. In accordance with legal and ethical standards, the least restrictive and supportive therapeutic interventions should be used. However, at the point where imminent danger exists, the nurse needs to institute restraint procedures.

Nurses in this study were told to stop the MAPAT video at the point that they judged imminent danger, requiring restraint use, was present. The mean MAPAT score in this sample was 252. At that point in the video, the patient is totally out of control, has violently assaulted property and has specifically threatened to strangle the nurse. When the MAPAT tool was evaluated by ten Master’s prepared Clinical Nurse Specialists/Nurse Practitioners in 1996, in their expert opinion, the appropriate time for restraint occurred between 239-244 seconds, just as the property assault began and a threat to the nurse is made. An alarming finding in the current study is that 31 nurses (28%) did not decide to initiate restraint until the patient had his hands around the nurse’s throat at 278 seconds.

With increasing demands to eliminate restraint use, nurses may feel pressured to avoid restraints, fearing negative sanctions from administration, thereby impeding their ability to comply with other legal regulations relating to safety maintenance. The significant finding that the incidence of injury has increased in the current sample when compared to the prior study is not surprising when considering the changes within the system. These findings are congruent with other studies which looked at changes in restraint policy by Khadivi et al. (2004) and Lieberman (2006).

There is a tremendous cost associated with the prevalence of assault and injury. The human costs of physical and emotional damage to nurses are well documented. In a systematic review of the literature, Needham et al. (2005) found that, regardless of country or culture, nurses’ responses to aggression were similar. These authors report feelings of fear, anger, post-traumatic stress guilt, self-blame and shame. Negative changes in professional functioning have also been identified as a consequence of assault (Yarovitsky & Tabak, 2009).

The economic impact of staff assault can be staggering. The high cost of nurse assault is documented by Findorff et al. (2000). In the current study, 2119 work days were lost.

## Limitations of the study

The ability to obtain a representative sample is severely constrained due to logistical factors. Moreover there were discrepancies in the report of assault and injury by the respondents themselves in regard to underreporting. Another limitation relates to the MAPAT instrument. The aggressive patient depicted is a middle aged white male of medium build. Demographic characteristics such as size, sex, race etc. may elicit different responses from the nurse respondents in their decision to restrain.

## Recommendations

The issue of increasing violence in psychiatry requires extensive study of the development of effective methods for increasing safety while simultaneously respecting the rights and dignity of the patient. Effective training in assessment and response to aggressive behavior must be developed. Another area that needs to be addressed is the support available to the nurse who has been injured. Unlike law enforcement professionals or firefighters who are often recognized as heroes when injured in the line of duty, nurses are often blamed. This culture must be changed. Organizational policies such as safe staffing and provision of personal alarm devices need to be established. Professional nursing organizations should continue to use their influence to facilitate change through public policy and legislative action.

## Further Study

There is great need for scholarly investigation of the effectiveness of programs to decrease assault and injury in acute care psychiatry. More study is also needed concerning the long term effects of serious injury to nurses, using both quantitative and qualitative research designs in order to achieve a fuller understanding of this troubling phenomenon.

## Conclusion

The increase in the rate of assault and injury of nurses working in acute care psychiatry is well documented in the literature. This study showed similar findings but added specific information as to the types of assaults and the types and severity of injuries sustained. A significant relationship was shown between history of injury and the nurse's decision to restrain the aggressive patient.

The rate and nature of injuries to nurses is truly alarming and needs to be addressed by the health care system, the management of institutions and the profession of nursing. Places of employment must begin to take responsibility for improving the risky conditions of nurses employed in acute care psychiatry.

## Acknowledgements

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# The effect of violence on healthcare workers' stress and productivity

## Paper

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## Abstract

Violence experienced by hospital emergency department (ED) workers from patients and visitors is prevalent and increasing. In addition, a research study by the investigators found that workplace violence is a significant stressor for ED nurses and that violence may have a negative impact on the care that ED nurses provide. The investigators are conducting an experimental study to test the effectiveness of an intervention to reduce violence against ED workers. Three intervention and three comparison hospital EDs are participating in this project over a four - year period. This paper will describe the nine months of pre-intervention data collected from 210 direct care staff in the emergency department including physicians, nurse practitioners, physician assistants, nurses, patient care technicians, and paramedics. Monthly surveys were sent to staff asking them to identify the number and type of physical threats and assaults they experienced during the previous month, their feelings of safety, and their confidence in dealing with aggressive and violent patients and visitors. They were also asked to respond to questions as to how the violent event affected their stress and productivity. Descriptive analysis (e.g. percentages, frequencies, means, and correlations) will be used to report the incidence of violence, type of violence, whether the perpetrator was a patient or visitor, and whether a weapon was involved. Information regarding rates and types of staff injuries resulting from the events will also be reported. Simple correlations will be done to identify relationships among violence, stress, productivity, safety and confidence. Structural equation modelling will be done to test and estimate the causal relationships among violence, stress, and productivity.

## Educational goals:

1. To describe the prevalence and characteristics of violence against ED workers.
2. To explore relationships among violence, stress, and productivity.

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# Symptoms of post-traumatic stress in hospital based emergency department workers

## Poster

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## Abstract

Workplace violence has a deleterious effect to the mental health of emergency department (ED) workers placing them at risk for developing post traumatic stress disorder (PTSD) symptomatology. The study purpose was to examine the degree that ED workers reported PTSD symptomatology following workplace violence. A cross-sectional survey design was used with a convenience sample of ED workers from six Midwestern U.S. hospitals. Participants completed a demographic survey and the PTSD Checklist—Civilian Version. Descriptive statistics were computed to describe the sample's reported PTSD symptomatology. Spearman's rho correlations were used to correlate events of workplace violence and PTSD symptomatology. The study included 208 ED workers reporting the experience of personal workplace violence trauma. There were 854 trauma exposures with events occurring from verbal harassment, sexual harassment, physical threats, or physical assaults from patients or visitors while at work in the ED during the six months just prior to data collection. Mean violent events was 4.1 per ED worker. The PTSD symptomatology most experienced by ED workers was re-experiencing the violent event ( $n=64$ , 30.8%). ED workers also reported hyperarousal ( $n=45$ , 21.6%) and avoidance ( $n=13$ , 6.3%). Reporting PTSD symptomatology from all three domains was seen with 11 (5.3%) ED workers. A significant correlation was seen between the mean number of physical assaults by patients to re-experiencing ( $r=.132$ ,  $p<.05$ ), sexual harassment by patients to re-experiencing ( $r=.163$ ,  $p<.01$ ), and sexual harassment by patients to hyperarousal ( $r=.153$ ,  $p<.05$ ). Avoidance was the least commonly reported PTSD symptomatology by the ED workers. This finding may be a result of the U.S. ED work environment against avoidance behaviors. For example, the U.S. ED is unique from other occupational settings in that ED workers are commonly asked by their professional colleagues for details that led up to and transpired during violent events. Employees may also file safety event reports with administration and later meet with the ED leadership to discuss in further detail the violent event and what could be done to prevent future occurrences. In addition, ED workers are not permitted to refuse emergency care per the U.S. Emergency Medical Treatment and Active Labor Act. ED workers are required to provide emergency care to all persons seeking care regardless of the patient's tendency toward violence. The more violent a patient has become, the more likely the ED worker will need to reassess the patient for harm against his or herself and other ED workers. As a result of these three situations, it is not surprising that the study sample failed to report avoidance behaviors more frequently. Participants experiencing the three domains of PTSD symptomatology were only 5.3% and comparable to the general U.S. population. The magnitude of the problem may be greater since ED workers that demonstrate avoidance may quickly change occupational settings. It is important that coping strategies such as debriefing occur following violent events to help protect ED workers from developing PTSD and/or leaving the ED.

## Educational goals

1. To describe the problem of post traumatic stress symptomatology in U.S. emergency department workers.
2. To examine the protective nature of the emergency department against endorsement for the post traumatic stress symptomatology of avoidance.

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# We don't speak no Italiano! But we do have a model of psychological trauma first aid which has been developed and employed in a secure mental health setting in the UK, this model of psychological first aid is known as the St Andrews ASSIST model

## Paper

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## Abstract

This model is being considered for training recruits at the new Red Cross Trauma Centre in Milan, Italy, later in 2011.

## The ASSIST model

This model is based on a brief psychological first aid debrief model and is employed on a 1 +2 session bases. The staff are seen within 4-5 working days of the incident/event. The attendance at the sessions is voluntary, but an organisational policy outlines the procedures for managers and staff following an incident/event at work. The models design draws on the Psychological Debrief (PD) approach developed Regel el (2010) at the Centre for Trauma, resilience and Growth, in Nottinghamshire, UK.

### ASSIST model

- Assessment of the individual or groups needs, context and background
- Structured session provides the individual with an understanding of the impact of psychological trauma and information of normal signs and symptoms and possible reactions.
- Strategies to help cope with the psychological impact of the signs and symptoms of trauma are discussed
- Information regarding ongoing support – 24/7 helpline
- Sign posting and referrals to specialist help and treatment for staff who have continued frequency of signs and symptoms or who report life difficulties related to trauma reactions
- The model takes account of the individual's natural resilience and ability for psychological growth and recovery

The ASSIST model is not a treatment for PTSD rather it is a psychological first aid intervention to provide a quick, accessible, structured support that promotes psychological wellbeing. Many organisations within the UK provide staff with a model of brief PD for example Trauma Risk management (TRiM) is employed in the military and SPOT developed by the Post Office. Offering support to staff after an event that has happened at work makes good business sense. Staff have reported that they feel more valued by the organisation and being given the time to attend sessions has been one of the keys to their recovery. This work is described in a new International Hand book on Psychological Trauma management, Edited by Professor Cary Cooper and published by Wiley (in press2011).

## Educational goals

- To inform staff support in secure mental health hospital where patients with aggressive and violent behaviour impacts staff in their place of work.
- The ASSIST model is being considered by the International Red Cross for training the new recruits at the Trauma Centre in Milan Italy, and may be transferable cross European cultures.

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# Violence against staff – ‘through blood, sweat and tears’..I’ll still care for you’

## Paper

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## Abstract

Assault against mental health staff within the UK’s National Health Service is increasing; however criminal sanctions against assailants remain low (between 1-2%) Do fear levels and/or, experience of assault by staff without police response affect patient care delivery? The objective of this study is to present comparison results from a repeated staff survey on the levels of perceived fear, assault levels (with and without weapon(s) and staff satisfaction rates around police and organisation (NHS Trust) response post assault.

This survey covers staff within the Maudsley Hospital, inner-London borough of Southwark. The ‘safer neighbourhood survey’ was jointly developed by the Metropolitan Police Safer Neighbourhood Team and Nurse Consultant for Promotion of Safe & Therapeutic Services in response to staff members concern that the police service was not supportive in pursuing charges after assault by a mental health patient.

A questionnaire was designed to examine staff members’ levels of fear of assault both at work and outside of working hours. Additionally, data was collected around the number of staff who had actually been assaulted (66%) and those staff members where weapon(s) had been used (30%). Additional data was collated around attitudes and satisfaction levels of police response and whether staff felt that senior-management within the trust expected them to tolerate assaults without considering prosecution. Finally, perceptions held by the police of mental health patients’ capacity and culpability in criminal activity have been explored to help develop strategies to promote safer services for all. This survey’s repeated comparison data is available to indicate effectiveness of strategic police work.

## Educational goals

1. The listener will be able to evaluate the impact of work-related violence in an inner-London hospital setting, have knowledge of the frequency of this type of event and the severity of the impact to staff members and recognise the effect of violence in the delivery of care to the mental health patient.
2. Illustrated will be the satisfaction levels in response to work-related violence experienced by staff by partner agencies and their employer.
3. The listener will be informed of collaborative work streams and strategies developed with the police service in managing work-related violence in psychiatry.

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# Serious assaults on staff: A study at a secure psychiatric hospital

## Paper

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**Keywords:** Staff assaults, forensic psychiatry, inpatients

## Introduction

Violence by psychiatric patients on inpatient units in the United Kingdom is a widespread phenomenon and appears to be increasing [1,2]. Possible reasons for this increase include the rising number of disturbed involuntary admissions and patients with forensic histories, the non-hospitalisation of less ill patients and reduced staffing levels on wards [3]. Overcrowding in psychiatric wards is an important factor associated with violent assaults [4].

Some authors report that staff are proportionally more likely than patients to be assaulted, especially nurses and inexperienced staff members [1,5], although another study found that trained staff were more frequently assaulted than untrained staff [6]. Roughly 40-60% of psychiatrists will be assaulted during the course of their professional lives [7].

Given that little is known about the pattern of patient assaults on staff in forensic inpatient settings in the UK, we set out to describe the nature and circumstances of serious staff assaults at our own hospital. Further aims were to produce profiles of victims and assailants thereby highlighting those most at risk.

## Method

The study was conducted at St Andrew's Healthcare, Northampton, a charitable, 550-bedded tertiary referral centre offering specialist psychiatric care to patients with diverse mental health needs. Almost all patients are detained and nursed in secure conditions. At the time of the study, the Northampton campus was organised into five Registered Hospitals: adult male forensic and rehabilitation, female forensic and rehabilitation, an adolescent service, a service for older adults and one for acquired brain injury. Each Registered Hospital had approximately 100 beds.

For the purpose of the study assault was defined as 'any intentional, aggressive physical act committed by a patient towards a member of staff irrespective of severity' [1]. Injuries which were sustained whilst controlling assaultative patients in restraint situations were excluded from the study. When a member of staff is assaulted two linked Accident and Incident Forms are completed; one for the patient and another for the member of staff. A proportion of assaults against staff will be reported as RIDDOR incidents (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) [8]. These are incidents which result in a member of staff having three or more days off work as a result of the assault. All RIDDOR forms pertaining to the years 2007- 2009 inclusive were studied. The Human Resources department provided details of the numbers and gender of nursing, healthcare assistants and other clinical staff employed by the Hospital during the study period.

A cross-sectional survey of the gender and clinical diagnoses of all inpatients was carried out. All patients are given clinical ICD-10 psychiatric diagnoses by their consultant psychiatrist and recorded in their case notes.

Data were entered into an SPSS database [9]. The Chi-square test was used to test for difference between groups and the Mann-Whitney test to examine for differences between medians.

## Results

Between 2007 and 2009, a total of 115 patient assaults on staff reached the threshold to be defined as RIDDOR incidents. Of these 115 assaults, eight members of staff were assaulted twice and 99 were assaulted once giving a total of 107 staff who were assaulted. Between 2007 and 2009 there was a significant increase in the proportion of assaults that reached the RIDDOR threshold, from 2.6% in 2007,

3% in 2008 and 4.5% in 2009 ( $\chi^2=7.38$ ,  $df=2$ ,  $p<0.05$ ). The number of assaults per mean occupied bed also increased over time.

The largest number of RIDDOR assaults occurred in the Adolescent Service (33; 29%) followed by the Brain Injury Service (27; 24%) and the fewest in the Women's Service (15; 13%). The majority of assaults occurred on medium secure wards (49; 43%).

#### *Details of RIDDOR assaults*

The highest number of assaults (42; 37%) occurred between 5pm and 11pm. Assaults were less frequent at the week-end (mean number of assaults 11.5 per day at week-end vs 18.4 on weekdays). The majority (108; 94%) of assaults occurred on the wards, most often in the day areas or corridors (52; 45%). Most (88; 77%) assaults were spontaneous but some occurred during patient restraints and some on wards for the elderly when patients were being assisted with their personal hygiene.

#### *Details of staff assaulted*

More females than males were assaulted (70% vs 30%). During the study period 65% of clinical staff employed by the Hospital were female, thus females were slightly over-represented among those who were assaulted. The highest number of assaults involved staff aged 26-35 years. The majority (62%) were healthcare assistants while 33% were nurses. Very few (5%) assaults involved other clinical staff and none involved doctors. During the study period 57% of clinical staff were healthcare assistants, 26% were nurses and 17% were other clinical disciplines. Thus, healthcare assistants and nurses were over-represented amongst those who were assaulted. The majority of staff (59; 55%) had been employed for less than five years by the Hospital.

#### *Nature of the assault and its severity*

The most frequent type of assault (25; 22%) involved the staff member being struck, while 26 (23%) of assaults involved multiple methods. Most of the staff assaulted (71; 62%) had multiple injuries. The head was the body part that was most frequently injured (42; 37%). Four staff sustained fractures, five major lacerations and one concussion. Most (61; 53%) staff attended the local Accident and Emergency department. In March 2009 the Hospital appointed a trauma advisor. Of the 47 assaults occurring after their appointment, 14 (30%) consulted the trauma advisor for psychological support post assault. After RIDDOR assaults staff were off sick for a median of 9.5 days (range 3 – 170 days). Assaults occurring on medium secure wards resulted in staff being off work for longer than on low secure, locked or open wards (median days off work 12.5 days vs 7 days, Mann-Whitney U,  $Z=2.63$ ,  $p<0.01$ ).

#### *Details of the patients who carried out the assaults*

For 16 RIDDOR assaults there was no information available about the assailant leaving 99 assaults. Seventy patients were involved in these 99 assaults. Fifty-six patients made one assault and fourteen made multiple assaults. Somewhat more male than female patients were involved in assaults (54% vs 46%). However, given that only 35% of the Hospital's population was female this means that females were over-represented amongst assailants. A total of 39% of assailants were aged under 25 years and 59% were under 35. Thirty (43%) had multiple diagnoses. The most common psychiatric diagnosis among assailants was organic disorder (34%) followed by schizophrenia (26%) and personality disorder (20%). Amongst the Hospital's population as a whole the most common diagnoses were schizophrenia (35%), organic disorders (30%) and personality disorders (25%). Forty-nine percent of assailants had been admitted within the previous 12 months. In total, 54% were detained under Section 3 of the Mental Health Act.

## **Discussion**

In this retrospective study of serious assaults on staff by patients over a three year period at a secure psychiatric hospital, 115 RIDDOR assaults were logged. It is likely that some assaults went unreported. The data showed an upward trend in the number of these assaults over time, even when the increasing size of the Hospital over this period was controlled for. This may represent more complete reporting of incidents or the increasing disturbance and assaultativeness of the patient population. The majority of assaults took place in medium security. Haller & Deluty reported that wards with unsettled patients such as admission and locked wards are more often the site of violence [3]. That the largest number of assaults took place between 5 and 11pm may reflect the fact that patients have unstructured time, staffing levels tend to be somewhat lower and temporary nursing staff come on duty to work a twilight shift. Conflict might be expected to be more likely with staff who do not know the patients well [10]. The lower numbers of assaults at the week-end was also a finding in a study of incidents in a psychiatric intensive care unit [11] and may reflect the more relaxed regime and greater access of patients to their bedrooms.

The staff who were assaulted tended to be relatively young. Almost two-thirds were healthcare assistants and a third were nurses. Few RIDDOR assaults involved other professionals. Hodgkinson et al (1985) reported that trainee nurses were assaulted most, staff nurses were intermediate and charge nurses least often [1]. In another study conducted in a maximum security hospital, nurses had a much higher rate of injury than other professions [12]. In our study most of the staff who were assaulted were relatively inexperienced, as has been found by others [5,12]. Although the injuries sustained were relatively minor in many cases, almost two-thirds of staff had multiple injuries and following the assault the majority of staff went off duty, with over half attending the local Accident and Emergency Department. Some staff availed themselves of psychological therapy from the Trauma Advisor. Lanza (1985) reported that 71% of nurses who were attacked described fairly severe to very severe emotional reactions to the assault [13].

The highest number of assaults occurred in the Adolescent Service, followed by the Brain Injury and Older Adults Services. Thus, some assailants were young (those from the Adolescent and Brain Injury Services) while others were older adults. Patients with organic disorders were slightly over-represented while those with schizophrenia and personality disorders were not. This is in contrast to other studies where the majority of violent patients had a diagnosis of schizophrenia [14, 15] and reflects the specialist patient population of our hospital. Overall, patients of the Adolescent Service were over-represented (Adolescent Service patients constituted 19% of all patients and were responsible for 29% of assaults). Female patients were somewhat over-represented amongst assailants. Half of assaults took place within the first twelve months of admission. A few patients were responsible for multiple staff assaults, a finding noted previously [16].

The study has a number of limitations. It was conducted in an independent tertiary referral centre with specialist patient groups. The results, therefore, cannot automatically be generalised to the NHS. It was a retrospective study making use of routinely collected data. The RIDDOR criteria of being off sick for three days or more, is a crude indicator of staff injury. Some RIDDOR forms had been either poorly filled in and thus did not provide accurate information, also some forms were missing. It must be remembered that we studied only the more serious assaults and excluded those where staff were off sick for less than three days. Thus, we focused on the more serious staff injuries whereas if we had studied all assaults a different, more minor overall picture of injuries would have emerged as has been reported by other authors (e.g.[11, 17].

## Clinical implications

Serious assaults on staff were not uncommon in the secure service studied. Clinical staff new to secure services need induction training in the prevention and management of violence and in safe breakaway techniques and all staff need regular updates of this training. However, the effectiveness of breakaway training has been called into question [18]. Following an assault by a patient, staff require not only medical attention for their physical injuries but also psychological support. When staff are assaulted it is important to carefully document the event, including details of the patient assailant, so that the organisation can learn from such event reporting and work towards the prevention of further such events. Further research is needed into the prediction and prevention of violence amongst psychiatric patients in secure settings so that the number of serious assaults is minimised.

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## First impression, final impression?

### Workshop

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### What do you see?



### Communication through behavior

An ordinary day in the corridors of a clinical setting. (Kinnik, child en youth psychiatry). In the corridor we collide Julian, an 8-year-old boy, who is hitting, kicking, biting, spitting, swearing, cursing and clawing, trying to loosen the three supervisors who try to calm him down. Meanwhile, he bangs his head hard against the supervisors and the floor.

Children are often limited in putting into words what they think, act and feel. For most children behavior is a way to communicate. Watzlawick (1921-2007) wrote: "It is impossible not to communicate". All behavior is a form of communication. Because there is no such thing as anti behavior, it is impossible not to communicate. With children with a psychiatric disorder, communication sometimes leads to violent behavior which in daily life can cause problems and prevent them from functioning.

### The meaning of behavior

Each behavior is significant. Herewith we follow Watzlawick (1974) who says that all behavior is communication. This means that all behavior has meaning and is an expression of a message. The message is associated with thoughts and feelings. This view has implications for the way you look at aggression and how you subsequently deal with it. From this way of looking we would therefore rather talk about hard to understand behavior than aggression and we assume that difficult to understand behavior is meaningful (it is the frustration about something that is important to that person), although its expression is often not productive.

It is desirable to trace the meaning of problem behavior and respond to it timely. It is also important to reflect on our own actions when confronted with difficult to understand behavior. The fact is that this way of expressing evokes debilitating reactions of the environment. We are talking about the first, instinctive tendency to control the behavior, while support and a listening ear is desired. By focussing on our share in the interaction, we try to restrain these tendencies so we can choose the most appropriate and effective (professional) approach.

On the one hand it is important to intervene when it comes to aggression, so that it stops. On the other hand it is equally important to find out the meaning of the behavior. What is the message behind the actual behavior? For that is what you can talk about and there is the opening for change.

## What behavior does to you

Sometimes, however, behavior is so impressive that it is hard to examine the meaning of the behavior. For the environment, most of the time aggression is a problem, something undesirable, something that needs to be addressed and should stop as soon as possible. The first tendency therefore is wanting to control the aggression. We lose ourselves in dealing with behavior, not dwell on the meaning. A cursing, screaming, scratching, kicking child is soon placed in the corner of the unwilling, oppositional and annoying child who doesn't want to cooperate.

What is imposed to us (the aggression) stands in the foreground and the rest easily disappears into the background. What we see first, makes the biggest impression. In practice, it is difficult to deviate from this impression. Sometimes the term social perception is used in perceiving and interpreting forms of (aggressive) behavior that one may encounter in society. Among social perception is a process of forming an opinion about another person. This form of perception is also colored by our own experiences, cultural background, life history and personality traits (Moskowitz, 2005).

The result of a purely managerial or predominant reaction is that contact becomes more disturbed, the control is taken over and sometimes even taken away. The perspective the child wants, is quelled. The discussion around the significance of the behavior is not or hardly carried. One tends to think in terms of reluctance, whereas the child feels powerless. Apparently, it is difficult to get separated from your first impressions and perceptions. Yet it is more desirable and useful to identify the meaning of this behavior and respond to it timely. If we know the meaning of behavior, we can look to a customized plan with a solution which was invented for and invented by the child.

## Prevention

An aggression incident is rarely an isolated thing. It also happens rarely out of the blue, but mostly has a connection with preventive signals. When you look back with a certain distance, you see a number of factors that play a role in the development of aggression. Nijman, à Campo, Ravelli en Merckelbach (1999) and Nijman (2002) indicate in their explanatory model for aggressive behavior in psychiatric clinical settings that the various factors are in constant interaction. These are factors on patient levels, factors on department levels and factors on employee levels. Repeated aggression by a patient may be the result of a vicious circle.

In preventive sense, signals of aggression can be anticipated. In many cases, tensions gradually increase until they discharge in an aggressive outburst. In many cases, the early break from the stress prevents escalations (Singh, Singh, David, Latham en Ayers, 1999).

Within the (cognitive) behavioral therapy the function and meaning analysis is used to get more insight into the meaning of behavior. The direction of the behavioral analysis emphasizes a careful examination of the causes and the consequences for the environment of a given response repertoire (Meichenbaum, 1981, p. 195). In the function analysis an accurate analysis of specific behavior in specific contexts is made, with all what the behavior precedes and what follows. This is behavior in a chain of events and thus perceived as functional in this chain: there is a kind of logical connection between behavior and context.

## Environment

Health, wellbeing and environment cannot be separated. Therefore, besides the attitude and approach, the environment in which the treatment takes place is important. At Kinnik we work and think from the world of the child. We don't only want to make this presentable in our approach but also in the physical environment, the buildings and the equipment.

We want to offer our children and youth (some of the most vulnerable in our society) a treatment area from which the perception of the child gives an answer to their complex request for help without losing the joy that belongs to children and growing up. With this we connect to the most recent developments in healthcare in which increasing attention is given to the healing of the care environment, also known as 'healing environment'.

Research shows that an environment which takes into account the positive impact of certain environmental variables such as color, privacy, autonomy, lighting, comfort and control, facilities and equipment, orientation and routing, interior, nature, etc. has a demonstrably positive effect on:

- the pace of recovery,
- the stress experience,
- the overall feeling of wellbeing,
- the number of incidents of aggression,

- disease (default), and
- less pain and infections in somatic diseases.

In particular, the reduction or removal of stress appears important. In 2005, Agnes van den Berg produced a review article in which she outlines the scientific evidence available for healing environments so far. Healing environment appears to be a so called contributing factor to the process which focuses on reducing aggression. These positive effects do not only apply to the patients, but also to the staff of the departments where exactly these points have been invested. In that perspective the “Healing Environment” is an important method that contributes to positive treatment outcomes, the duration of treatment, cost reduction and a pleasant environment for patients and staff.

## Summary

Kinnik strives for understanding the child and his behavior and connect with the experiences of the child through a tailored approach and attitude within a suitable environment. By examining the meaning of behavior in the individual child with a psychiatric disorder in a healing environment, we try to reduce the number of incidents in which aggression is involved in clinical child and adolescent psychiatry.

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# Perception of nurses who are working at a University Hospital to patient aggression

## Poster

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## Abstract

### Background and Aim

Being exposed to patients aggressive behaviour for nurses is a common problem. How they perceived the aggression is determinative for the nurses attitudes and approaches to patients. Both cultural and individual factors may effects nurse's perception about patient's aggression. The purpose of this study is to investigate how the nurses who are working at a university hospital perceive the patients aggression and if some factors (sociodemographic and professional characteristics, being exposed to aggressive behaviour) effect this perception . In literature, it have not been found a study which evaluates the perception of nurses' "who are working except psychiatry units" to patient aggression with a psychometric measurement.

### Method

This study is a cross sectional and descriptive study. POAS (Perception of Aggression Scale) , a self report scale, that measures the perception of patient's aggression performed to 218 nurses who are working at different clinics (responding rate = 68.1%). Nurses categorized as sociodemographic and professional characteristics and situation of being exposed to aggression. And they are compared using (functional and dysfunctional) sub-scores of POAS.

### Results

In our study; nurses generally have a dysfunctional perception against patient's aggression (dysfunctional sub-score;  $3.39 \pm 0.61$ , dysfunctional sub-score;  $2,28 \pm 0,56$ ). 69.2% of nurses in our study had been exposed to patient aggression at least once in their professional life. It is found that these nurses perceived patient aggression much more dysfunctional compared to nurses who did not exposed to aggression ( $p < 0.05$ ). Moreover, it is observed that nurses who are the oldest, the most experienced and have the longest years of work at the unit, perceive the patient aggression less often as functional compared to others.

### Conclusion

Nurses often percept patient's aggression by negative side. Aggressive behaviors of patients to nurses are quite common and this situation negatively affects nurses' perception of aggression. On the other hand, getting older and becoming experienced in nursing –perhaps contrary to expectations- is also related with negative perception of patient aggression. The professional attrition and burning out can be a role in that situation. Taking a comprehensive training about the aggressive behavior of patients can have a more positive effect on perception of nurses and provide nurses to improve relations with patients in a more positive direction.

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## **Educational goals**

1. To evaluate the perception of nurses' toward patient aggression.
2. To determine the educational needs of the nurses about aggression.

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# Verbal aggression against staff in health care: A qualitative study in different settings

## **Paper**

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## **Abstract**

Background: Verbal aggression against health care staff is a poorly defined and under-researched phenomenon. While physical aggression can be operationalized relatively easily, there is no clear boundary between ‘ordinary’ speech acts and ‘aggressive’ speech acts. Furthermore, there is no sufficient evidence on the impact of verbal aggression on staff.

## **Study aim**

To explore the perception and impact of verbal aggression on health care staff.

## **Methods**

Eight focus groups with staff were conducted in different care settings (adult psychiatry, children/adolescent psychiatry, forensic psychiatry, general hospital, residential setting for the chronically mentally ill, nursing home) in north-western Germany. Interviews were transcribed verbatim. A content analysis was conducted.

## **Results**

Verbal aggression is a common issue in all participating care settings. It is mostly considered as one of many stressors in the everyday work life. Impact and coping strategies depend highly on the setting. Adult psychiatric staff seems to be adapted to verbal aggression, it is considered as part of the job, forensic (and somatic) staff suffers more. Organizational/setting attitudes and policies shape the coping strategies (e.g., limit setting).

## **Conclusions**

Even after thorough analysis of the data, it is impossible to operationalize verbal aggression in a satisfying manner. Prevention efforts could be focused on: immediate reactions and argumentativeness; team strategies; individual coping strategies (e.g., how not to take accusations personally); milieu-induced aversive stimulation and organizational barriers.

## **Educational goals**

1. To learn about the details and about the impact of verbal aggression on staff.
2. To learn about possible preventions measures against the harmful impact of verbal aggression.

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# Chapter 8 – Impact and effect of coercive measures on patients

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## Review of the medical theories and research relating to restraint related deaths

### *Paper*

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### **Abstract**

In 2011 the Ministry of Justice (UK) funded a research project to scope, review and report upon the existing literature on restraint related deaths and their causes.

The project specifically focussed upon:

- A review of the medical theories and research relating to restraint related deaths focussing upon those that occurred in the UK from 1st January 1999 to 31st December 2009 with particular reference to positional asphyxia (with reference also to relevant international research on these deaths).
- Discussion of other aspects of restraint related deaths including excited delirium, pre-existing congenital conditions e.g. Sickle Cell Disease (SCD) and acquired conditions e.g. Chronic Obstructive Pulmonary Disease (COPD).
- Discussion of the role of drugs and alcohol in restraint related deaths.
- Identification of any trends particularly in relation to Black and Minority Ethnic (BAME) communities and those individuals with mental health issues.
- The review also identified any relevant research undertaken in relation to the use of de-escalation techniques in order to avoid the use of physical restraint.

A gap analysis was then mapped against the tender specification to determine recommended steps to be taken in moving from current practice and training provision to a desired future state; the gap analysis formed the basis for discussion and recommendations at a convened expert meeting in London in the summer of 2011.

The final report of the project included an overview of the medical theories of restraint related deaths, the implications from the evidence base and robust recommendations for future practice, research and education in the future in this area.

### **Educational goals**

1. To understand what factors contribute to Restraint Related Deaths
2. To identify current best practice in physical restraint methods
3. To identify which procedures should be avoided whilst physically restraining an individual
4. To discuss implications for practice in physical restraint

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# Patient participation in compulsory care in an acute psychiatric setting

## Paper

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**Keywords:** Compulsory care, intensive psychiatric care, patient participation in care, patient understanding, nursing care

## Abstract

The aim of this project is to increase patient participation in planning their own care among patients receiving compulsory care in an intensive psychiatric unit. This key project is part of a national effort in Sweden to improve adult inpatient care in psychiatric hospitals through the increased use of current knowledge of patient care from a clear user perspective. The intensive psychiatric care unit taking part in this project is located in the south-west of Sweden and provides care for adults, both men and women, over the age of 18 years. The unit has 14 places and is well staffed with psychiatrists, specialist nurses, and registered nurses. Students and doctors in training participate in the daily work of the unit. The project comprises the systematic collection of clinical information focusing on staff adherence to the guidelines governing compulsory care, patient involvement in planning their own care, and patient experience of coercive measures. This knowledge is then used directly to improve care. Care planning is now carried out on a regular basis with all patients, regardless of the form of care, and this must be seen as an improvement. The patients' experience of involvement in the planning of their care is measured and documented in their journals. The results are continuously collated and evaluated in order to improve the knowledge and competence of the staff and thereby deepen their understanding of the patients' needs. The results from subsequent structured interviews with patients who had been placed under compulsory care show that these have a favourable effect on their processing of the experience and on their recovery. This was verified with the VAS, a scale measuring between one to ten before and after the interview to measure the achieved effect. The method has provided the ward staff with an effective and structured way of working and also increased their knowledge about the experiences and needs of the patients. Everything is documented in the patient's journal so that it can serve as a foundation in possible future care episodes.

## Two educational goals:

1. Involving patients in the evaluation of compulsory measures is a learning process for both caregivers and patients that is beneficial in the improvement of compulsory care.
2. Structured follow-up interviews after coercive measures improve the patients' experience of the measures they were subjected to.

## Introduction

This key project is part of a Swedish national effort to improve adult inpatient care in psychiatric hospitals through the increased use of current knowledge of patient care from a clear user perspective. The main goals of this project were to reduce the need for and use of coercive measures, improve patient experience of coercion, and develop skills and improve quality when using coercive measures. The intensive psychiatric care unit participating in this project is located in the south-west of Sweden and provides care for adults, both men and women, over the age of 18 years. The unit has 14 places and is well staffed with psychiatrists, specialist nurses, and registered nurses. Students and doctors in training participate in the daily work of the unit. This ward cares for patients who are there voluntarily via the Health and Medical Service Act (Swedish Code of Statutes), as well as those admitted for compulsory care under the Swedish Compulsory Mental Care Act (Swedish Code of Statutes). Patients who need compulsory care are often severely ill, opposed to care and treatment, and often aggressive and violent. (Sjöström et al.) Coercive measures must be avoided wherever possible, but sometimes the situation requires nursing staff to perform actions such as isolation, forced injections, and restraints. Our starting hypothesis for this project is that skilled and well-trained nursing staff may perceive and understand the patient's needs, which contributes to safe and secure care while allowing coercive measures to be minimised. When coercive measures become necessary they must be carried out as ethically and humanely as possible. To carry them out it is important

to listen to the patient and to have the best understanding possible of the patient's needs and desires. Doing so requires extensive knowledge and an empathetic approach, as well as structure and routine procedures, which are also a prerequisite for developing effective preventive measures (Björkdahl, et al.).

## Aim

The aim of this project is to increase understanding of and participation in planning their own care among patients receiving compulsory care in an intensive psychiatric unit.

## Method

The model used to achieve improvement in this project is based on the "Breakthrough series model" formulated at the Institute for Health Care Improvement in Boston by statistician Tom Nolan and physician Donald Berwick. (Langely GL; Nolan KM; Nolan TW) The model comprises several cornerstones, while the actual foundation is based on the concept that knowledge is inadequately applied in everyday work within the healthcare system. The method is based on active learning among the participants. By testing small changes and noting the effects, participants learn directly which changes will lead to improvements and which ones do not.

This project began with two interviews, one with a male patient and one with a female patient, who had been subjected to coercive measures during previous admissions. These interviews were used to guide formulation of objectives for the project. Outcome measures are: 1) 75% of patients must state that they participated in the formulation of their care plan and that all turnover reporting between teams is based on the individual care plan, which entails a clear focus on the patient's needs; 2) 100% of patients subjected to compulsory care must be offered subsequent structured conversation in order to improve the patient experience and increase understanding of the coercive measure; 3) 100% of staff comply with current guidelines on coercive measures.

The project comprises the systematic collection of information from the documentation of the clinical work focusing staff adherence to the guidelines governing compulsory care, patient involvement in the planning of their own care, and patient experience of coercive measures. The patients' experience of coercive measures and involvement in the planning of their care are obtained through subsequent structured interviews at the end of a treatment period and through the patients' own journals. The interview includes a retrospective review of medical records and gives the patients the opportunity to process their experiences. The VAS scale is used before and after the interview to measure the achieved effect. The results are continuously collated and evaluated in order to improve the knowledge and competence of the staff and thereby deepen their understanding of the patients' needs.

## Results

All patients under compulsory care in the intensive psychiatric unit, the focus of this project, now have a care plan that is also used during turnover reporting between teams. Follow-up of the number of patients who felt they had participated in planning their care showed that the 75% target was achieved (85%). In addition, all patients who have been subjected to compulsory treatment are now offered structured follow-up conversation sessions. The results from subsequent structured conversations with patients who had been placed under compulsory care show that these have a favourable effect on their processing of the experience and on their recovery. Follow-up of the various measures related to compulsory care at the intensive psychiatric care unit that is the focus of this study showed that even though most of the nursing team had extensive training and experience there were still areas for development. A training program was planned and implemented to improve staff skills in the area of compulsory care, focusing on: common procedures for how to work safely and with high quality with various activities relating to compulsory care, relevant legislation, and theory and practice of coercive measures. The training initiatives undertaken have provided the nursing staff with greater knowledge and understanding of patients' experiences and needs during compulsory care.

## Conclusion

Involving patients in the evaluation of compulsory measures is a learning process for both the caregivers and the patients that is beneficial in the improvement of compulsory care. The structured work in increasing the patients' involvement in their care and the follow-up interviews after coercive measures improves the patients' experience of receiving compulsory care. Efforts to improve care in the intensive psychiatric unit are making progress, and knowledge from measurements and follow-up of results leads to continuous improvement. We hope to develop a more comprehensive training programme including implementation

of the Bröset Violence Checklist (Almvik et al.) for assessment in order to prevent threats and violent situations, as well as knowledge of subsequent structured conversations so that all nursing staff have the skills to carry out such a conversation.

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# Coercive treatments in forensic psychiatry: a study of patients' experiences and preferences

## Paper

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## Abstract

### Aim and Method

The aim of this study was to report on detained forensic rehabilitation inpatients' experiences and preferences for physical restraint, seclusion and emergency intra-muscular medication (coercive treatments) using mixed qualitative and quantitative methods. The study was conducted in a large independent hospital in the UK and involved structured interviews with patients.

### Results

Of 79 potential participants, 57 (72%) agreed to take part. Just over half thought they should have been subjected to coercive treatment, the main reason being to prevent violence to self or others. Although coercive treatments were generally perceived as negative experiences, 20% of participants reported the last episode of seclusion or restraint had been a positive experience for them. The figure for emergency intra-muscular medication was 39%. Eleven percent of participants said they had made an advanced statement but none could be found in their records. The majority of participants preferred intra-muscular medication to seclusion. The most commonly requested medications were lorazepam and haloperidol. Participants made suggestions as to how their experiences of coercive treatments could be improved, for example by using de-escalation techniques first, asking the patient to co-operate and telling them what the staff were going to do.

### Conclusions

Patients' views on coercive treatments should be incorporated into their care plan and they should be encouraged to make advanced statements.

### Educational goals

1. To inform mental health professionals of the impact coercive treatments have on patients.
2. To describe patients' preferences for these treatments and measures that can make these treatments more acceptable to patients.
3. To encourage mental health professionals to work collaboratively with patients to produce advanced statements regarding their wishes with respect to seclusion, restraint and emergency medication.

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# Informal coercion and its relevance to the therapeutic relationship

## Paper

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**Keywords:** Coercion, leverage, therapeutic alliance, subjective perspective

## Background

### Therapeutic relationship in psychiatric care

The therapeutic alliance between patient and professional in psychiatric treatment is crucial for a satisfactory treatment outcome [1]. This includes patients' subjective satisfaction with therapy and its impact on quality of life, psychosocial functioning and participation, and lack of disturbing psychopathology. The interaction between health professional and patient is the means to support the psychiatric patient in achieving his or her treatment goals. Accordingly, patients consider aspects of the professional relationship the most important components of health care [2, 3]. Contemporary therapeutic relationships in psychiatric setting depend on a balanced working alliance, with the professional providing information, counselling and support to help the patients in making informed decisions concerning his or her treatment [4]. Even though there is a wide range of conceptualisations, the most important aspects of a sound therapeutic relationship include identification with the therapist, reducing the perception of loneliness, reassurance, minimising emotional and cognitive tensions, structuring and empowerment, empathy, and respect to patient's personality and autonomy in an attentive milieu. Theoretical frameworks of therapeutic relationships seem to have three aspects in common: the collaborative nature of the relationship, the affective bond between patient and professional, and their ability to agree on treatment goals and tasks [5]. On the basis of a trustful relationship the patients can experience new ways of behaviour and thinking and thereby will be enabled to make meaningful changes in their lives. This could be achieved through reflecting emotional experiences and behaviour, feedback and advice, learning of new coping strategies and giving up established dysfunctional defence mechanisms, promoting insight and understanding, and enforcing autonomy and capacity. Such a contemporary framework of the therapeutic relationship that relies on horizontal shared decision-making processes has only recently gained in importance especially in psychiatric treatment [6].

Traditional concepts of the interaction between patient and physician base upon paternalistic concepts that strive to achieve patients' insight into medical illness concepts and compliance to prescribed treatment. Although aspects of power and control are inherent to all kinds of relationships traditional vertical therapeutic relationships are particularly dysbalanced to this effect in favour of the professional. Physicians and therapists who perceive having a mandate to guide the patients towards a favourable treatment outcome are likely to employ mechanisms of influence and control and thereby overrule the patients' individual needs and goals [7].

On the other hand, health care professionals in psychiatry, especially in inpatient treatment setting, oftentimes have to deal with patients who were involuntarily admitted. In that case, a legal mandate to treatment strongly influences and complicates the establishment of a therapeutic alliance. If patients endanger themselves or others due to severe mental illness and are not willing to accept treatment it is possible that coercive treatment becomes inevitable. Incidents involving coercion are likely to be perceived as aversive by the patients and therefore decrease their readiness to cooperate with the professionals [8].

### Informal coercion in psychiatric care

Coercion and influence are ubiquitous in the therapeutic relationship especially in the field of psychiatry [9]. Beyond legal involuntary treatment, interventions aimed at enhancing patients' treatment adherence frequently include sub-threshold coercion on the spectrum between full autonomy and distinct coercion [10]. Informal coercive interventions are defined as treatment pressures which are not regulated by the law and can be classified on a dimensional measure including the following phenomena [11]. (a) Persuasion and conviction include a discussion about risks and benefits of the treatment in the context of the patient's value system. (b) Leverage is a utilitarian concept of interventions demanding certain behaviour such as adherence to medication or outpatient treatment in return for desired resources, i.e. inducements. Examples for such inducements are receiving accommodation, work or money, avoiding criminal prosecution, or

prevent loss of child custody. (c) Coerced voluntarism is defined as a threat of negative sanctions. All these interventions are likely to be used frequently by mental health professionals in daily routine [12].

## Subjective perspective on coercion

Experience with informal (and legal) coercion does not necessarily predict whether the patient perceives treatment as coercive [13]. Therefore, measures of the subjective perspective of coercion have been developed and adjusted to different treatment settings. One example is the MacArthur Admission Experience Survey (AES) [14, 15]. The scale includes 15 items assessing perceived coercion (5 items indicating judgement about lack of autonomy in seeking outpatient treatment), negative pressure (6 items concerning threats and force) and process exclusion (4 items referring to the lack of “voice” and validation in treatment decisions) [15, 16]. To elicit the effects in terms of perceived fairness and effectiveness of leverage and related pressures 8 additional items were added to the AES [17]. Another relevant dimension that seems to be connected to the concept of perceived coercion is the sense of procedural justice, i.e. the patient believes he or she has been treated with fairness, concern and respect [18]. If a patient perceives being treated coercively and unfairly it seems to be likely that he or she would not evaluate that intervention as effective. Consequently, such an intervention would interfere with the therapeutic relationship and could decrease future treatment adherence as opposed to the professionals’ intention.

## Questions under research

At the Psychiatric University Hospital in Zurich we investigated two clinical samples between 2006 and 2009 in order to examine the prevalence and risk factors of informally coercive interventions [19], the factors influencing patients’ subjective measures of perceived coercion, fairness and effectiveness [20], and the relationship between perceived coercion and the therapeutic relationship [21].

## Methods

The first study examined the perceived coercion, and also the appraisal of the fairness and effectiveness of the treatment. A total of 187 psychiatric patients with different diagnoses were interviewed using a structured questionnaire that included socio-demographic and clinical data, insight into illness, psychopathology, psychosocial functioning, experience with informal coercion and a modified version of the MacArthur Admission Experience Survey (AES) as a measure of perceived coercion, fairness and effectiveness [14].

The second study examined a sample of 116 psychiatric patients concerning the association between perceived coercion rated by AES and the therapeutic relationship as rated by patient and corresponding clinician using the Scale to assess the therapeutic relationship – STAR [22]. Detailed information on the methods used can be obtained from the original publications [19-21].

## Results

### Prevalence and risk factors of informal coercion

43% of the patients (N= 187) had experience with informal coercion in terms of leverage (29%) and / or coerced voluntarism (30%). The most prevalent leverage intervention was to link housing to patients’ readiness to consent with psychiatric treatment (55% of patients living in supervised accommodation and 19% of the total sample). The least prevalent leverage tool was to give money in return for psychiatric treatment compliance (3% of the sample). Announcing a less invasive criminal sanction to a psychiatric patient who was arrested or convicted due to a criminal offence was the intervention study subjects’ endorsed the most (about 60% of the sample). The majority of the sample (65%) rejected the use of child custody as a leverage tool. Patients who experienced at least one leverage intervention had a history of multiple hospitalisations, involuntary admission, substance abuse, and were more likely to live alone. Patients who experienced housing as a leverage tool were more likely to have a diagnosis of schizophrenia [19].

### Perceived coercion, fairness and effectiveness

Perceived coercion was associated with experience with informal coercive treatment pressures (OR 2.5–2.9;  $P<0.05$ ), and a main diagnosis of a schizophrenic disorder (OR 3.8;  $P<0.001$ ). Experience with informal coercion was inversely associated with fairness (OR 0.3–0.4;  $P<0.05$ ), but not with effectiveness. Patients with more insight into their illness indicated higher fairness and effectiveness concerning treatment interventions (OR 3.1;  $P<0.01$ ). Insight showed no association with perceived coercion. Higher global psychosocial functioning was associated with patients’ perception of an effective intervention (OR 2.4;  $P<0.05$ ) [20].

### Perceived coercion and the therapeutic relationship

Higher perceived coercion is consistently related with a more negative therapeutic relationship as rated by the patient ( $r = -0.433$ ,  $P < 0.01$ ). This association persisted after controlling for clinical and socio-demographic variables. In path way analysis the association was not equally strong in both directions but in terms of perceived coercion has an impact on the therapeutic relationship rather than vice versa. This is in line with previous findings suggesting that a perceived loss of autonomy arouses negative feelings in the patient, creates negative expectations regarding treatment outcome, and fails to result in a trusting treatment relationship [3, 23]. There was a moderate correlation between the patients' and the clinicians' evaluation of their therapeutic relationship ( $r = 0.306$ ,  $P < 0.01$ ). Perceived coercion by the patient was not correlated with the assessment of the therapeutic relationship by the clinician.

## Discussion and Conclusions

The presented studies focussed on the interaction between informal coercion, perceived coercion and the therapeutic relationship. Informal coercion (as well as legal coercion) is a frequent phenomenon in psychiatric treatment and doubtlessly has an impact on patients' subjective perspective. Perceived coercion is associated with experience with legal or informal coercion but also with procedural justice or perceived fairness. The therapeutic relationship is the interaction where informal coercion may happen and, on the other hand, it is negatively affected by perceived coercion. This phenomenon has to be impeded, regarding to the unambiguous impact of the therapeutic relationship on treatment outcome [1].

Informal coercion is a fact in clinical routine even though it seems to contradict an ideal patient-physician-relationship. From the perspective of a traditional therapeutic relationship it occasionally seems to be necessary to use informal coercive measures to achieve the treatment goals for a patient's best interests. In the light of a contemporary therapeutic alliance and the concept of shared decision-making it can also be reasonable to employ informal coercion in order to avoid more coercive interventions and legally mandated treatment. Considering that, we have to keep in mind that in practice some patients who are mostly not capable of achieving a rational decision due to severe psychopathology consequently have an impaired adherence and might benefit from soft paternalistic behaviour in the sense of applying leverage.

Given that perceived coercion can represent a barrier to mental health service use [8], a more sensitive approach to informal coercion might be beneficial for long-time adherence. Informal coercion does not necessarily induce perceived coercion as long as it is applied with high transparency in order to put its purpose across to the patient [18]. A substantial number of persons who are subjected to leverage interventions seem to recognise positive effects for treatment progress, and are willing to consent to such an arrangement [20]. As a precondition, the affected person has to be fully informed about the intent and purpose of the intervention, and has a possibility to express his or her own position. In that case, using leverage tools to facilitate adherence to treatment fits into a concept of patient-centred care taken for granted that the interventions are experienced by patients as being clinically grounded in a caring therapeutic relationship in line with the concept of procedural justice [24]. As one ascends the hierarchy of treatment pressures towards coercion, the stronger must surely be the justification for the intervention by the clinician [11]. Using treatment pressures always ought to aim at increasing the patient's treatment adherence, his or her involvement in decision-making, and a favourable outcome.

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# Use of coercive measures in psychiatric care

## Poster

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## Abstract

### Introduction

Variation in use of coercive measures in psychiatry is still poorly understood and most empirical research has been limited to compulsory admission. This study addresses the prevalence and the association between various coercive measures at the patient level and at the centre level.

### Methods

Patients were traced using the psychiatric register that covers all psychiatric hospitals in Canton Zurich (1.3 million population). We included all inpatients in 2007 aged 18-70 (n=9,698).

### Results

Overall, we found quotas of 24.8% involuntary admissions, 6.4% seclusion/ restraint and 4.2% coerced medication. On an individual patient level, there are significant associations between all forms of coercion: Patients admitted compulsorily are at a markedly increased risk of exposure to restraint/seclusion during psychiatric hospitalisation (RR 6.4) and of forced medication (RR 8.5). Within centres, the different forms of coercion, however, are not associated. Moreover, even after accounting for risk factors at the patient level, high variation in use of coercive measures occurring at the centre level is still observed (P-values < 0.0001).

### Conclusion

To identify the factors that contribute to the substantial variation in use of coercive measures across psychiatric hospitals further studies are needed.

### Educational goals

1. Clearer understanding of factors that might explain high variation in use of coercive measures in psychiatry
2. Bring to attention the need to adopt a multi-level perspective (patients/centres) in the analysis of such measures

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# Involuntary psychiatric admission in Germany: the patients' perspective

## Paper

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**Keywords:** Involuntary admission, involuntary treatment, coercive treatment

## Introduction

Beyond its role in treating mental disorders, it was always the role of psychiatry to protect society against the potential dangerousness of mentally ill persons and to protect mentally ill persons from themselves. In modern democratic societies it is generally expected that involuntary psychiatric admissions and involuntary treatment only take place in compliance to law and human rights principles [1; 2; 3]. Therefore they should be reduced to an absolutely necessary minimum. Nevertheless national and international research indicates a large variety in the legal basis, frequency and type of coercive measures. It is necessary a deeper understanding of the legal and clinical practice to explain the causes of such differences. That is a precondition to the development of international guidelines which met both principles of civil patient rights and public safety.

## Background

Involuntary admission of patients to inpatient psychiatric care is always a dramatic situation which can be traumatic for patients, carers and clinical staff. Research and hospital statistics show that involuntary admissions in Germany have considerably increased in absolute numbers during the last two decades [4;5;6] even if the relation to voluntary admissions which also have increased to a similar extent remained rather stable. The increase of involuntary admissions can neither be explained by means of different psychiatric practice, nor by changes or differences in the legal practice resulting from reforms to psychiatric involuntary admission laws in Germany [5;7]. This study aims to document patients' personal experiences during the involuntary admission and to understand the admission process in order to obtain a clearer picture of the involuntary admission practice in Germany and help to create the basis for a reflexive and critical approach to this issue.

## Methods

Recruitment and data collection was initiated after a three months preparation phase. For a period of three months, all cases of involuntary admission to five public psychiatric hospitals in Germany were systematically documented. Participating hospitals and inhabitants in the respective catchment's areas were: The County Psychiatric Hospital Günzburg (680.000) and the County Psychiatric Hospital Kempten (291.000), both situated in the German Federal State of Bavaria; the Centre for Psychiatry Weissenau (480.000) and the Centre for Psychiatry Zwiefalten (289.000) situated in the Federal State of Baden-Württemberg and the Clinic and Policlinic for Psychiatry und Psychotherapy at the University of Rostock (319.000) situated in the Federal State of Mecklenburg-Western-Pomerania. All hospitals with the exception of Rostock are situated in rural areas. Patient recruitment and data collection were both performed simultaneously by the same researcher on a rotation basis during 15 months. This helped to ensure homogeneous data collection and to identify seasonal differences. The recruitment was performed according to schedule and although it was difficult to become patient's informed consent, mostly because of their illness symptoms or general mistrust towards institutions and persons, a participation rate of 42.6% was achieved. Data collection took place within two weeks after admission or even later depending on patient's mental state. All cases of involuntary admission that took place at the general psychiatry wards during the data collection period were systematically recorded and patients were interviewed. A considerably high rate of patients denied giving informed consent to participate in the study (39.3%). 18.0% of the patients met exclusion criteria. Patients' views of involuntary admission were collected using the MacArthur Admission Experience Survey AES-Short Form [8]. This standardised interview measures the patient's perceived coercion regarding the involuntary admission. Open patient interviews were also used in order to describe the admission process and to appreciate the patient perspective of the admission experience. The open patient interviews were subjected to a qualitative content analysis in

order to classify the main reasons of involuntary admission. Effects of region, diagnosis, disease severity and socio-demographic characteristics on patients' subjective experience of the admission process were examined by means of a linear regression analysis. Differences between patients' and psychiatrists' description of the reasons for the involuntary admission were analysed by Chi<sup>2</sup> tests. Two scales, OSFS (Objective risk to self and risk other scale) and SSFS (Subjective risk to self and risk to other scale), were specially developed for the study in order to ascertain the medical decision making based on patients risk to self and risk to others during the involuntary admission. The OSFS scale describes from the psychiatrist's point of view what objectively happened before the involuntary admission took place and in which legal frame it took place. The SSFS scale ascertains why the psychiatrist decides to admit the patient involuntarily. The Clinical Global Impression (CGI) [9] rating scales were used to measure patient's symptom severity and treatment response. Further research was based upon the analysis of police reports (only available for the Federal State of Bavaria), legal court decisions, patient case notes and psychiatric reports. A new instrument (ZUDS) (Involuntary Admission Documentation System) was developed in order to achieve a unitary system to document the admission procedure. All available data were encoded and archived on a Microsoft Access databank and statistical analysis was performed with SPSS and Stata.

## Results

Altogether 244 cases of involuntary psychiatric admissions were documented during the 15 months of recruitment. 104 patients gave informed consent to participate in the study. In order to obtain representative results for all cases of involuntary admission that occurred during the recruitment, both samples were compared using paired T-tests and Chi<sup>2</sup> tests in regard to sociodemographic features. Schizophrenia (48.1%) and addiction (34.6%) were the most frequent diagnoses (ICD-10 diagnosis code). 22.9% of the patients had been involuntarily admitted for the first time. Patients were 40 years old on average and almost two third (64.5%) were male. The percentage of non-working patients was 76.8% and 52.9% of the patients were singles. The involuntary admission figures varied remarkably by region. Bavaria (149) reported the highest number of involuntary admissions. Mecklenburg-Western-Pomerania follows with 56 cases. In Baden-Württemberg (39) was recorded the lowest frequency of involuntary admissions of the total of reported cases. The involuntary admission rates per 100.000 inhabitants and study duration in the respective catchment areas also varied according to the region: in Bavaria were reported 15.4 cases; in Mecklenburg-Western-Pomerania were recorded 17.5 cases and in Baden-Württemberg were documented 5 cases per 100.000 inhabitants.

*Table 1 Patient's perspective of the involuntary admission*

	AES total score	
	B	sig
Bavaria	Reference category	
Mecklenburg-West-Pomerania	-0.79	.952
Baden-Württemberg	2.635	.042
Addiction	Reference category	
Schizophrenia	2.891	.028
Other diagnosis	2.365	.147
Intoxicated	1.010	.384
CGI	-0.189	.673
Female	0.202	.839
Age	0.027	.673
R2	.20	
n	70	

The results of a multivariate regression analysis based on patients perceived coercion during the involuntary admission, with the AES total score as the dependent variable, shows that patients in Baden-Württemberg had experienced more coercion than patients in Bavaria ( $b=2.635$ ;  $p=.042$ ). The regression coefficient for schizophrenia ( $b=2.891$ ;  $p=.028$ ) depicts that patients with schizophrenia had experienced more coercion than patients with addiction.

Table 2 Patient's and psychiatrists perspectives of the involuntary admission causes n(%)

	Patient	Psychiatrist	P
Aggression*	12 (46.2)	22 (28.6)	.002
Conspicuous behaviour	25 (98.2)	67 (87.0)	.960
Family altercation	5 (19.2)	17 (22.1)	.004
Non-compliance with treatment	4 (15.4)	23 (29.9)	.016
Non-compliance with medication	1 (3.4)	11 (14.3)	.000
Substance abuse*	14 (53.8)	33 (42.9)	.013
Public nuisance*	14 (53.8)	16 (21.1)	.007
Psychosis*	17 (65.4)	47 (61.0)	.001
Suicide attempt*	5 (19.2)	9 (11.7)	.004
Suicide intention	14 (53.8)	23 (29.9)	.000
Violence against police officers	4 (15.4)	8 (10.4)	.016
Damage to property	4 (15.4)	4 (5.3)	.239

Multiple choice answers are possible; source: patient interviews and patient case notes; \*prerequisites of involuntary admission

Table 2 displays the differences between patient's and psychiatrist's perspectives of the reasons for involuntary admission. The main reasons for involuntary admission were perceived differently by patients and psychiatrists. The most significant differences occur in terms of non-compliance with medication and treatment. Both causes were often regarded by psychiatrists as motive for an involuntary admission. In general patients reported less causes for involuntary admission than psychiatrists.

Figure 1 Patient's emotional reactions to involuntary admission by Federal State

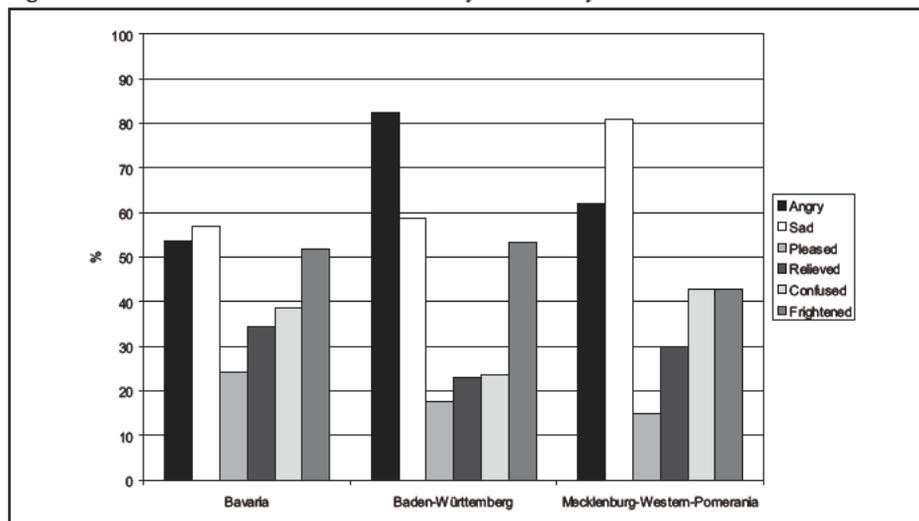


Figure 1 illustrates the emotional reactions of patients towards the involuntary admission (source AES). The most common reactions were sadness and indignation, almost the half of the patients were frightened by the situation. Relief or even a positive opinion was seldom reported. There were no significant differences between the Federal States but most of patients (81.0%) in Mecklenburg-Western-Pomerania reported they were sad and (82.4%) of the patients in Baden-Württemberg reported that they were very displeased with the involuntary admission.

## Discussion

Patients in different regions and with different diagnoses reported to have experienced coercion differently. Due to the limited duration of the data collection, it was not possible to determine the causes of such variations. We can most likely assume that regional differences in the admission practice are responsible for those variations. Most patients considered involuntary admission a negative or traumatic experience and although many patients changed their opinion during treatment, most of them reported that they had experienced more difficulties dealing with the situation as if they were voluntarily admitted in the clinic. Patients stated that they had lost confidence in institutions and that they were afraid that an involuntary admission could happen again. Study results indicate that patients' perceptions of the admission situation clearly diverged from psychiatrist's perceptions. On the other hand, there were no substantial differences between patients' perceptions and the perception of other persons involved in the involuntary admission. Study procedures confirm that the availability of a unitary documentation system could be an important instrument to obtain accurate information about the involuntary admission practice. Involuntary inpatient admission should be regarded as the last step in a process to protect patients' health or lives and also the public safety. In our opinion a well organised network of psychiatric services supporting people with mental illness in crisis would help to reduce the use of coercive measures in psychiatry.

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# The incidence of coercive measures during a 24 months period at a regional psychiatric department in Vienna

## Paper

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## Introduction

The use of coercive measures in psychiatric hospitals during treatment means a severe restriction of personal rights [1] and autonomy of the patient and is debated very intensively, since ethical, legal and medical aspects have to be taken into account. In Europe there is a growing number of studies that examine the use of coercion and restraints in psychiatry. But still, there are only a few publications with quantitative data of the frequency as well as the duration of different coercive measures [2]. The proportion of patients exposed to coercive measures in inpatient treatment is an important quality indicator [3] and varies notably in European countries and also between clinics with different structural characteristics [4]. The reason for this variability can also be seen as a result of different legal and cultural approaches which complicate a direct comparison of the studies.

In Austria, coercive treatment is regulated by an in-patient civil commitment (Unterbringungsgesetz), which states that coercive treatment in a psychiatric hospital is allowed only if a person suffering from mental illness exhibits behaviour that is a severe danger to oneself or others. It must also be established that there are no other alternative treatment options outside the clinic.

A judge, together with an expert, decides on the necessity of in-patient treatment, the duration of stay and assesses the commensurability of further coercive measures. Such further restraints of personal freedom are allowed only in acute situations of danger. They have to be documented and times of coercion have to be kept as short as possible.

The Social-Medical Centre of the Otto Wagner Hospital is a psychiatric hospital with 6 regional departments serving different catchment areas (serving different districts of Vienna). All 6 departments provide the supply of psychiatric emergencies. Additional there are specialized departments for addicted and forensic patients. The 3<sup>rd</sup> psychiatric department of the SMZ OWS has a catchment area of about 170.000 residents and has three inpatient wards (general admission ward, geronto-psychiatric admission ward and a rehabilitation ward) with 20 beds each and a day hospital for 10 patients.

Coercive measures applied at our department are net beds as a form of seclusion with a certain freedom of movement and limb-belts. At the geronto-psychiatric admission ward another common measure is the use of a hip belt for patients who are in danger to fall and harm themselves. The application of alarm-wristlets is only implemented at the geronto-psychiatric ward. Other measures such as the restriction of free communication (by seize of the mobile phone) or the obligation to wear clinic clothes is related to the presence of an acute danger and/ or must be considered as medically indicated. In difference to other countries and cultures, in Austria isolation rooms are considered as inhuman because cutting off direct human contact, which is seen as a supplementary factor of stress.

The aim of our study was a quality benchmarking of the application of coercive measures with the aim to get more information about the concerned patients and possibilities of reduction of restraints. As quality parameter the results were compared with the findings presented in international publications.

## Methods

We included the files of 1666 consecutive admitted patients in the two acute wards (general admission or geronto-psychiatric admission ward) during the study period (01/01/2009-12/31/2010). The documentations of coercive measures in the case histories were recorded anonymously and entered into a database. The ICD psychiatric discharge diagnoses were collected. We excluded patients admitted in the rehabilitation ward as the focus on subacute patients excludes the application of coercive measures. The following data were analysed:

- Ward (general admission ward or geronto-psychiatric admission ward),
- Diagnose (ICD 10),
- Length of stay,

- Method, number and duration of each coercive measure,
- Reason for the coercive measure.

As physical restraints are considered as the most severe form of coercion, the data analysis focussed on this subject. All other coercive measures are documented as well, but were not the subject of this statistical analysis. We analysed our data as Martin et al. [5] suggest:

1. Incidence of admissions exposed to mechanical restraints for the different psychiatric categories of ICD10. (in percentage of the total admissions)
2. Mean number of mechanical restraints per patient concerned by physical restraints.
3. Mean duration of a single restraint.

Furthermore, we calculated:

4. The cumulative duration of restraints for each concerned patient during the whole duration of stay as proposed by Martin et al.[3]
5. Mean, median and standard- deviation have been calculated for the examination of each form of coercive measure.

## Results

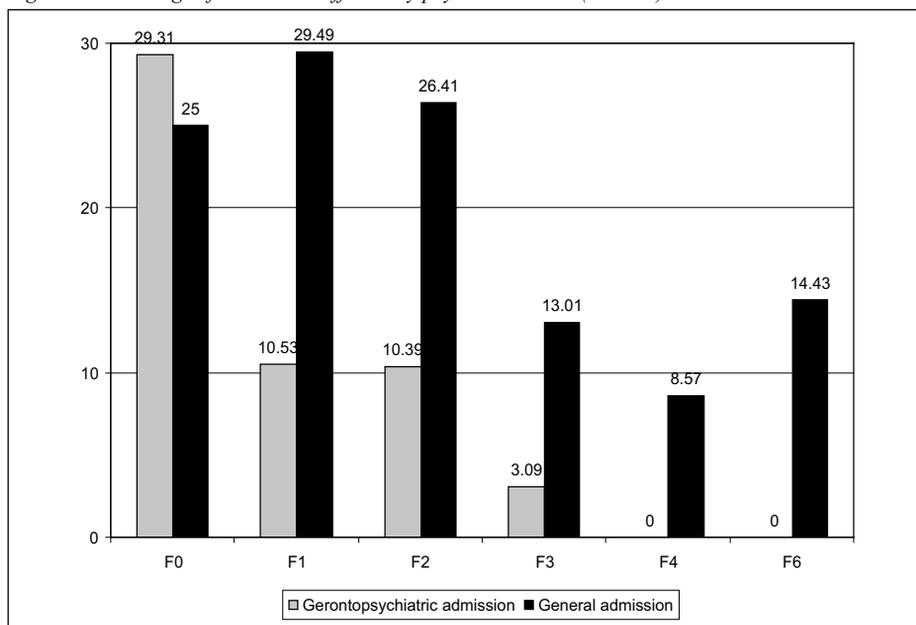
1666 admissions in the 24 months observation period were included (397 admissions at the gerontopsychiatric ward, 1324 admissions in the general psychiatric ward). The mean duration of stay varies between different diagnostic groups and also between patients who are concerned by coercive measures or not (see Table 1).

Table 1 Length of stay in days (Median) for different diagnostical groups

Physical restraint	F00	F10	F20	F30	F40	F50	F60	F70	F80
yes	40	2	13	20	18.50	-	11	-	-
no	18	5	14	13	5	10.50	4	6	1.50

The incidence of coercive measures differed in both admission wards is represented in Figure 1.

Figure 1 Percentage of admissions affected by physical restraint (n=1666)



Our data (see Table 2) show that there are 3 patient groups with a higher risk of being subjected to coercive measures:

- Patients with dementia, delirium, other cognitive disorders and mental disorders due to a general condition. The main reason for the application of physical restraints in this group of patients is the danger of falling and the risk of self harming behaviour with severe, vital complications. Primarily elderly patients with a high percentage of somatic comorbid disorders are concerned.
- Patients with mental and behavioural disorders due to psychoactive substance use. Our results show that patients who are admitted due to an acute intoxication are the most concerned by physical restraints, either because of a medical emergency (monitoring of vital parameters) or because of acute behavioural symptomatology: hyperactivity or assaults.
- Patients suffering from schizophrenia, schizotypal and/or delusional disorders. Mostly the reason was the occurrence of violent behaviour, assaults or threats combined with delusions, hallucinations or disorganized behaviour.

Table 2 Coercive measures

	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	total
Contribution of admissions concerned by physical restraints in % (n=1666)											
Mean	22.05	21.52	19.27	9.53	6.90	0	12.5	0	0	0	16.15
Number of physical restraints per concerned admission (n=268)											
Mean	17.02	2.29	5.97	7.87	2.83	0	10.29	0	0	0	7.52
Median	9	2	3	4	2.5	0	4.5	0	0	0	3
Minimum	1	1	1	1	1	0	1	0	0	0	1
Maximum	76	10	82	43	6	0	54	0	0	0	82
Cumulative Duration of physical restraints per concerned admission in hours (n=268)											
Mean	113.53	12.96	33.38	45.35	11.69	0	40.66	0	0	0	44.19
Median	57.15	9	17.45	20	11	0	20.25	0	0	0	17.42
Minimum	5.74	0.08	0.17	2.50	9	0	0.75	0	0	0	0.08
Maximum	515.45	106.33	497.95	260.27	17.75	0	154.25	0	0	0	515.45
Mean Duration of a single physical restraint in hours (n=268)											
Mean	6.59	5.34	5.73	6.13	5.96	0	5.70	0	0	0	5.85
Median	6.55	4.96	5.39	5.86	4.97	0	4.88	0	0	0	5.63
Minimum	1.52	0.08	0.17	2.22	1.65	0	0.75	0	0	0	0.08
Maximum	14	15.19	22.50	10.50	11.50	0	18.50	0	0	0	22.50

In total 17% of all admissions in all wards were exposed to physical restraints. The most common form of restraint in both admission wards is the net bed (91.49% of all coercive measures). The use of limb-belts is more frequent at the general admission ward, but represents only 5.20% of all coercive measures. It was very encouraging to find out, that on the geriatric ward only 3 applications of limb-belts were recorded (see Table 3). The mean durations of different single coercive measures do not differ significantly on both wards.

Table 3 Number of different physical restraints in the two admission wards (n=2021).

	Net bed	Limb-belt	Parallel restraint (net bed + belt)
Geronto-psychiatric admission ward	826	3	0
General admission ward	1022	103	67

Regarding the reasons for the application of physical restraints, our results show that in the general admission ward the main reason for applying coercive measures are violent behaviour, assaults or threats. At the geronto-psychiatric admission ward the main reason is a high risk of physical self-harm (danger to fall and vegetative exhaustion) and the lack of self-care and attention. The simultaneous application of multiple forms of restraints is restricted to very rare and severe cases of patients not otherwise treatable, with a complex endangering behaviour (see Table 4).

Table 4 Ranking of reasons for the application of coercive measures.

	Application of net bed		Application of limb-belts		Application of parallel restraints (limb-belt + net bed)
	Geronto-psychiatric admission	General admission	Geronto-psychiatric admission	General admission	General admission
1	Danger of falling	Endangering of others	Vegetative exhaustion	Endangering of others	Endangering of others
2	Self-endangering behaviour	Self-endangering behaviour	Danger to fall	Self-endangering behaviour	Suicidality
3	Vegetative exhaustion	Vegetative exhaustion	-	Treatment refusal	Self-endangering behaviour
4	Endangering of others	Danger of falling	-	Suicidality	Treatment refusal
5	Suicidality	Suicidality	-	Other reasons	Aggressive assault
6	Aggressive assault	Treatment refusal	-	Vegetative exhaustion	
7	Other reasons	Aggressive assault	-	Aggressive assault	
8	-	-	-	Danger of falling	

## Discussion

Our results differ to those of other studies. In a German study by Martin et al. (2007) reoprtng data from 10 clinics the differences may be related to structural differences of the health care system, as well as to cultural factors.

Noticeable in the study of Martin is the low incidence rates of coercive measures for the group of patients with mental and behavioural disorders due to psychoactive substance use, which represent the second-highest incidence rate in our study. The reason might be, that in Austria patients with acute intoxications and/or with a delirium due to alcohol dependence are treated in psychiatric hospitals. In other countries they are primarily treated in medical departments until the medical condition is sufficiently stabilized. Those patients often present a combination of a critical medical condition and agitation that makes a physical restraint indispensable for treatment.

## Summary

Coercive measures are considered as a restriction of human rights and their application should be reduced to a minimum. Psychiatric treatment occurs involves tension between caregiving and coercive power by order of public security [6]. In psychiatric emergency departments the use of physical restraints is still considered a necessity in severe cases of illness, even though – according to Conolly [7] – the aim is “a psychiatry without restraints”. Legislation defines the conditions of application of restraints and permits a legal counselling of the patients. The documentation of coercive measures is necessary to render their application transparent and is considered as an important part of control. An international comparison of the application of restraints is very difficult because of different legal systems and structural organizations in health care systems. Additionally cultural differences have a high impact on the method of coercion applied.

The analysis of the data permits the recognition patient groups at risk and their characteristics, so that further research can take place for the optimization of treatment approaches that underlie voluntary treatment and cooperative behaviour.

In summary, the application of coercive measures occurs relatively seldom, since a voluntary treatment has a high value in psychiatric treatment. Those persons affected by coercive measures are often patients with high readmission rates (“heavy users” of the health care system) and with psychiatric or somatic comorbidities which complicate the psychiatric treatment and bundle the focus of attention.

Our data are not congruent/comparable with results from studies in other countries which confirm the influence of legal and structural factors. For a real quality benchmarking in Europe an important objective would be the standardization of legal and structural frameworks, so that practical and cultural differences could better be determined.

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# Chapter 9 – Nature, epidemiology and cross-cultural aspects of violence

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## The effect of physical space on aggression in closed admission wards of psychiatric hospitals in the Netherlands: A quantitative study with a nation-wide sampling frame

### Paper

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**Keywords:** Violence, aggression, physical environment, staff perception

### Introduction

In early 2009, the author worked on an admission ward which was relocated to a new hospital. In comparison to the old situation, the patients were assigned to only single rooms. Here the common rooms were more spacious, cleaner, more comfortable and better furnished. The rest of the patient and staff circumstances remained the same. After a while, the author noticed that patients seemed less aggressive and fewer aggressive incidents seemed to appear. This was unfortunately never formally assessed due to the lack of reliable use of assessment instruments. This situation led to the research question if there indeed is a correlation between the physical space and the rate of aggressive and violent incidents on closed psychiatric admission wards.

### Methods

To answer the research question, closed admission wards were selected at random and compared with each other for this matter. For a sampling frame, a list was compiled of every closed admission ward in the Netherlands. This was achieved by starting with the list (N=363) of all wards in the Netherlands that are allowed to hold patients involuntary (Ministerie van Volksgezondheid, 2009). This list was narrowed down by contacting all of the hospitals, and only the closed admission wards remained (N=104). From this sampling frame, ten wards were selected at random.

The ten wards included were approached and from these ten wards, three were excluded. One ward refused to take part in the research, because they were too busy to participate. Another wanted to participate, but was excluded because the staff members regularly worked on different wards (this makes measuring aggression very hard since the staff have to differentiate both wards). A third ward was excluded because the contact person, despite the intention of participating, did not respond to the telephone calls and emails after the first contact.

Two sets of data were collected for each of these wards: (1) information about the physical space, and (2) information about the prevalence of aggression. Firstly an interview was conducted (by telephone) with a manager, in order to collect data about the physical space on the ward through a convenience list. Secondly email addresses of staff members who were working and interacting with patients were collected. Those staff members received a questionnaire for measuring the aggression on the ward, namely the 'Perception of Prevalence of Aggression Scale' (POPAS) (Oud, 2000).

To compare the data, the Mann-Whitney U-test (nominal vs ordinal data) and Spearman's rank correlation coefficient (ordinal vs ordinal data) were used. These two tests were chosen because they provide reliable results even in cases with a relatively small sample without a normal distribution. In addition to this, a

factor analysis was done, after which the Mann-Whitney U-test and Spearman's rank correlation coefficient were repeated.

## Population

Seven wards were included and those seven wards turned out to be spread evenly around the country, across both cities and rural areas. Of the staff members who received an invitation to participate in the research (N=95), 52 responded within six weeks. This adds up to a response rate of 55 percent.

## Results

Quite a number of individual correlations were found. To simplify these results, a factor analysis of the data from the POPAS was conducted. This split the POPAS into four sets of variables and after repeating the statistical tests, several major results were found. One correlation that could be proved is between verbal and sexual aggressive behaviour and the number of seclusion rooms on the ward ( $r_s = 0.791$ ,  $p = 0.034$ ). A second correlation is that between verbal aggressive behaviour and the number of common rooms on the ward ( $r_s = 0.863$ ,  $p = 0.012$ ). Another correlation was demonstrated between verbal and sexual aggressive behaviour and the number of staff members on the ward in the evening ( $r_s = 0.801$ ,  $p = 0.030$ ).

A fourth correlation was found between sexual aggression and the number of patients on the ward ( $r_s = 0.800$ ,  $p = 0.031$ ). The last correlation that could be proved is that between the average level of training and sexual aggression ( $r_s = 0.775$ ,  $p = 0.041$ ). In addition to these results, a wide range of correlations was found within the POPAS. Perhaps the most interesting result was that in all but one ward, passive-aggressive behaviour was the second most reported form of aggression (after verbal aggression).

## Conclusion

The results clearly show that the physical space has an influence on aggression on closed admission wards of psychiatric hospitals in the Netherlands. This research reveals a clear correlation between aggression and the number of common rooms, the number of seclusion rooms, the average level of training of staff, the number of patients on the ward and the number of staff in the evening.

If this line of thought is continued, it is very likely more variables within the physical space that influence aggressive behaviour can be found. More of these influences could be pointed out by a more extensive version of this research.

These results partially counter the current evidence found by Daffern et al. (2004) amongst others. On the other hand, it concurs with evidence found by Palmstierna et al. (1991), Krakowski and Czobor (1997), Ng et al. (2001) about the influence of the physical environment on aggression that is not yet entirely proven.

Besides those results, the research shows that there are other ways to reliably measure aggression than the usual measuring methods of incidents. This way could even be more reliable, since underreporting remains an issue with incident-based instruments (Woods et al., 2008) (Abderhalden et al., 2007). Aggression can be measured with a questionnaire and this even holds up if the goal is to compare the data between different wards or situations. Because of that, researchers have another option when they need to measure aggression besides the incident-based methods like the SOAS-R.

Since this research showed clear, although somewhat limited results, it is recommended that further research should be done in a way similar to this research design. This research should have a more extensive set of variables about physical space (collected by visiting individual wards) and should have a bigger sample.

## Acknowledgement

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# Differences in male and female nurses' response to physical assault by psychiatric patients

## Paper

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**Keywords:** Psychiatry, assault, gender differences

## Introduction

In a mixed methodology design study which investigated assault and injury of psychiatric nurses, a supplementary finding arose relating to gender differences in perceptions and responses to the assault experience. Gender difference was not a focus study variable in the original study proposal, but was one of the demographic variables on which data were collected. The original study was complex, consisting of both qualitative and quantitative segments. The qualitative segment encompassed two different methods of data collection. Study respondents were required to provide a written narrative which described the assault experience. Additionally, they were given the option of discussing any aspects of their assault experience or of the study with the researcher. This debriefing session was not proposed in the original study protocol, but was added at the request of the Institutional Review Board. It was thought by this body that because the topic could be emotionally disturbing for some of the respondents, an opportunity to verbalize their feelings to the psychiatric Clinical Nurse Specialist (CNS) researcher would be appropriate. When data was analyzed, a supplemental finding arose concerning gender differences in perceptions of, and responses to, physical assault by psychiatric patients.

## Sample

A convenience sample of 110 psychiatric nurses participated in the study. Of the 110 nurses, 93 were female and 17 were male. Years of psychiatric practice ranged from 1-40 years with a mean of 14 years. Ages range from 24 to 70 with a mean of 48.4 years. Educational preparation included Diploma (n=9), Associate Degree (n=38), B.S. Degree (n=39), and M.S Degree (n=24) nurses.

## Setting

Five acute care psychiatric facilities participated in the study. Two institutions were exclusively psychiatric facilities. Three were general hospitals with discrete psychiatric units. The institutions were located in Queens, Nassau and Suffolk Counties close to the New York City metropolitan area.

## Data Collection

After viewing a video depicting a violent assault of a psychiatric nurse and completing the instruments for the quantitative segment of the study, respondents completed a narrative section describing their experience with assault. This was requested as the researcher believed that aspects of the assault experience might arise which were not addressed in the quantitative measure instrument. Additionally, the respondents were offered the opportunity to discuss any aspects of their experience with assault with CNS researcher. They were informed that the results of the study findings would be used to identify factors which had the potential of increasing safety in acute care psychiatry. With the respondent's permission, confidential field notes were made of the information provided in the discussion.

## Findings

Eighty of the 110 nurses reported being assaulted. In comparing the narratives with the quantitative data provided by each subject, it was found that female subjects under-reported both the frequency and severity of assault in the quantitative segment.

Themes that emerged among the female nurses were : 1. Assault is to be expected, 2. Incidents were often not reported for fear of administrative reprisal, 3. Assaulted nurses are often blamed by management and sometimes by colleagues, 4. Assaulted nurses often questioned their own competency, 5. The psychological and emotional trauma is often more lasting than the physical effects.

**1. Assault is to be expected**

Frequent comments reported were: "If you work here you know that it is just part of the job". "It happens all the time". "It happens to most of us". "Sometimes they (patients) can't help it". "You know it's bound to happen sooner or later". This is consistent with reports in the literature (Lanza, M., Zeiss, R., & Rierdan, J., 2006; Rodriguez-Acosta et al. 2010)

**2. Incidents were often not reported, sometimes for fear of administrative reprisal**

Frequent comments reported were: "Official policy is to report assaults, especially if there is an injury, but the unspoken message is to let it go". "You're made to feel like it's a black mark against you." "You get the message that they really don't want this stuff on record". "It's going to ruin their statistics". "If you report it, it's making a big deal". Under-reporting of assault is consistent with reports in the literature from the 1980's to the present (Lanza et al. 2006). Rodriguez-Acosta et al. (2010, p 198) report that assault "may be viewed as a result of poor job performance or worker negligence".

**3. Assaulted nurses are often blamed by management and sometimes by colleagues**

Frequent comments reported were: "The first question they ask is 'What did you do to make him do that?'". "You're asked: 'Don't you know how to handle a situation?—I do. It wouldn't happen to me' ". "You're told; 'You are responsible for maintaining safety. Can't you do that?'" .Many nurses reported being talked about, avoided or marginalized by supervisors and/or peers especially when serious injury resulted. That nurses may be blamed is supported by Lanza et al. (2005).

**4. Assaulted nurses often questioned their own competency**

Frequent comments were: "I always thought I was a good nurse, but maybe I'm not as good as I thought". "I tried to be therapeutic but I guess I wasn't". "Why didn't I see it coming sooner?" "I knew the patient and never thought he would do it. I was wrong". "It really wasn't his fault". Some of these comments are analogous to those made by domestic abuse victims.

**5. The psychological and emotional trauma is often more lasting than the physical effects**

Frequent comments: "The injury healed, but I wake up at night thinking about it". "I have flash backs years later". "I'm still not over it, I question myself more now". Nurses also reported ongoing feelings of guilt, shame, fear, self-blame, loss of control and anxiety, which in some cases has impacted their personal lives. These are consistent with the findings of Needham et al. (2005) in a comprehensive review of the literature. Several nurses made a comparison of how nurses are treated after an assault incident compared to police or firefighters, who are perceived as heroes. These nurses described how injured police and firefighters, in most circumstances, are paid full salaries during recovery, while, nurses in this study first were required to use all of their accrued sick time and vacation time and were then placed on government disability well below their normal salary.

**Findings related to male nurses** varied markedly from those of the female nurses. Although they did identify that violence is to be expected, consistent with the first most common theme expressed by the female nurses, their written narratives and discussion did not reflect the perceptions or responses of the female nurses relating to the other four themes.

While many female nurses did not report the assault occurrence, all but one of the males reported the incident. None of the males reported feeling pressured by administration to refrain from reporting the assault or fear of reprisals for reporting. The third theme of the female nurse reports relating to feeling blamed by others was not addressed at all by the male nurses in their discussion or narratives.

In regard to theme four, none of the males questioned their own competency, instead they attributed the event to unit conditions or faulted the patient. Frequent comments were "the patient was uncontrollable. Nothing could have stopped it", "If we had adequate staffing, this never would have happened". The gender differences relating to assessment of performance is supported by some studies based on Attribution Theory which proposes that men are more likely to attribute failure, poor performance and negative outcomes to external factors or events and attribute their success to their own abilities. In contrast, women are more likely to attribute failure, poor performance to their own abilities and attribute their success to external factors or events (Felder et al. 1995).

The fifth theme of the female nurses relating to psychological trauma was not mentioned in either the written narratives or discussion directly. Comments were made which might be construed as denying emotional trauma or long term effects. Comments made were: "This is psych. You just blow it off" "You get used to it".

An additional finding was that the data reported in the written narrative of the males was generally restricted to factual matters surrounding the assault i.e. staffing, unit conditions, patient diagnosis and physical description of the assault. Emotional reactions, either at the time of the event or later on, were not addressed. The female's narratives included the factual data but were often more emotional in tone. They reported feeling violated or shocked. Some reported feeling sorry for the patient. The males were far less verbal in the discussion sessions than the females who reported lingering feelings of self-doubt, fear, anger, flashbacks and sleep disturbance. There were too few male respondents in this study to identify specific themes.

## Limitations

This study was not designed specifically to investigate gender differences in relation to assault in psychiatry and therefore it lacks scientific rigor. Additionally there were far fewer males (n=16) than females (93) and the males were far less verbal in the narratives and debriefing session. Another aspect may be that males are less comfortable discussing emotional issues, especially with a female researcher. However, clear differences which arose from the data can be identified.

## Discussion

Due to the limitations of this study no conclusions about gender differences can be made at this time. However the trend identified should be investigated using rigorous scientific standards which could potentially confirm the findings obtained. Questions that arise include "Are male nurses treated differently than females with regard to reporting of assault incidents?" and "Are female nurses more likely than male nurses to be blamed or have their competency questioned when assault occurs?" or is this merely a perception? This is an important area to investigate. If future studies confirm that male and female nurses are, in fact treated differently in relation to assault, is this congruent with current social theory related to differences in the treatment of men and women in the workplace in other professions and job categories? If the differences found are simply related to perception, rather than the actual treatment of the nurses, is this congruent with current psycho-social theory related to gender differences and what implications does this have for developing post-assault support for male and female nurses? A follow-up study is planned.

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# Epidemiology of violence: The relationship between delusions and violence is explained by anger: Findings from the East London First Episode Psychosis Study (ELFEPS)

## Seminar

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## Abstract

### Background

Violence is more common among persons with psychotic illness than the general population, but this difference reduces or even disappears after adjusting for co-morbid psychopathology and adverse experiences more common in the lives of persons with psychosis. It appears that the relationship between violence and psychotic symptoms is tenuous and that the key risk factors for violence among persons with psychosis are the same as those among the general population and not specific to psychosis. However, a more recent meta-analysis indicated a strong relationship between violence and psychosis and suggested that the key to understanding this may lie in a more focused approach on symptoms and that methodological shortcomings explain the apparent lack of associations.

### Aims

The ELFEPS was designed to answer the following questions: (1) whether there is an association between symptoms of psychosis and violent and aggressive behaviour (after controlling for demography and co-morbid psychopathology), (2) whether both affective and psychotic symptoms have an effect on violent behaviour when occurring in close temporal proximity, (3) whether characteristics of delusions, including their meaning and significance to the psychotic individual, have an effect on outcome, and (4) whether the associations investigated above show variation according to the seriousness of violent behaviour.

### Sample

The ELFEPS is a large, population-based incidence study conducted over 2 years in 3 neighbouring UK London boroughs. The area is exclusively inner city urban, characterised by high levels of socioeconomic deprivation and ethnic density. Everyone aged 18-64 years living in the study area who made contact with mental health services because of a first episode of any probable psychotic disorder was identified during study periods of 24 months in each borough between December 1st 1996 and November 30th 2000. Overall, 484 individuals were assessed at baseline.

### Outcome

We classified violent behaviour against the person at two levels of severity using the Mac Arthur Community Violence Interview. This had to have occurred during the previous 12 months before interview. Raters were instructed firstly to establish whether the patient was suffering from psychotic symptoms at the time of the incident using all sources of information available, including interview. Participants judged to have been symptom-free at the time of the incident were excluded. For more than one incident of violence, the most serious was selected. Three categories were assigned to the sample: (1) no violent behaviour, (2) occurrence of minor violence, corresponding to simple assault without injury or weapon use; and (3) serious violence, corresponding to assault resulting in injury or involving use of a lethal weapon, threat with a lethal weapon in hand, or sexual assault. The three categories were mutually exclusive. The second outcome included victims of violence during the 12 months before interview and when symptoms were present: family member/carer, friend/acquaintance, stranger, medical/mental health professional, fellow patient, police, other. These victim categories were not mutually exclusive.

## Prevalence and Correlates of Violence in the British Household Population

### Background

Developing preventive interventions to reduce harm from violent behaviour requires information on seriousness of potential harm, identification of potential victims, and circumstances in which the violent behaviour is likely to occur. Identifying the correlates and risk factors for violent behaviours may lead to improved targeted interventions to reduce the incidence of violence in the community and its burden on healthcare systems.

The impact of low IQ on criminal and violent behaviours has been a focus of debate for several decades. Previous research reported an increased risk of assault associated with low IQ scores in early adulthood. In general, results suggest that the prevalence of violent crimes is associated with lower state IQs. However, less is known about the associations between intellectual functioning, learning disabilities and interpersonal violence in the general population.

A substantial body of empirical research has studied the relationship between mental disorders and violence. However, less is known about the association of violent outcome with personality disorders. Previous research has focused mainly on antisocial personality disorder. The relationship between other personality disorders and violence is a relatively neglected area of research although some empirical findings suggest that personality disorders in Cluster B of the DSM-IV predict violent outcome.

In health research, an increasing interest has been paid to the association between health issues and social disadvantages, as social inequalities seem to be widening between the different social classes. Numerous studies have reported strong inverse associations between socio-economic status and various health outcomes, including all causes of morbidity and mortality. As for other health outcomes, past criminological and epidemiological studies have shown that levels of interpersonal violence varied considerably across social groups, with a likelihood of violence being more elevated in the lower social classes.

A large number of studies reported evidence of associations between drug misuse and violent crimes. One difficulty when examining those associations is the important overlap between substance use disorders and other comorbid psychiatric disorders. It is therefore relevant to examine the effect of antisocial lifestyle and other potential confounders on the associations between violent behaviours and drug misuse/dependence.

### Aims

The aims of the study were

1. to examine the associations between intellectual functioning, learning disability and violence (Constantinos Kallis);
2. to investigate the link between personality disorders and self-reported violence (Tianqiang Zhang);
3. to examine the associations between social class and violence among adult British men, and to identify the predictive factors of violence among each social class (Simone Ullrich);
4. to explore the effect of an antisocial lifestyle (conduct disorder before age 15 and adult antisocial behaviours) on the associations between drug misuse/dependence and violence, controlling for a large range of confounding factors including psychiatric co-morbidities and alcohol dependence (Isabelle Pitrou).

### Sample

People aged 16 to 74 years were sampled in the survey of Psychiatric Morbidity among Adults Living in Private Households in England, Wales and Scotland in 2000. This was a two-phase survey. Computer-assisted interviews were carried out by Office for National Statistics interviewers. The Small Users Postcode Address File was used as the sampling frame and the Kish grid method was applied to systematically select one person in each household. A total of 8886 adults completed the first-phase interview, a response rate of 69.5% and 8397 (94.5%) of these completed all sections of the questionnaire. A weighting strategy was applied throughout the analysis and took into account proportions of non-respondents according to age, gender and region. This was to ensure a sample representative of the national population, compensating for sampling design and non-respondents in the standard error of the prevalence, and to control for effects of selecting one individual per household.

## Predictors

- Intellectual functioning: the National Adult Reading Test provided IQ estimates. IQ scores were grouped into the following categories: average IQ (IQ scores: 85-115), high IQ (>115), low IQ (<85), and learning disability (<70).
- Psychopathology and personality disorders: The revised version of the Clinical Interview Schedule screened for the most common mental disorders of DSM-IV Axis I: generalized anxiety disorder, mixed anxiety and depression, depressive episodes, phobias, obsessive-compulsive disorder, and panic disorder. The Structured Clinical Interview for Axis II screened for personality disorders, including conduct disorder before age 15 and adult antisocial behaviours.
- Social class was defined according to occupational activity as follows: I- Professional, II- Managerial and technical/intermediate, IIINM- Skilled Non-Manual, IIIM- Skilled Manual, IV- Partly skilled, V- Unskilled.
- Drug misuse and dependence: The assessment included lifetime and past year drug misuse of the 6 following substances: cannabis, opiates, stimulants, cocaine and crack, volatile substances, hallucinogens, and tranquilizers. Drug dependence (past year) was measured with 5 questions from the Epidemiological Catchment Area Study (frequency of drug use, stated dependence, inability to cut down, need larger amounts, withdrawal effects). A positive response to any of the five questions indicated drug dependence. Hazardous drinking was defined for scores  $\geq 8$  at the Alcohol Use Disorders Identification Test. The Severity of Alcohol Dependence Questionnaire screened for alcohol dependence in the past 6 months, a score  $\geq 4$  indicating alcohol dependence.

## Outcome

Violent behaviours in the past 5 years were assessed with the following question: "Have you been in a physical fight, assaulted, or deliberately hit anyone in the past 5 years?" Additional questions on violence included information on severity of violence: repetition of violent incidents ( $\geq 5$  violent incidents over the past 5 years), whether intoxicated when violent, victim and/or perpetrator injured, the number of victims injured, and whether the police was involved in the incidents. Two other questions collected the types of victims (close relationship, friend, person known, stranger, police) and the location of the incident (home, someone else's house, street/outdoors, bar/pub, hospital, workplace).

## Educational goals

1. To improve the knowledge of interpersonal violence and its determinants in the general population and in psychotic illness.
2. To discuss the clinical and public health implications of those findings in terms of risk assessment and prevention of violence.

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# Gaining consensus on priority areas for violence management in practice education and research across Europe: A novel eDelphi approach

## Paper

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## Abstract

### Background

Despite greater understanding of cause and effect in violence management, violence towards staff continues to represent a major challenge in mental health services. Across Europe, there are no standardised approaches to managing violence or related staff education and training. Equally, there is no agreed research agenda or determination of priorities for investigatory work into violence. There is little evidence on which to base any coordinated efforts to create European standards for violence management.

### Aims

The study will determine priority areas for violence management in practice education and research across Europe

### Methods

The study is supported by the European Violence in Psychiatry Research Group (EViPRG), and includes 20 European countries. The study involves the collaborative support of EViPRG to assist with and promote this study in the various European countries. The data gathering instruments were translated into different European languages and sent to mental health respondents in each country. The data was gathered through a European consensus obtained using a 3 round e-Delphi technique.

### Outcomes

The study will provide much required information on violence management in Europe. The results will benefit policy makers, and researchers as they can target areas of interest that have been identified, funding agencies will be aware the priority areas for future funding, education institutions can provide programmes to meet the needs of the employees. Ultimately patient care will be enhanced, through better approaches to care management in the clinical environments.

### Educational goals

1. Cognitive: Provide a knowledge base for action and development.
2. effective: understanding of diversity, demography and attitudes among mental health professional towards violence management in Europe.
3. Psychomotor: skill and various practices across Europe in violence management.

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# Potential severity of aggressive behaviour after acquired brain injury: implications for recording

## Paper

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**Keywords:** Neurobehavioural rehabilitation, aggression, violence, OAS-MNR, Attacks, observational recording scale

## Introduction

Violence against healthcare staff in the United Kingdom (UK) is common: there were in excess of 55,000 reported physical assaults in 2006-7 [1]. The problem is greatest in mental health services where aggressive incidents are 2.5 times more frequent than in other healthcare settings [2]. Violent incidents make the working environment unpleasant and impacts negatively on patient care [3].

Aggression is a frequently cited characteristic of individuals with an acquired brain injury [4] and can result in admission of the aggressor to hospital [5]. Specialised 'Neurobehavioural rehabilitation' programmes have been developed as the only viable option to meet the needs of this complex and challenging group of patients [6]. The prevalence of observed aggression amongst this group is very high [7]. It is a priority to consider new developments which may aid in the assessment and management of aggression and violence in these settings.

The 'Overt Aggression Scale – Modified for Neurorehabilitation' (OAS-MNR) was developed to create a standardised method of describing and reporting aggression exhibited by patients participating in residential neurorehabilitation programmes, and is both valid and reliable [8]. OAS-MNR was a modification of the 'Overt Aggression Scale' (OAS) developed for use in psychiatric settings [9]. The OAS-MNR enables detailed records to be made concerning the frequency of four categories of aggressive behaviour, including that of physical assaults on other people. Aggression is rated on a scale of severity ranging from '1' (mild) to '4' (very severe). Ratings of severity are defined using written criteria to further facilitate objective recording. OAS-MNR also quantifies the intrusiveness of interventions to manage aggression ranging from 'behaviour ignored completely' (rated 1) to 'immediate medication given by injection' (rated 12). The OAS-MNR has been used successfully in clinical work and research [10].

One suggested weakness of the OAS and related tools is that the recorded severity of aggressive incidents is overly determined by the observed outcome of the incident and does not take into account the *commitment to do harm* shown by the aggressor nor the *injury potential of the assault* [11]. The outcome of an assault may be independent of its intention: a young man armed with a knife and with apparent commitment to act in revenge for some perceived slight may be skilfully disarmed with no resulting injury. The event will be recorded on OAS-MNR as a physical assault against a person, which whilst directed and purposeful resulted in no significant injury. This is reflected in a weighted score of 8. Alternatively, a confused middle aged lady with ABI may strike out unexpectedly during close physical contact and break a nurse's nose. Again this will be categorised as a physical assault against a person but will be assigned a weighted score of 16 as it has resulted in serious injury.

The 'Attempted and Actual Assault Scale' ['Attacks' 11, 12] was developed in an attempt to solve this incongruence. 'Attacks' measures interpersonal physical violence and gives equivalent emphasis to attempted assaults regardless of their outcome. Five separate scores are derived from the scale. Two are calculated through consideration of any weapon used and body areas of the victim that are targeted. These scores are weighted with more vulnerable body parts and more dangerous weapons attracting a higher score. A third score reflects the intensity of the assault as measured by the number of times the assailant struck the victim. A further two scores are obtained regarding the perception of the clinician completing 'Attacks' regarding the *commitment* the assailant displays in achieving an assault and to the *potential* for injury. These are measured on a Visual Analogue Scale (VAS) of 10 cm in length. The five scores are combined to create an overall severity score [12]. 'Attacks' has demonstrable validity and reliability [11, 12]. It has been used successfully in acute psychiatric settings; however, its use has not been described previously within neurorehabilitation services.

The current study therefore aimed to describe the potential for and commitment to harm during physical assaults against people (as measured using the 'Attacks' scale) in a neurobehavioural rehabilitation service. The study also offers the opportunity to further investigate the convergent validity of Attacks against the OAS-MNR (and vice versa).

## Methods

### Setting and participants

The study was conducted with male inpatients at the National Brain Injury Centre, based in the Kemsley Unit at St Andrew's Healthcare, Northampton, UK. The neurobehavioural treatment programme developed within the service over the past three decades has been comprehensively described in the literature [13].

### Measures

Data was collected using the 'Attacks' scale and the 'physical aggression against others' subscale of the OAS-MNR on three wards. Routinely gathered demographic and clinical data was also collected in order to describe the sample.

### Procedure

All members of the clinical teams within NBIC are trained to use the OAS-MNR. A group of Assistant Psychologists were trained to complete the 'Attacks' scale. For the purpose of this study, data captured during a six week period was considered. A power calculation indicated that rating 50 events with both the OAS-MNR and the 'Attacks' scale would identify correlations in excess of 0.5 ( $\alpha = 0.05$ , power = 0.94). Ethical approval was not required for a study of this nature in which routinely recorded observational data was used.

### Results

During the study period 40 patients were resident on the three wards. OAS-MNR data showed that 33 (82.5%) had demonstrated physical aggression against people during the six week period it took to obtain the 50 Attacks recordings. The total number of incidents logged on the OAS-MNR was 1066. The 50 assaults recorded on Attacks involved 25 patients (mean frequency per patient = 1, median = 2, range 1-9). Severity of these 50 incidents as rated on OAS-MNR was 13 (26%) mild, 33 (66%) moderate, 3 (6%) severe and 1 (2%) very severe. Mean weighted severity as measured on OAS-MNR was 6.6 (sd = 2.7, range 4-16). Within the 50 incidents there were 57 attempted or actual assaults as recorded on 'Attacks' (mean = 1.1 per incident).

#### *Severity of Aggression*

Mean OAS-MNR weighted severity was 6.56 (sd = 2.65). The average 'Attacks' overall severity score was 14.50 (sd = 7.95). There was a statistically significant correlation between Attacks overall severity and OAS-MNR weighted severity scores of  $\rho = 0.5$  ( $p < 0.01$ ) a finding that is supportive of convergent validity for both measures. OAS-MNR weighted score on the physical assaults against people subscale correlated with both Attacks VAS measures ('commitment to harm',  $\rho = 0.44$ ,  $p < 0.01$ ; 'potential injury',  $\rho = 0.35$ ,  $p < 0.05$ ). OAS-MNR did not correlate at a significant level with either weapon score, target score or intensity (as measured by the number of assaults per incident).

There was a significant correlation between 'Attacks' overall severity and OAS-MNR intrusiveness intervention of .39 ( $p < 0.01$ ); this is also supportive of convergent validity as the correlation reflects a tendency for more severe physical assaults to require more intrusive means of management, for example, restraint and seclusion. However, only one of the five separate scores from items comprising 'Attacks', VAS 'commitment to harm', correlated with OAS-MNR intrusiveness intervention ( $\rho = 0.33$ ,  $p < 0.05$ ).

#### *Attacks' Construct Validity*

Whilst the 'Attacks' overall severity score correlated in the expected direction with both the OAS-MNR weighted severity and intrusiveness of intervention scores, the comparative lack of association between individual 'Attacks' items and OAS-MNR measures was surprising. To examine this further, relationships between 'Attacks' items was investigated. All items, with the exception of weapon score, have a significant correlation with the overall severity score. However, within the five 'Attacks' items which contribute to this the pattern of relationships is variable. The intensity score is associated with all other Attacks items, and the VAS 'commitment to harm' has a high correlation (.79) with the overall severity score.

Whilst scores from each of the five items are combined to provide a single index of severity, variable correlations between the five Attacks items suggests lack of internal consistency. This raises the possibility that scores may be meaningfully combined to reflect a number of different concepts regarding physical assaults captured by the scale within neurobehavioural services. Cronbach's alpha for the five Attacks items from this sample was low (.38), a finding which confirmed doubts about internal consistency raised by the intercorrelation matrix.

Consequently, scores were subjected to exploratory factor analysis to identify separate underlying concepts. Scores from all five items met the minimum criteria of a primary factor loading of .50 or above and were retained in the analysis. Two factors were extracted accounting for 38% and 30.3% of the total variance. The first factor (*actual* severity of assault) comprised weapon used, number of strikes, perceived potential for injury without intervention. The second factor (*intended* severity) contained the target score and the VAS 'commitment to harm' rating.

'Attacks' was developed to provide an empirical means of distinguishing the intended from the actual consequences of physical assaults; the factor structure reported above is consistent with this. Examples cited earlier here and previously [11] illustrate that classification of severity of aggressive acts can be deceptive: patients who are perceived to be highly motivated to carry through an assault with the intent of maximising the extent of the injuries inflicted on a victim are more likely to be subject to staff intervention which results in a less severe rating of aggression than would have been otherwise the case.

## Discussion

We investigated the nature and severity of physical assaults against people committed by men with an acquired brain injury within a locked neurobehavioural service. Of 1066 incidents reported using the OAS-MNR over a six week period 50 events were also rated on the Attacks scale, results from which have previously been reported for general acute psychiatric settings [11]. There was significant positive correlation between total weighted severity score on the OAS-MNR and Attacks overall severity and VAS scores for 'commitment to harm' and potential injury. There was no significant correlation between OAS-MNR weighted severity score with weapon, target or intensity scores. Evidence of convergent validity of both Attacks and OAS-MNR was found. There was a moderate correlation between Attacks overall severity with both OAS-MNR weighted severity and intrusiveness of intervention.

However, of the five items within Attacks only the two VAS ratings significantly correlated with OAS-MNR severity, and only one of these ('commitment to do harm') with intrusiveness of intervention. This finding prompted further investigation which found that correlations between 'Attacks' items was variable and internal consistency low, suggesting that a number of concepts may be captured by the scale rather than just one overall measure of severity. Exploratory principal components analysis suggested items contributed separately to one of two underlying factors, one that reflected the *actual* severity of assaults and the other *intended* severity. Subsequent analysis demonstrated that *intended* severity had a moderate correlation with OAS-MNR intrusiveness of intervention.

The principal limitation of this study was the comparatively small number of physical assaults studied (50). A subsequent replication using a larger number of incidents would serve to validate the tentative factor structure of the 'Attacks' scale; extending this to other clinical populations would also determine if this was unique to physical assaults observed in neurobehavioural services, or to aggression against people in inpatient settings generally.

In conclusion, this study provides further evidence regarding convergent validity for both the OAS-MNR and Attacks scales. OAS-MNR provides a valid and reliable means of capturing objective data regarding aggression in ABI inpatient settings [8]; however, modification of severity scores so that they reflect the intent to inflict injury would further increase the validity of the measure, reflect staff perception of risk within the score, and reduce anomalies of the sort described by Bowers and colleagues [11]. If such a modification were to incorporate a measure of intent such as that provided by the 'Attacks' VAS 'commitment to harm' then it will be essential to demonstrate robust measures of inter-rater reliability as such ratings may be more liable to individual variance.

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# Violence and mental disorder: A central paradigm for psychiatry

## Paper

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## Introduction

The majority of people diagnosed with mental disorders are neither violent towards themselves or others. The presence of a mental disorder, however, increases the risk of violence towards self and others. Specific mental disorders have different risks of violence. The relationship between violence and mental disorders is a central paradigm in understanding both the management and the etiology of mental disorders. The definition of violence according to the World Health Organization is “The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation”(1). Intentionality distinguishes the world of violent injuries and behavior from unintentional injuries. Intentional injuries are injuries caused by the spectrum of violence towards self and others. Together these two categories – intentional and unintentional - comprise the public health category of injuries (2). Mental disorders are defined by the thirteen chapters of the DSM IV TR (3). Paradigm is defined as a world-view underlying the theories and methodology of a particular scientific subject (4).

Psychiatry and the spectrum of mental health services associated with managing mental disorders is the field of medicine that manages people who are at risk of or commit intentional injuries. Psychiatry also manages people who have developed mental disorders as a consequence of being the victim of intentional injuries (especially violence towards others). Over the past two hundred years the management of the self-harm spectrum has become completely enfolded into the specialty of psychiatry and related fields. Psychiatry shares the field of managing violence towards others with the criminal justice system that stresses punishment.

This paper will emphasize a historical perspective. Mental disorders have been associated with violence towards self and others from ancient European times to the present. The relationship between being a victim of violence and the subsequent development of mental disorders was first noted in case studies in the 19<sup>th</sup> century and gathered significant steam following the wars of the 20<sup>th</sup> century. Contemporary research shows that being a victim of interpersonal violence is associated with a wide range of mental disorders. Numerous studies in the last decades of the 20<sup>th</sup> century have also associated the presence of a mental disorder with substantial increased risk of being a victim of interpersonal violence.

## The management of violence associated with mental disorders

From Ancient Hippocratic texts to the present, severe mental disorders have been associated with intentional injury (5, 6,7,8). The management of these disorders has also been associated with coercion including confinement; the use of restraints – chemical, mechanical and muscular (physically holding a person) - and for nearly two hundred years, permanent or semi-permanent removal from society in institutions for the most severely ill (9-17). The coercive methods used to manage the violent behavior have given clinical psychiatry its particularly dark history (18). Case studies in European medical texts demonstrated that the use of restraints and confinement were common in the management of violence (19, 20, 21). Places of confinement included jails, homes, attics, monasteries, strong rooms, strong huts, rooms in castle walls, cells in workhouses and, finally, specific facilities designated to hold patients for months to a lifetime: lunatic hospitals, asylums, state psychiatric hospitals (22,23,24).

Restraint was mechanical, chemical, architectural and muscular (6,12). Mechanical restraints ranged from chains, ropes, beds, mittens, muffs, straitjackets, heavy clothing, small cages, leather bands and Velcro “soft” restraints to contemporary Posey beds (6,25,26). Seclusion was another form of restraint within institutions (17,25,26). Mandatory bed rest – the mildest form of restraint – was considered the number one form of initial treatment in the early 20<sup>th</sup> century (13). Chemical restraint included medications that would sedate the patient (27). A list of sedatives used during the 19<sup>th</sup> and early 20<sup>th</sup> centuries included opiates, potassium bromide, digitalis, chloroform, alcohol, ether, paraldehyde, chloral hydrate, urethane, sulphonal, hyoscyamine, hyosine, cannabis indica, codeine, hemlock, physostigmine and barbiturates (13). The depletion therapies – bleeding, vomiting (emetics), diarrhea (cathartics), intentional withholding

of food – all resulted in a physical weakening of the patient rendering violent behavior less likely (28,29). The production of nausea by rapidly swinging a person around or by the introduction of emetics that induced forced vomiting was also used (6,27,28, 29).

The clinical problem with these 19<sup>th</sup> century chemical restraints was the fact that they were short acting, only produced sedation and sleep and had dangerous side effects including death, addiction and withdrawal (11,12,13,30). In the first half of the 20<sup>th</sup> century the problematic world of side effects led to the widespread use of hydrotherapy in treating “excited” behaviors (31,32,33,34). “Excitement” was the word used to describe severe agitation that often preceded violence (32,35,36,37). Excitement was described in many different mental disorders including mania, schizophrenia, delirium, panic, organic and personality disorders (38). (In the late 20<sup>th</sup> and early 21<sup>st</sup> centuries excitement has been replaced by the word agitation.) (39). In the middle third of the 20<sup>th</sup> century the introduction of somatic treatments - electroshock, prolonged sleep, insulin shock and lobotomy - were used in the management of excited behaviors, gradually replacing hydrotherapy (38,40,41,42,43,44). Beginning in the 1950s with the introduction of chlorpromazine a new era of violence management began that continues to the present: medications that targeted specific symptoms associated with violence (8,42,45,46,47).

The use of psychopharmacology is commonly viewed as the core TREATMENT of severe mental disorders. The contemporary pharmacological treatment of mental disorder symptoms can also be viewed as the use of medications to PREVENT the occurrence of violent behavior. From this viewpoint, anti-depressants, mood stabilizers, anti-anxiety medications and anti-psychotics help to prevent intentional injury. It is this point of view that is embraced by the thinking that compliance with medication and other treatments are associated with a decrease in violent behavior (48,49,50). For instance, anti-psychotics can decrease command hallucinations and delusions which when untreated can place the person with these symptoms at higher risk of interpersonal violence (51). Anti-depressants can decrease suicide (52).

Both historically and presently, many mental disorders were/are associated with violence. Substance abuse, intoxication and dependency have been associated with intentional injuries since Hippocratic times (53). Severe anger and rage associated with mania have a long history of violence towards others (54). In the 19<sup>th</sup> century, violence was viewed as unpredictable and associated with all forms of insanity. Suicide and homicide were seen as related. Destructive impulses and acts warranted an entry in the Dictionary of Psychological Medicine 1892 that emphasized their presence “in many forms of acute and chronic insanity. They include homicidal and suicidal acts, destruction of furniture and clothing, self-mutilation, stealing and dangerous exhibition of passionate excitement” (13).

In the early 20<sup>th</sup> century, William Sullivan, the Superintendent of Broadmoor Criminal Lunatic Asylum in England, included general paralysis of the insane, senile insanity, alcoholism, manic depressive insanity, dementia praecox (schizophrenia), systematized delusional insanity, epilepsy, transitory conditions of mental disorder, hysteria, mental deficiency and moral imbecility as disorders associated with criminal behavior (55). By the 21<sup>st</sup> century almost all mental disorders were associated with an increased risk of intentional injury (56). Approximately 90% of suicides are linked to mental disorders (57). Overwhelmingly, the greatest contribution to societal violence is the substance abuse disorders (56).

Institutionalization has been and remains the major form of violence management. Generally, but not always, violence or the threat of violence was/is associated with admission to psychiatric hospitals (58,59,60). Within the walls, the acuity of the patients and their clinical risk of violent behavior determined ward placement, level of restraint both mechanical and chemical, types of treatment and ultimately discharge (14, 23, 61, 62). These walled psychiatric institutions were breached in the second half of the 20<sup>th</sup> century through a broad multi-factorial attack that included civil rights laws; advances in pharmacological treatment; comprehensive outpatient treatment models; the financial burden of long-term institutions; exposes on the horror of state hospitals and finally, the less known, but newly emphasized belief that people with mental disorders were not violent (63, 64, 65,66).

Prior to the 1960s, the relationship between mental disorders and intentional injuries was extremely strong. By the late 1970s the paradigm had shifted (67). This period of change in the paradigm regarding the relationship between violence and mental illness has not been systematically studied. In the United States during the 1960s and 1970s there were a number of dubious conclusions drawn from middle third of the 20<sup>th</sup> century studies of discharged mental patients (65). These studies showed a low rate of violence towards others but failed to take into account the fact that the vast majority of severely ill patients remained in psychiatric hospitals. In 1978, Thornberry estimated that the percentage of ex-mental patients who were dangerous towards others was between 0.7% and 4.7% (66). In the MacArthur Study of 2000, 60.6% of the total patient sample had a violent or “other aggressive act” within one year after hospitalization (49). It should be noted that this estimate of violence was for danger to others only. During the final

third of the century, violence in most professional articles only referred to interpersonal violence not the self-harm spectrum (8). This slight of hand helped to minimize the relationship between violence, mental disorders and intentional injuries. Studies of jail and prison populations have shown a high rate of substance abuse, personality disorders and other mental disorders (68,69,70). It might very well be that if homicide is examined in terms of its relationship to ALL mental disorders – substance abuse, traumatic stress disorders, personality disorders, adjustment disorders, the severe mental disorders etc. – that, like suicide, over 90% of homicides will be associated with mental disorders (8,56,71,72,73,74,75,76).

## **Violence as a cause of mental disorder**

By the end of the 19<sup>th</sup> century, the traumatic experience of war, railroad accidents and even sexual trauma was making its way into psychiatric literature as a cause of mental disorders (77,78,79). Historical studies of the 19<sup>th</sup> century indicate that mass trauma- the Civil War in the United States and the Siege of Paris in 1870-1871 – is associated with high rates of psychiatric symptoms (80,81). The experience of psychiatric casualties was noted in most European countries as well as in the United States following the great wars of the 20<sup>th</sup> century as well as in civilian and refugee populations who have experienced violent trauma (82). In 1980 the diagnosis of Post Traumatic Stress Disorder was included in the Diagnostic and Statistical Manual (DSM) III of the American Psychiatric Association. By 2010, another diagnostic category - Disorders of Extreme Stress, Not Otherwise Specified (DESNOS) – was being suggested for inclusion in the DSM (79).

DESNOS was the product of numerous studies showing that the experience of being a victim of violence in childhood – physical abuse, sexual abuse, neglect, witnessing violence and multiple combinations of these – were significantly associated with a wide range of addictive and dangerous behaviors, psychiatric symptoms and an increased risk of certain physical disorders. Studies associated childhood abuse with an increased risk of suicide. By 2010 mental disorder categories associated with being a victim of violence include childhood, substance abuse, anxiety, eating, somatoform, mood, psychotic, adjustment and personality (79). In short, trauma associated with violence was clearly one of the major environmental factors or stressors associated with most non-organic mental disorders.

## **Violence against people with mental disorders**

There is along history of violence perpetuated TOWARDS people with mental disorders. The violence towards the mentally ill can be divided between the violence experienced by the mentally ill in the community and the coercion (restraint, seclusion, confinement) associated with the providers of services. The protection of people with mental disorders was one of the major reasons for institutional confinement according to the early 19<sup>th</sup> century alienists (20,24). The community was considered a dangerous place for people with severe mental disorders. The rise of the public psychiatric institution in England was seen as a direct way to combat the abuses of patients in private institutions and workhouses (17). The emphasis on Non-Restraint and Moral Treatment that characterized early 19<sup>th</sup> century psychiatric theory was focused on minimizing the use of violence in institutions (19). Coercion was viewed as an incitement for further violence: the less coercion and restraint, the less violence. Despite this initial emphasis on not using coercive methods of management, the history of the management of people with mental disorders remains associated with coercive tactics as shown in the first section of this paper. In essence, it has been hard to manage violent behaviors without coercion. The history of the treatment of the mentally ill can be viewed as a history that balances the intentional injury world of people with mental disorders and the coercive and voluntary strategies of psychiatric management.

Being the victim of interpersonal injury outside institutions has risen to the forefront of many studies now that nearly all people with severe mental disorders are in the community. In an influential article in *Psychiatric Services* in 2008, the authors concluded that victimization of the severely mentally ill - because it was so much more frequent – was the greater public health concern than the perpetration of interpersonal violence by the mentally ill (83). (Once again there was no mention of the self-harm spectrum.) There are many recent studies that have shown that the victimization of people with mental disorders is exponentially greater than towards people who do not have mental disorders (84,85).

## **Conclusion**

Does the experience of being a victim of violence cause– directly or indirectly - violence towards self and others? Current research – especially in regards to self-harm - points to the answer Yes. More research is needed concerning violent behavior towards others. Research on successful prevention strategies at each age of life and in specific mental disorders is also needed. Intentional Injury based on mental disorders is the specialty of psychiatric management. Mental disorders themselves are highly associated

with the consequence of violent behaviors. People with mental disorders are at exceptionally high risk of being victims of violence. These areas are connected. Treatment and research should focus accordingly. People with mental disorders should be routinely screened for environmental stressors associated with violence. Research on intentional injuries should include histories of childhood adverse life events, current victimization issues as well as the history and presence of risk factors of both violence to self and others. This will lead to both a better understanding of the issue of violence in clinical psychiatry as well as more effective interventions and prevention programs. At this point in time, clearly the most effective prevention program would target substance abuse and dependence which is the mental disorder category contributing the most to societal violence.

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# Safety in numbers: is the violence research literature too heterogeneous to be useful?

## Paper

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## Abstract

### Background

Interpersonal violence is a major public health issue. A very diverse range of interventions have been developed to prevent and manage violent behaviour and the primary literature base is extensive. A comprehensive summary of the evidence base would be highly valuable to practitioners. Though aspects of this literature have been reviewed previously the Liverpool Violence (LiVio) Research group investigated the wider evidence base for these interventions by updating a purposely broad systematic review previously conducted by the group.

### Aim

To describe the extent of heterogeneity in the violence literature and make recommendations for future research to develop a more homogeneous literature base for practitioners and researchers.

### Methods

By combining the results of the two wide ranging reviews, a database covering all published literature up to 2008 was produced. Using filters to interrogate this database the heterogeneity in the literature was assessed.

### Results

In total 496 intervention studies were identified across the two reviews. These covered a wide range of pharmacological, psycho-social and organisational interventions conducted in various settings and with different populations. This was not unexpected given the wide inclusion criteria adopted but it was hoped that subgroup analyses would identify meaningful groups of homogenous studies. However even the sub-group analyses continued to show high heterogeneity. This paper will give examples of this subgroup heterogeneity and discuss possible explanations. Future research needs to address these issues in order to develop a more homogeneous literature base that will enable recommendations for evidence based practice to be made using the best available evidence derived from multiple comparable studies. This project was funded by the National Institute for Health Research Health Technology Assessment (NIHR HTA) programme (project number 08/101) and will be published in full in Health Technology Assessment series. Visit the HTA programme website for further project information. This paper presents independent research commissioned by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-0407-13253). The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the HTA programme, NIHR, NHS or the Department of Health.

### Educational goals

1. To provide an overview of the diversity of studies in the violence literature
2. To increase awareness of the need to consider the value of homogeneity and the need to make studies comparable when designing research

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# Partnering with an inpatient psychiatric hospital to evaluate measures of aggressive behavior

## Paper

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## Abstract

### Introduction & Aim

The aim of this study is to compare the results of three different methods of counting events of verbal and physical aggression (restraint rates, questionnaires and event counters) in inpatient psychiatric settings.

### Methods & Study Population

A study using participatory action research methods was implemented on four inpatient psychiatric units. Standard measures for collecting restraint rates were combined with use of questionnaires (PCC-SR and SOAS), and use of event counters of individual worker exposure.

### Results

The comparison of counter data with scales and standard restraint and incident reports highlight differences between each measure. Counter methods provide more accurate counts of actual events than standard methods, given that standard methods only collect information when injury or physical restraint occurs. Questionnaires and logs document a broader range of behaviors, but depend upon communication of exposures, while counters provide individual as well as unit wide exposure data when used by all staff.

### Conclusions

Some published rates of aggression may only identify those events which result in restraint which means that efforts to understand and prevent aggressive behavior are based only on the most aggressive behaviors. Information from events that are successfully mediated should be considered and may be important in designing effective prevention and intervention for reducing aggressive behavior.

### Educational goals

1. To differentiate worker exposure to aggression and patient rates of aggression.
2. To compare and contrast 3 types of measures of aggressive behavior.
3. To discuss differences in successfully mediated aggressive behaviors vs. behaviors resulting in restraint use.

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# I'm just doing fine: Preliminary results of an art and training project relating to self-harm in psychiatry

## Paper

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**Keywords:** Self-harm, self-injury, training, lay expert, art, research

## Introduction

Self-harm can be seen as violence against oneself and others. At least, that is what treatment staff think. It can provoke a lot of different feelings among treatment staff: disbelief, anger, frustration, even horror, but also concern, empathy, sometimes leading to feelings of guilt [1]. For people who self-harm however, their behaviour is functional and often a way to survive. They view self-harm as self-help: it helps them to cope with their feelings and dissociative processes [2].

Self-harm can be defined as any intentional damage to one's own body, without a conscious intent to die [3]. Self-harm is relatively common: in the general population the percentage adults who (sometimes) self-harm is estimated between 1% and 4%, among adolescents it is estimated between 4,3% and 17,8%. Within the psychiatric population the estimated percentage self-harmers rises to between 4% and 33,2% [4].

For treatment staff the priority in treatment of people who deliberately harm themselves is to stop this behaviour, contrary to the patients who cannot (yet) do without this coping mechanism.

The difference in perspective on self-harm often leads to problems in the relationship between patients and staff. Patients experience feelings of frustration, anger or humiliation, increasing the probability of self-harming behaviour. The ongoing self-harm in turn leads to feeling manipulated or tested in the treatment staff, eventually leading to feelings of insecurity and powerlessness. Counter transference towards the patients may now arise, again increasing the risk of self-harming behaviour. This ends in a vicious circle in which both parties cease communicating about underlying problems.

To find a solution for this problem, the project I'M DOING JUST FINE took place from the summer of 2009 until the summer of 2011 in The Netherlands. The aim of this project is to look at self-harming behaviour from the perspective of patients as well as professionals. By doing so, the treatment of (sometimes chronic) self-harming behaviour is expected to improve.

## Project I'm just doing fine

The essence of the project I'M DOING JUST FINE is to help treatment staff understand that to effectively deal with self-harming behaviour of their patients, they need to understand, express and deal with their own feelings and thoughts on self-harm. This helps in opening the dialogue between patients and staff about the meaning and function of self-harming behaviour. It also helps exploring possible alternatives. An itinerant art exposition combined with a training has been used to this end. The language of art is used to express the deeper meaning of self-harming behaviour, for which words sometimes are inadequate. The project has been realized in 10 different Mental Health Institutes in The Netherlands. Next to the art exhibition, 40 members of the treatment staff in each institute were trained. In total 400 mental health professionals are now trained in dealing with self-harming behaviour of patients.

The training consists of three sessions provided by a mental health professional and a lay expert with personal self-harming experience. Information is given on the meaning, causes and consequences of self-harm. The personal experiences of the lay expert also play a crucial role in the training. In an interactive way the trainees practice different ways to talk about self-harm and gain insight into their own attitude towards self-harming behaviour and its effect on communication with patients. Lastly, trainees are taught to talk about signals of increasing tension and/or imminent self-harming behaviour.

## Research

To investigate the effect of the project, all participants in the training completed three measurements: the first took place three months before the project started, the second two weeks before the project started and the third 1 week after the last training session. The average of both pre-training measurements is compared to the post-training measurement. Three variables are measured: (1) Attitude of the professional towards patients who self-harm, (2) the self perceived efficacy in dealing with self-harming behaviour and (3) the level of detached concern towards the patient who self-harms.

The first variable is measured by the Dutch version of Attitudes Towards Deliberate Self-Harm Questionnaire [3]. This instrument consists of statements like: 'Sometimes I feel that I'm being used by deliberate self harm patients.' 'I feel useful when working with deliberate self harm patients.' 'Risk assessment is an important skill for me to have.' Respondents can answer these statements on a 4-point scale from strongly disagree to strongly agree. The second variable is measured by a new questionnaire developed by the research team in this project called the Self Perceived Efficacy in Dealing with Self-Harm questionnaire. This questionnaire also consists of statements but is more focused on the extent the respondent considers him – or herself capable to deal with patients who self-harm. To measure the third variable, the V-Pacon [5] is administered. In this questionnaire respondents can agree or disagree with statements on a 9-point scale. Examples of statements are: 'No matter how difficult patients in contact are, I do not withdraw from them.' 'I can easily listen to the stories of depressed patients'. 'With some patients I also discuss my own problems.'

Data will also be gathered on several background variables of the participants. Lastly, an evaluation of the learning experience of the participants will take place.

## Discussion

The different feelings and emotions self-harming behaviour elicits in all those involved, can lead to disruption of the patient – staff relation. Consequently, patients may not receive the treatment they need whereas professionals may start to doubt their competence in dealing with this behaviour. The project I'M DOING JUST FINE hopes to instigate an improvement of the treatment of patients who self-harm by helping treatment staff understand this behaviour, improving the communication skills concerning self-harm and by increasing the sense of efficacy in treatment staff.

As far as we know, this is the first large scale study in The Netherlands on the effects of a training programme for treatment staff in how to deal with self-harming behaviour of patients.

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# Audit of suicides in a South Staffordshire (UK) psychiatry unit to determine any preventable deaths

## Poster

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## Abstract

### Aims and methods

The five year report of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness highlighted that 27% of the patients were in contact with mental health services. A retrospective audit of deaths by suicide in the years 2006 and 2007 was conducted to assess for preventable deaths and make recommendations using standards set by National Confidential Inquiry.

### Results

In 2006 deaths (n=8) highlighted poor communication between Crisis & Community Mental Health Team, Noncompliance with Care Programme Approach and inadequate risk assessments. In 2007 deaths (n=12), in high risk cases the importance of 48hr followup, Review & documentation of Risk, Carers involvement in CPA, Face to Face contact for clients who miss 2 appointments.

### Clinical implication:

1. The Audit highlighted the importance of Risk assessment, Documentation & CPA to prevent deaths by suicide.
2. Joint working by Substance Misuse Teams and CMHTs for patients with identified high risk (especially dual diagnosis) to be considered
3. In addition risk assessments should be translated into the care plan, and actions identified to reduce and manage the identified risks. For there to be consideration as to whether current risk assessment processes could be improved.
4. Robust arrangements for 48 hour follow up for all patients discharged from hospital who are deemed to be high risk should be implemented. Where individuals DNA appointments face to face contact should occur. For all Teams to clearly document strategies for contacting patients who do not attend appointments and the rationale behind them.
5. More consideration should be given to referral to Assertive Outreach/Early Intervention Team as a resource to assist with engagement, where appropriate.
6. All staff should strive to involve carers in care planning and risk assessment. This should be clearly documented as should any reasons why this has not been possible.
7. All dual diagnosis patients to be on enhanced CPA.
8. Re audit in 2011.

### Educational goals

1. Better understanding of the facets of risk management.
2. Importance of liaison with Substance Misuse teams.

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# Introducing screening for domestic violence in family care settings in Slovenia

## Poster

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**Keywords:** Domestic violence, screening, physical violence, psychological violence

## Abstract

### Objectives

To estimate the prevalence of domestic violence in Slovenia and its characteristics while using an educational intervention for participating family physicians.

### Design

Randomized controlled trial.

### Setting

The participating family medicine practices were selected from both urban and rural settings, serving populations with diverse socio-economic and ethnic characteristics. 70 participating physicians conducted consensual screening face-to-face interviews with every fifth visitor of their practice. GPs who administered screening procedure were divided in two groups, each of 35 subjects. First group was empowered by the short educational intervention, focused on factors on both, the personal level and on relationship level.

### Results

Out of the 2075 participating individuals (98.8% response rate), 372 (17.9%) had been exposed to psychological or physical violence within the family, including coerced sex, during the previous five years (from 2005 to 2009). Among the male participants, 58 (7.55%) reported having been victims of domestic violence. Out of 1307 female participants in the study, 314 (24, 02%) reported exposure to family violence in the past five years. Typically, in the group of 372 self-reported victims of violence women prevailed significantly, i.e. 314 (84, 4%) female vs. 58 (15, 6%) male victims. Short educational intervention (SEI) to participating GPs made the identification of victims of physical violence less likely (61, 1 in the control group vs. 38, 9 in the intervention group).

### Conclusions

The rate of domestic violence in Slovenia is comparable to equivalent published research. Educational intervention did not have the expected outcome. Implementation of broader educational agenda, further research and plan of action would be plausible.

### Educational goals

1. To assess the scope of the domestic violence as a health problem in Slovenia.
2. To raise sensitivity of the primary care health providers for family violence.

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# A comparative study of attitudes towards aggression in 16 psychiatric wards

## Poster

Tero Laiho, Hanna Putkonen, Nina Lindberg

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## Abstract

### Background

It has been considered that a major component of differing frequencies of restrictive measures is the attitudes of the staff, the so-called ward culture of attitudes. Previous research with ATAS (Attitudes Towards Aggression Scale) (Jansen et al. 2005) has found significant differences between attitudes in relation to aggression. Those differences have been found to be related to frequencies of use of de-escalation or more restrictive coercive measures (eg Nakahira et al. 2009).

### Objective

In this study we compared personnel's attitudes towards aggression in three major psychiatric hospitals in Southern Finland. The purpose of our study was to find putative differences in attitudes among different wards, age groups, and gender.

### Method

Data were collected from all wards of three major psychiatric hospitals in Southern Finland. Data collection was conducted using ATAS. For data analysis we selected wards that had a response rate of over 50% (n=16). Validity and reliability of scale was assessed with Principal Component Analysis and Cronbach Alpha correlation. Differences among wards were observed using Kruskal-Wallis test and areas of specialization (acute/rehabilitation/forensic) were observed with T-Test and Mann-Whitney test.

### Results

We observed significant differences in attitudes among wards and areas of specialty. Differences were found in all components of the scale. Some differences could be seen as a result of long working history in a certain area of specialty, especially in forensic psychiatry, but we also observed major differences among groups that could not be explained by personnel's working history or by specific patient groups.

### Conclusions

It seems that there are some differences not related with staff or patient history but to attitudes per se. This knowledge can be used in understanding nursing culture, especially on certain wards, and in developing work that aims to decrease excess use of coercive measures.

This study increases knowledge related to use of coercion and gives some ideas how nursing culture is connected to use of restrictions.

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# Available instruments to register aggression incidents on psychiatric wards: a literature review

## Poster

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## Abstract

### Background

This study is financed by the Belgian Federal Public Service of Health, Food Chain Safety and Environment. Nurses in psychiatric settings run a high risk of being confronted with aggression. Considering the frequency of aggression and the impact it has on patients and staff, a sound aggression management seems important. Such a policy includes, amongst other things, a continuous registration of aggressive incidents. As there is no systematic and uniform registration system for aggressive incidents in Belgian psychiatric hospitals, it is difficult to get insight into e.g. the frequency, the types, the consequences of aggressive behavior.

### Aim

With this literature review we aim to select a valid instrument for the registration of violent or aggressive incidents in psychiatric settings in Belgium. The instrument should allow hospitals and wards to develop their violence and aggression management based on the results of the registration. The instrument should also be useful and easy to apply in daily practice.

### Method

A review of the literature was conducted to identify existing instruments. The review concentrated on aggression registration instruments used by health care professionals to register aggression in hospitalized psychiatric patients. First a selection was made of sixteen observer-based registration scales. From these sixteen observer-based scales, eleven incident-based observation scales were selected based on the fact that they were intended to register immediately after the aggressive incident took place.

### Results

Each selected observation scale was generally described. The main characteristics, the focus of the instrument, the population for which the instrument is intended, the psychometric aspects and the possible advantages and disadvantages were studied. A global overview was made and the content of the selected scales was compared. This resulted in the selection of the SOAS-R, a validated and reliable scale which is used during a period of 11 months for further research.

### Educational goals

- To increase insight in the need for continuous aggression registration.
- To provide an overview of the existing registration instruments and their characteristics.

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# Demographics on not formerly known inpatients in an medium security forensic department in Denmark

## Poster

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## Abstract

The abstract will give an overview an the following items:

Age, gender, drug abuse, GAF at admittance and discharge of inpatients, SOAR-R and BVC, diagnosis, first contact to the psychiatric healthcare system, follow up after discharge, inhouse activity including physical exercise, cognitive psycho-education, recidivism to crime, assessment over first contact to psychiatric healthcare system in relation to first time criminal offence, seclusion and use of mechanical restraints. This study is based on a time period of 1½ year and includes 55 inpatients and uses the SOAS-R and BVC to reduce risk behaviour. Elucidation of potential risk areas in daily planning of activity. Use of cognitive psycho-education too reduce risk behaviour.

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# Aggression in psychiatric settings: incident registration using SOAS-R in nine Belgian hospitals

## Paper

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**Keywords:** Aggression, mental health, registration

## Background

Nurses are at high risk of being confronted with aggression (Farrell & Cubit, 2005). This risk is even higher for nurses working in psychiatric settings (Bowers et al., 2009; Finfgeld-Connett, 2009; Foster, Bowers & Nijman, 2007; Bisconer, Green, Mallon-Czajka & Johnson, 2006; Kindy, Peterson & Parkhurst, 2005; Needham, Abderhalden & Meer, 2004; Doyle & Dolan, 2002). The possible causes and the effects or the impact of aggressive incidents on psychiatric nurses explain the extensive attention for aggression management in the literature (Farrell & Cubit, 2005). A basic and necessary element for the development of a sound management policy of aggression is the continuous monitoring of the occurrence of aggression on psychiatric wards (Nijman, Björkly, Palmstierna & Almqvist, 2006). This indicates the importance of the use of reliable and valid aggression registration instruments. At this moment, the comparison of national incident rates is not possible because there is no systematic and uniform registration system for aggressive incidents in Belgian psychiatric hospitals. The lack of a consistent aggression registration method on different psychiatric wards combined with the lack of a clear expression of the incident rates result in data that are impossible to compare (Bowers, 2000). Therefore, we have insufficient data to detect if the problem becomes better or worse and what the degree of variation is between different types of clinical areas (Bowers, Nijman, Palmstierna & Crowhurst, 2002). Depending of the instrument used additional information about different aspects of aggression (triggers, types, measures to stop aggression...) is collected.

A search of the literature was conducted and the available aggression-registration instruments were assessed based on psychometric values and additional described advantages or disadvantages. This resulted in the selection of the SOAS-R as an appropriate aggression-registration instrument for our study.

## Aim

The aims of the study are incident registration of aggression in non-forensic psychiatric wards of nine Belgian hospitals, using the SOAS-R (Staff Observation Aggression Scale Revised, Nijman et al., 1999) and the evaluation of the SOAS-R.

## Method

The SOAS-R was selected after a review of the literature. This well known instrument is used for the monitoring of aggressive incidents witnessed by staff members. Aggression is clearly defined in this scale. The SOAS-R, which is built from the SOAS (Palmstierna & Wistedt, 1987), consists of five columns that relate to specific aspects of aggressive behavior: provocation, means used by the patient, target of the aggression, consequences for the victims and used measures to stop aggression (Abderhalden, Needham & Dassen, 2008; Woods, Ashley, Kayto & Heusdens, 2008; Foster et al., 2006; Needham et al., 2004). The scale features a visual analogue scale used to assess the severity of an incident (Nijman et al., 1999). Besides recording incidents of aggression, the use of the SOAS-R results in a total severity score.

Nine hospitals are selected to participate in the study. From each hospital at least one, and maximum three wards take part in the study, with a total of 17 participating wards. This gives the following distribution for the Belgian context: six hospitals (eleven wards) in the Flemish region, two hospitals (four wards) in the Walloon region and one hospital (two wards) in the Brussels capital region. On every ward a software package of the SOAS-R is installed on the central server. The staff is trained in the use of the SOAS-R and the data were collected between December 2010 and September 2011.

## Results

The continuous registration is at the time of this writing still ongoing. At the end of the registration period, different analyses will be performed on the collected data. We would like to answer the following questions: (1) What are the most frequent provocations, means used by the patients, the targets, the consequences or measures to stop the aggression? (2) Are there significant differences between the wards? Is it possible to detect influencing factors for differences between wards? (3) Has the use of the Visual Analogue Scale an increasing value for the calculation of the total severity score?

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# Violent acts at the University Hospital of Psychiatry Bern

## **Poster**

*Thomas Reisch, Daniel Born  
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## **Abstract**

Psychiatric hospitals much more often have to deal with aggressive act than non-psychiatric hospitals. Violent acts in a psychiatric hospital can be differentiated in auto-aggressive acts and aggressive acts against third persons. The goal of the study was to evaluate the quality of the different acts in order to better prevent such acts in the future and to better train the employees to be better prepared. During a time of 3 years all violent acts in the University hospital of psychiatry of Bern (200 beds) were systematically recorded. The implications of results in order to better prepare the employees and to better prevent future acts will be discussed.

The goal of the study is to assess the quantity and the quality of the different act in order to improve the education of the staff.

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# A study of GPs practices and reflections regarding involuntary psychiatric admissions

## Poster

Ketil Røtvold, Rolf Wynn  
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## Abstract

### Background

Norwegian law allows for the involuntary admission of psychiatric patients provided that the patient has a serious psychiatric disorder and in addition is a) either deemed to be a danger to him/herself or others or b) will not receive appropriate treatment without admission. In some other countries, involuntary admission is only allowed when there is some type of danger. Involuntary admission is quite frequent in Norway. In approximately 1/3 of referrals to Norwegian emergency psychiatric wards, the referring doctor asked for involuntary admission.

### Purpose of study

To examine GPs understanding of the relevant Norwegian laws and to examine how the GPs apply the laws in clinical practice. We wanted to examine whether the current laws are adapted to current clinical practice and if other factors than those mentioned in the law are of importance to the decision to admit patients involuntarily.

### Methods

Semi-structured telephone interviews with GPs that had referred patients for involuntary admission at one Norwegian University Hospital have been carried out. GPs were asked to consider circumstances regarding their latest involuntary admission. Insofar, 60 GPs have been interviewed. The study will continue until 100 have been interviewed. The data were analyzed quantitatively and qualitatively.

### Preliminary results

Some trends are already visible in the data;

1. Many of the GPs had little knowledge about the patients prior to the admission.
2. A high number of the GPs did not make a distinction regarding whether the patients posed a risk to themselves or others or whether they would not receive appropriate treatment without admission.
3. The GPs believed that many of the admissions could possibly have been avoided if the patients had had better assistance and care at home.

### Discussion

As the data collection is only partly completed, it is too early to draw conclusions from the data. Further data and analysis will show whether there is an association between the GP not knowing the patient well and subsequent involuntary admission. We will also examine whether a lack of assistance and care at home can be associated with involuntary admission. The use of the criterion of danger vs. the criterion of treatment will be explored further.

### Educational goals

1. To learn about the criteria for involuntary admission to psychiatric hospital in Norway
2. To learn about GPs practices and reflections regarding involuntary admissions

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# Better quality of life of sexual deviants is after surgical castration than after hormonal therapy

## Poster

Jiří Švarc, Slavoj Brichtin  
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## Introduction

Biological part of the therapy of sexual deviants is based on deactivation of sexual hormones. It can be achieved by hormonal therapy (GnRH analog or antiandrogene) or surgical castration (testicular pulpctomy or orchiectomy). In Czech Republic, if forensic treatment is imposed on a sexual delinquent, he is obliged to undergo the hormonal therapy (if prescribed by physician-sexologist). The surgical castration can be done only for patient's request after a special committee's permission. The reason for the surgical castration is a serious relapsing sexual deviation (sadism, pedophilia) if a lifelong sexual inhibition is necessary.

The relapse reduction is proved e.g. by Langelüddecke (1963) who followed up 1036 sexual delinquents for 20 years. In the group of 685 men who refused the castration 80% relapsed; while only 2.3% relapsed in the group after castration.

## Methods

Interview with 33 responding sexually deviant men from 51 who underwent the castration in Psychiatric Hospital Bohnice during 1987-2009; and comparing with 33 sexually deviant men treated by antiandrogene or GnRH. All of them underwent the same psychotherapeutic procedures in the past.

## Results

The results are demonstrated in Table 1.

	Castration	Hormonal therapy
Mean age	28.7 years (at castration)	41.2 years (at treatment onset)
Diagnosis		
Sadism	10	10
Pathologic sexual aggression	9	9
Pedophilia	14	14
IQ		
Under average	12	7
Average	13	22
Above average	9	4
Partnership		
In partnership	12	10
Single	21	23
Sexual functioning		
Morning erection	21	28
Achieving orgasm	11	21
Masturbation ability		
Daily	2	2
Eight times a month	3	9
Twice a month	9	10

Not at all	19	9
No response	0	3
<b>Weight</b>		
Overweight	17	12
The same weight	14	20
Underweight	2	1
<b>Bone status</b>		
Osteology – normal results	2	3
Osteopeny ( $p < 0.05$ )	19	2
Osteoporosis	4	0
Not examined	8	28
<b>Change in substance use</b>		
Less	14	16
The same	11	11
More	5	4
Not specified	3	2
<b>Changes in quality of life</b>		
Better ( $p < 0.05$ ),	26	18
The same	6	11
Poorer	1	4

## Conclusion

The quality of life of sexual deviants is better after surgical castration than after hormonal therapy from their subjective point of view. In the other health factors there are no significant changes apart from the osteopeny after the castration.

## Educational goal

1. To point out the usefulness, effectiveness and safety of surgical castration of the delinquent sexual deviants, whose life quality is improved by the castration.

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# Clinical and demographic profile of repeatedly violent patients in an acute psychiatric hospital: A one-year retrospective study

## Poster

*Lizica Troneci, Rozy Aurora, Katya Frischer, Nataliya Gulyayeva, Ali Khadivi, Andrei Nagorny  
Bronx Lebanon Hospital Center, Albert Einstein College of Medicine, Bronx, USA*

## Abstract

### Introduction

Despite extensive research on inpatient violence, only a limited number of studies have examined demographic and clinical profiles of psychiatric patients who are repeatedly violent (Lussier et al, 2010, Flannery, 2002, Blow, 1999). Several studies (Quanbeck, 2007, El-Bardi, 2006, Davis, 1991, and Beck et al., 1990) have shown that repeatedly violent patients may have different clinical characteristics from the patients who are less violent. However, these findings are not consistent across setting and patient populations.

Given these discrepancies, the objective of this study was to determine if psychiatric patients who engaged in multiple episodes of inpatient violence demonstrate different demographic and clinical profiles from non-violent inpatients.

### Method

This study is a retrospective case control study of patients with multiple episodes of violence on inpatient psychiatric units and a randomly selected equal sample of non-violent patients. The data were collected from incident reports filed over the course of one year (January 2009 through December 2009). The sample of repeatedly violent patients on the inpatient psychiatric unit was defined as the patients who committed three or more violent acts in the hospital during the whole period of one or more hospitalizations, within the study period. A violent behavior/act was identified as a completed act or an attempt to physically harm staff and/or other patients and/or damage to property. The record review identified 80 inpatients who committed violent acts within the study period. Thirty of these patients exhibited three or more episodes of violence constituted the repeatedly violent group. Thirty randomly selected non-violent patients who were on the inpatient unit during the same study period was chosen and analyzed for comparison.

### Results

The patients with a history of multiple violent episodes are significantly more likely to be male, have a diagnosis of a major psychotic disorder, have a co-morbid diagnosis of mental retardation, and have personality disorders. With regard to past history, patients with multiple violent episodes are significantly more likely to have a history of physical/sexual abuse, long-term psychiatric hospitalizations, and multiple past psychiatric hospitalizations. Finally, patients with multiple episodes are more likely to require seclusions and restraints than the control group.

### Conclusion

The present study suggests that psychiatric patients who engaged in multiple episodes of inpatient violence have distinct demographic and clinical profile compared to non-violent controls. The results are discussed in light of the literature on the inpatient violence.

### Educational goals

1. To identify clinical characteristics of the patients who engage in multiple violent episodes of inpatient violence
2. To recognize how the risk factors for repeatedly violent inpatient sample is variable across different setting and population.

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# Violence and victimization among Czech psychiatric patients

## Paper

Jan Vevera

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## Abstract

While the relationship between psychiatric disorders and violent behavior has been studied in the USA and Western Europe, there has been no systematic research in this area in the post communist countries. In our previous studies, we examined a) prevalence and characteristics of violence among psychiatric patients, b) trends in violent behavior among patient suffering from schizophrenia and c) their victimization

## Prevalence

In 1 year prospective study in 140-bed university-based psychiatric clinic prevalence of violence among all hospitalized patients was 5 %. Patients with organic disorders exhibited most violence (14%), followed by patients suffering from schizophrenia (7%).

## Trends in violent behavior

While the number of reports confirm rapidly growing rate of mentally disordered offenders, this does not apply to the Czech Republic.

In our first study (1) we analyzed prevalence of violence among schizophrenic patients in the years 1949, 1969, 1989, and 2000 in Prague (Czech Republic). Overall, violence was 41.8% for men and 32.7% for women. There was no increase in violence in schizophrenic patients between 1949 and 1989, and only a marginally higher prevalence of violence was reported in the 2000 sample. Family members and medical staff are the most frequent victims of violence.

In the second study, we did not find significant increase in admissions to a large forensic psychiatric facility between 2002 and 2007. Further, number of court ordered forensic treatments between 1991 and 2007 for psychiatric and sex offences remained unchanged. However there was a steep increase (162 %) in number of treatments imposed for abusing illicit drugs.

We hypothesized that the high rate of adult psychiatric hospitalizations protected patients with serious mental disorders from engaging in criminal behavior. It is necessary to identify the subgroup of patients for whom longer inpatient care is of benefit. In the Czech Republic this process is important in the sense that there is a need to promote shorter hospitalizations and high quality community care for the vast majority of patients.

## Victimization

It is becoming increasingly clear that people with schizophrenia are more often victims than perpetrators of violence. In our pilot study 50% females and 40% males schizophrenic patients were victimized during previous 6 months (using CECA. Questionnaire) and 11 % suffer also from PTSD (using SCID module).

The high rate of PTSD in persons with schizophrenia has important clinical implications. Once PTSD will be diagnosed another therapeutic procedures (e.g. cognitive restructuring, exposure therapy) could be added to antipsychotic therapy. Effective treatment for PTSD could improve both physical and mental health functioning.

## Literature

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## **Educational goals**

1. The attendees will learn about the relation between violent behavior , victimization and comorbidity with PTSD with a focus on schizophrenia.
2. These issues will be discussed using the evidence collected worldwide as well as specific data from the Czech Republic.

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# Chapter 10 – Pharmacological treatments for violent patients

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## Rapid metabolism of antipsychotics and akathisia in violent psychotic Court-ordered detention patients and treatment with mood stabilizers and atomoxetine in violent dual diagnosis patients with mixed affective state and/or ADHD

### Poster

*Carel de Blécourt, Tjoe Oei, Armand van der Kruijt, Rebecca Rabbino-witsch, Robert van Montfoort GGNNet, Doetinchem, The Netherlands*

### Abstract

#### Aim

Attempting to improve the psychopharmacological treatment of violent psychotic detention patients and to ameliorate psychological treatment as usual by psychopharmacological pretreatment of violent dual diagnosis patients.

#### Methods

In paranoid schizophrenics patients who were treated with average or high dose of antipsychotics, in most cases as depot preparation, plasma levels were determined after informed consent.

Dual diagnosis patients with a combination of substance abuse and a personality disorder, all with violent offences, were scrutinized in a pilot study for mixed affective state, also called minor mixed depression or minor agitated depression. The clinical features include racing thoughts, mood lability, high irritability and inner tension, early insomnia and outbursts of unprovoked rage. Patients who showed these features were treated with a mood stabilizer; antidepressants, when used, were tapered off because of their worsening effect: we have seen such patients using e.g. 60 mg paroxetine/day for years, wandering in the ward like a walking bomb, becoming involved in fights again and again. If indicated, quetiapine or periciazine was added.

#### Results

In the psychotic patients, to our surprise, in three wards of two different clinics, in 10 out of 30 patients, subliminal or relatively low plasma levels were found. Moreover, about half of these patients appeared to have had severe akathisia, which had deterred them from commitment to a higher dose, at the time, before the criminal offence. Adjustment of the dose, in combination with treatment of akathisia with propranolol, yielded clear clinical improvement of the psychotic features as well as of the related violence. By means of pharmaco-genetic investigation ultrarapid metabolism due to gen duplication of P450-2D6 was excluded. An incidental observation was that violent incidents occurred after addition of aripiprazole.

The dual diagnosis patients, in a pilot study, showed a good reaction on the mood stabilizers in the sense that mood swings disappeared, but in about one third the racing thoughts continued. When these patients were given atomoxetine, in addition, it was striking that already within a few days 'they finally had become quiet in the head'. These patients got more overview on their situation, were inclined to look for alternative coping strategies for substance abuse, started keeping better their appointments,

could tolerate confrontations by staff members in stead of getting enraged by them, didn't interrupt treatment impulsively and could concentrate themselves better on psychological treatment, engaging in a therapeutical relationship.

## Discussion

The observations about plasma levels of the antipsychotics are suggestive for a selection bias of patients with a metabolism on the fast normal side of the Gaussian curve and yield a perspective for real prevention if patients would be identified as such, in anticipation, before committing the offence.

In the dual diagnosis patients, it seems to be worthwhile to start treatment with a mood stabilizer and then, if racing thoughts remain, to add a psycho pharmacological drug for ADHD. Thus, psycho pharmacological pre-treatment seems to facilitate treatment as usual by the psychologist.

## Conclusion

These treatment interventions in violent patients are not yet mentioned in the literature, as far as we know. Violence related to these clinical aspects, however, appears to be treated in a relatively easy way.

## Educational goals

1. To demonstrate the usefulness of plasma level monitoring of antipsychotics in violent psychotic Court-ordered detention patients.
2. To point to the possible usefulness of psycho pharmacological pre-treatment with mood stabilizers, in some cases with addition of atomoxetine, to facilitate psychological treatment as usual of double diagnosis patients.

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# Chapter 11 – Psychological treatments, therapies and trainings for violent patients

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## Two Session Treatment Protocol Post Non-Lethal Restraint (Tasing)

### *Workshop*

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**Keywords:** Taser, non-lethal restraint, aggression, violence

### **Abstract**

This article outlines a two-session treatment protocol for those who have experienced a tasing event. The protocol is designed to allow the patient an opportunity to share his narrative about the event and assist him better understand the technology involved. The first session ends with an explanation of common symptoms experienced by those who have gone through a traumatic event in the cognitive, physical and emotional realms. He is asked to monitor for these symptoms during the interval between the first and second session. The second session involves a more detailed processing of the events drawing on cognitive behavioral techniques, normalization and an explanation of how future treatment may help him process the event.

### **Introduction**

Jack Cover, a physicist in the 1960's, first developed the TASER (Thomas A. Swift's Electric Rifle). The original model was fired with gunpower. Since that time, tasers have grown in popularity in both civilian and law enforcement applications. Modern day devices, such as the X26, deploy two probes via compressed nitrogen to penetrate up to one inch of clothing. The taser then transmits electrical pulses through the insulated conductive wires into the body affecting the sensory and motor functions of the peripheral nervous system. Guidelines for safe deployment are provided by the International Association of Chief of Police (2007), McBride and Teddar (2006) and Taser International (2005).

As these devices become more popular with law enforcement, media and press coverage have raised the question of appropriateness of use and the potential lasting emotional and traumatic impact to the individual. The most noteworthy of these cases occurred in 2007 when Andrew Myer famously quipped, "Don't tase me, Bro!" after he repeatedly failed to comply with law enforcement directions at the University of Florida during a question and answer session with presidential candidate John Kerry (Lipka, 2007). He was then tased.

### **Purpose of the study**

The main purpose of this study is to develop a two-session treatment protocol for individuals who have been tased. Counselors, psychotherapists, psychologists and psychiatrists may conduct the treatment protocol as a preventative measure to address potential Adjustment Disorder and PTSD symptoms. "Collectively, prevention programs within the domains of learning, information processing, memory, and psychobiology could target the primary mechanisms thought to differentiate PTSD from healthy recovery from traumatic event exposure" (Feldner, M., Monson, C. and Friedman, M., 2007, p. 103).

## Session I

The first session teaches the individual some of the science behind the taser to assist him to better understand his experience. Prior to educating the individual about the taser process, he is invited to share his story about what lead up to the event, his experience during the tasing, the immediate aftermath and how he has been since. Narrative therapy offers a useful explanation on the importance of eliciting a story from the patient and attending to the metaphors and language he uses to describe the event (White and Epston, 1990).

On November 19, 2010, the WKU police tased this author so that he develop a better firsthand experience of the process. The narrative is included:

*“The officer had me lie down in order to not be hurt in a fall. The taser was deployed for five seconds. It felt like a truck passing over me, kind of like rumble stripes. There was a pulsing and causing an intense pain. On a scale from 1-10, being shot by the barbs hurt at a 1-2, the tasing hurt like a 9, having the barbs removed hurt at a 2-3. The pain was immediate when the barbs struck, and was completely gone at the instant the 5 seconds were complete. There were no lasting effects and I went back to work that day with an increased level of energy.”*

Common information shared includes:

- Taser: 50,000 Volts during a 3-5 second period
- Static electricity (such as a doorknob) 35,000-100,000 volts
- Not the voltage, but amperage is dangerous. A taser delivers from .36-1.76 joules per pulse with 19 pulses per second
- High voltage affects nerves and leads to intense muscle contraction (Bozeman and Winslow, 2005)
- Does not affect muscles directly, but contractions can cause back or joint injuries, stress fractures, back injuries, muscle or tendon strains or tears (Bozeman and Winslow, 2005)
- May cause minor surface burns from arcing, can ignite flammable liquids
- Danger of penetrating eye injuries (NG and Chehade, 2005; Chen et al, 2006).
- Skin at puncture site is cauterized, barbs are remove with quick pull, wipe with alcohol prep pad and may have Band-Aid applied

The patient is then given a trauma checklist for symptoms related to a traumatic event. This checklist includes information concerning the physical, emotional, psychological and cognitive symptoms he may experience. The patient is asked to monitor for these symptoms between the first and second session. Ideally, 1-2 weeks should pass between sessions.

## Session II

The second session begins with a review of any symptoms the patient may have experienced during the interval between sessions. He is also encouraged to discuss any new symptoms or thoughts he has had about the event after discussing his narrative during the first session.

Additionally, the clinician is encouraged to make the following points. These points should be made gently and in consideration for the process the patient is currently experiencing.

- Everyone makes mistakes with their behavior. It can be helpful for the patient to understand his behavior in the context of not being perfect. He should be encouraged to take responsibility for the mistakes that lead to the tasing event. Patients should be encouraged not to engage in irrational thoughts that lead to catastrophizing, but instead see the event as unfortunate, painful and something they will move on from (Ellis, 2007).
- Some patients might benefit from a discussion of the usefulness of tasers in reducing actual injury to the subject and the police during a restraint event. There is an increase in potential harm from longer lasting injuries such as bruises, lacerations, strains, sprains and broken bones when the police subdue a subject with a nightstick, rather than a taser. Even mace, which doesn't have the same long lasting effect, still remains painful for up to an hour after use (Taser International, <http://www.taser.com/>).
- Some type of mediation or further discussion between the police and subject might also be helpful. The process of restorative justice may also be helpful for the patient to work through any feelings of guilt, shame or regret associated with the tasing event (Karp, 2005; Zehr, 2002). This restorative justice approach involves the patient making some amends for his behavior that lead to the tasing in order to move past it and make amends. These amends can be directed at an individual or the larger community.

## Discussion

“Some patients will make claims for adverse physical and psychological effects after having the taser used on them. Clear causation will be very difficult to prove given the paucity of clinical evidence” (Bleetman, 2004, p. 139).

Traumatic events are often an individualized, subjective experience. An event that traumatizes one person is enjoyable for another person (e.g roller coasters, skydiving, paintball, tattoo or body piercing). For some, the pain of the tasing event, the humiliation and feeling of powerlessness may be a lasting wound for an individual. Completing this two-session treatment model, or something similar in form and content, may be preventative for those who have experienced a tasing event.

Some groups have reviewed safety concerns about taser use (Rappert, 2004; Amnesty International, 2006; Robison and Hunt, 2005; Jenkinson, Neeson and Bleetman, 2006; McBride and Teddar, 2006). The purpose of this study is to lessen the psychological impact of those who have been tased. The safety and efficacy of tasers is beyond the scope of this study.

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# Group treatment and interventions in a High Security Forensic Hospital: How to increase knowledge about own illness, prevent relapse, and increase social skills.

## Poster

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## Abstract

### Introduction

Forensic hospital patients often have long substantial difficulties associated with serious mental illness, drug abuse, and dangerous and criminal propensities. They have special needs of information, both related to the illness and treatment, to understand and manage their chronic illness more effectively in collaboration with treatment providers. Recovery is not only remission of symptoms and return to prior functioning. It can be defined as a blend of subjective aspects including common themes like personal growth and full life beyond the illness during a positive identity, personal responsibility, social connection and meaningful life activities.

### Method

The group treatment is based on The Illness Management and Recovery (IMR) program from Kim T. Mueser and the Norwegian translation from Rolf Gråwe. Additionally, the program is based on a locally developed anger management program at the High Security Forensic Hospital Brøset/Trondheim (Norway). The group-based CBT treatment is drawn upon the cognitive-behavioral principles and has been designed to meet the special needs of patients in High Security Forensic Hospital.

### Treatment outcomes

This is a pilot program and is not empirically validated yet. This paper can only describe the development, accomplishments and effects of group based treatment in high security Forensic Hospital. The participating patients all report that the program is useful, respectful, and help them make progress. The patients are motivated and there has been no dropouts.

### Educational goals

1. The program focuses on stabilizing, managing symptoms, functional failure, teaching social skills and psycho education to reduce violence, change level of insight and psychiatric symptomatology.

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# Delivering a nurse led 'managing problematic anger' treatment programme in a high security psychiatric hospital

## Paper

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## Abstract

The serious consequences of violent and aggressive behaviour are common reasons leading to admission into high secure psychiatric facilities, and as such the reduction of risk in this respect represents a core treatment target for this patient population. An examination of the treatment literature identifies a number of variables that predispose individuals to violence, with anger mediated aggression frequently cited as a major factor. The delivery of psychologically based interventions in the management of anger is therefore an important factor in the targeting of potential high risk areas in the management of forensic patients with a violent predisposition. Traditional approaches to anger are conceived as involving a variety of techniques ranging from relaxation training, and cognitive restructuring to social skills training. Such approaches however require high levels of motivation and cooperation, characteristics not readily found in the forensic population. Forensic patients therefore present the clinician with a unique set of problems that in many instances render standardised CBT ineffective. Consequently the issue of how to adapt standardised interventions, responsive to the unique treatment needs of forensic populations, and that improve treatment outcomes, is of salient importance.

The Managing Problematic Anger programme, designed and delivered by Nursing Staff within Rampton Hospital, is a 36-week manualised treatment programme, that has been adapted from Novaco's stress inoculation approach (Novaco, 1975, 1983) and other recognised anger treatments (Deffenbacher 1996). Designed specifically for the forensic population, from the outset the programme utilises motivational techniques to reduce patient drop out (thus maximising therapeutic engagement), then initially in module 1 looks at material designed to promote participant confidence and promote the therapeutic alliance, moving on to insight development and problem ownership in module 2, before finally looking at skills generalisation and maintenance in module 3. Skills development is an ongoing theme throughout the programme, which is underpinned and informed by the 'stages of change' model. The weekly sessions can also be supplemented by individual ward based sessions to further enhance understanding, and close working relationships are fostered with the wider MDT to both inform care planning and monitor skills acquisition and transfer. Psychometric questionnaires are administered pre and post treatment to indicate reductions in the frequency and intensity of aggressive and anger related behaviours.

Despite the central role of Nurses within this process, little emphasis has traditionally been placed on the Nurses' role within a psychologically driven treatment context for reducing violence. Although traditionally delivered by psychologists, the greater availability of cognitive-behavioural training has increased the potential for mental health nurses to adopt a more proactive role in direct treatment delivery. This paper highlights the extended role and important contribution Nurses make, in reducing the risk of anger mediated violence within a mentally disordered male offender population.

## Educational goals

By the end of this paper the audience will be able to;

1. Discuss the role of anger in relation to violence.
2. List the key components of an anger management programme.
3. Describe how mental health nurses can contribute to the reduction of anger mediated violence through structured psychological interventions.

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# Reduction of hospital assaultive behavior following CBT anger treatment of male offenders having intellectual disabilities

## Paper

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## Abstract

Anger dysregulation is a transdiagnostic problem, being involved in many forms of psychopathology. Among people with intellectual disabilities, anger drives 'challenging behavior', and our previous research has established its link to physical assaultiveness in hospital, controlling for many covariates. Across psychiatric populations, anger is related to violence prior to hospitalization, during hospitalization, and after hospital discharge. Regarding anger treatment, while many meta-analyses have established its efficacy in reducing anger, there are very few studies about whether it results in lowered aggressive behavior. This study concerns a CBT anger treatment, specialised for offenders with ID (Taylor & Novaco, 2005), as implemented in a forensic hospital where over 50% of the patients have been physically assaultive since admission. The individual-based anger treatment was delivered twice a week for 18 sessions, involving 50 patients for this study. Anger and aggression was assessed by multiple methods of patient self-report of anger, staff ratings of anger and aggression, and case records of assaultive incidents. Anger and aggression assessments occurred at 4 time points: baseline, pre-treatment, post-treatment, and 12-month follow-up. Our principal analyses concerning physically assaultive behavior, which was obtained from case file records 12 months prior to the start of treatment and 12 months following the completion of treatment. Each 12-month interval was divided into 6-month blocks for more refined analyses. The mean number of physical attacks was reduced by more than half, showing a strong contrast of approximately 3.5 attacks per patient in the 6 months prior to treatment versus approximately 1 attack per patient in the 6-12 month interval post-treatment. Hierarchical regression analysis found that controlling for IQ and pre-hospital violence history, reduction in physical assaults from 12 months pre-treatment to 12 months post-treatment was significantly related to the patients' pre- to post-treatment change in anger level. These findings buttress the efficacy of anger treatment with forensic hospital patients having a history of community violence and assaultiveness in hospital. Our results have significance for patient mental health needs, hospital staff well-being, therapeutic milieu of treatment units, hospital management decisions, and service delivery costs.

## Educational goals

1. clinical scientific knowledge about anger treatment efficacy with forensic patients having cognitive functioning difficulties
2. information about the delivery of CBT anger treatment in a forensic hospital
3. information about how to assess anger with this client group and how measurement of anger and aggression interface
4. knowledge that assaultive behavior by forensic patients can be substantially reduced by anger treatment
5. discussion of clinical service and hospital management implications

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# Cognitive-behavioural anger treatment for low functioning clients

## Seminar

*John Taylor, Raymond Novaco*

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## Abstract

### Seminar as an Extended Workshop (per Nico Oud)

Dysregulated anger often drives the aggression and violence that commonly occur among people who are intellectually low functioning or have mild-borderline intellectual disabilities. This is now well established by clinical research, especially in the UK, as well as by international epidemiological studies. Dysregulated anger can have serious consequences for clients, their families and carers, and for services attempting to support them.

Cognitive-behavioural anger treatment is gaining sway over formerly preferred behaviouristic antecedent control contingency management and psychotropic medication regimes for challenging behaviour in this client group. The efficacy of CBT programmes for anger has been demonstrated across types of settings, types of institutions (forensic and non-forensic), and treatment formats (individual and group). Beyond reduction in anger levels, our anger treatment programme has produced substantial declines in assaultive behaviour in a forensic hospital.

This seminar will be a skills workshop, providing a brief overview of the evidence base, followed by procedures for anger assessment with this client population, and an introduction to an intensive individually delivered cognitive-behavioural anger treatment programme that has been shown to be effective in reducing anger and aggression in a number of controlled and service evaluation studies.

Participants will learn how to use the stress inoculation paradigm as a component part of this adapted CBT intervention with clients with cognitive limitations. Participants will be given practice in applying anger control coping strategies to clients' provocation hierarchies in analogues of clinical practice with low functioning clients.

### Training modalities:

Didactic, experiential, role-play.

### Workshop Leaders:

John Taylor is Professor of Clinical Psychology at Northumbria University and Consultant Clinical Psychologist with Northumberland, Tyne & Wear NHS Trust. He has researched and written extensively on the assessment and treatment of anger problems experienced by people with mild and borderline intellectual and developmental disabilities.

Ray Novaco is Professor of Psychology and Social Behavior at the University of California, Irvine, USA. He is the foremost international authority on anger treatment and research and pioneered the widely used approach to anger treatment incorporating the stress inoculation paradigm. He has published extensively on this and related areas.

### Implications for the science and clinical practice:

Participants will acquire skills in working with a difficult-to-engage client group concerning a wide-spread problem for which little clinical service provision is routinely available.

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## **Educational goals**

Learning objectives:

1. To become familiar with evidence-based cognitive behavioural anger intervention designed for use with clients with cognitive limitations.
2. To learn anger assessment procedures for clients with cognitive limitations.
3. To learn and practice therapy skills that are part of the stress inoculation approach to anger treatment.

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# Anger treatment therapist training level effects with male forensic intellectual disability patients

## Paper

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## Abstract

Among forensic populations, the unmet need for mental health care is greater than for the general population, and this is especially so for those with intellectual disabilities (ID). The present study concerns an enhancement in the provision of anger treatment delivered to that client population at a forensic hospital. The clinical research question was whether a CBT anger treatment, specialised for offenders with ID (Taylor & Novaco, 2005), can be efficaciously delivered by supervised trainee therapists. We examined whether trainee therapists can achieve clinical gains and compared their outcomes to those attained by experienced therapists using the same manual-based treatment protocol. Multiple patient-rated and staff-rated measures of anger and aggressive behaviour were used to evaluate treatment gains among 88 patients (55 treated by professionally qualified therapist and 33 by trainee therapists) who received an 18-session treatment. Assessments occurred at 4 time points: baseline, pre-treatment, post-treatment, and 12-month follow-up. Repeated measures analyses revealed that trainee therapists achieved significant declines in patient anger and aggression, however, treatment gains were significantly stronger for the experienced therapists, especially for the STAXI anger control, NAS anger regulation, and staff-rated anger and aggression indices. Significant differences were found in patient characteristics, with more difficult patients having been assigned to the professionally qualified therapists. Overall, the present study results with a larger patient sample and the inclusion of trainee therapists extend our previous findings on the efficacy of CBT anger treatment with this client group. Our findings are good news for world-wide initiatives seeking to boost the delivery of psychological treatment for the mental health needs of forensic populations.

## Educational goals

1. Clinical scientific knowledge about anger treatment efficacy with forensic patients having intellectual disabilities.
2. Information about treatment research design.
3. Learning about procedures for training therapists and providing supervision of them.
4. Information about gains made by trainee therapists.

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# Explanations of reduced aggression rate in a security ward

## Paper

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## Abstract

### Background

Concerns about inpatient violence are frequently expressed and various aspects are extensively studied. Knowledge about relations between ward settings and aggression rate and patterns may offer relevant and valuable clinical information. Longitudinal investigations, including changed rate, identification of causal factors and analysis of relative impacts are however rare. This scarcity of long term studies is due to both lacks of data and methodological complications. Prospective controlled studies in natural settings meet challenges due to the nature of clinical settings. Large bodies of data need to be collected for clear trends to emerge, important variables as patient-staff interaction and other situational variables are considered difficult to assess and lack of control upon policies and unexpected changes in operations often occur. Lack of researchers inclined to engage in such studies may be another restriction.

### Aim

A central issue in explanations of inpatient aggression is the relative impact of contextual variables and individual patient characteristics. The aim of this study is to explore staff perspectives upon such factors influencing a 40 % downward trend in aggression rate appearing in a security ward, mainly during the middle part of a period of 17 years.

### Method and design

An earlier study of the ward setting in the same period found a significant increase in patient autonomy, as indicated by reduced use of coercive interventions in risk situations, more liberal house rules and reduced mandatory activity program. The parallel trend of reduced violence incidents seems not to be explained by changed ward operations. Responsibilities, tasks and general conditions have been stable during the total period. Several possible contextual variables potentially related to the rate reduction are however possible.

Retrospective quantitative analysis has fundamental methodological shortcomings and statistical tests of causal hypotheses were not considered an option. Alternatively we used semi-structured interviews of staff to bring up a wide range of views on potential factors influencing the change in violence rate. The interviewees had long clinical experience from the ward, different backgrounds, roles and educations, and they were employed during the years of main rate reduction. The interviewees were asked about their spontaneous explanations and preferred variables for testing their hypotheses. Subsequently they were presented a list of 21 patient and contextual variables and asked to select the three most probable proposals for explanation. Finally they were presented trend graphs for the 17 years for these variables and asked to give their comments upon their suggestions and conclusions. The interview texts were analyzed using quantitative and qualitative content analysis.

### Results and discussion

Suggested contextual explanations include qualities of the ward staff group, professional level and competence, norms, values and attitudes, organization of staff resources, risk assessment and treatment methods and several aspects of routines and program. Transition from group to individual approaches seemed to be a common aspect of several answers.

Even though the results are supposed to reflect individual experience and background of the informants, they are expected to shed light on a diversity of contextual variables of clinical relevance as well as their relative importance. The significance of the relation between reduced violence rate and earlier findings of increase in various aspects of patient autonomy are of particular interest.

## **Educational goals**

- To present the diversity of contextual factors with potential impact on inpatient violence rate and common aspects of such factors.
- To emphasize the importance of ongoing assessment of clinical data for quality assurance of program and evaluation of professional interventions.

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# “Walk With Me, Please”

## Poster

Alexandria Windcaller  
Response Training Programs, Shutesbury, USA

## Abstract

Fire fighters and first aide professionals rely on and gain lifesaving minutes when people-in-need know self help drills such as “drop and roll” and “apply pressure and elevate”. Crisis interveners also benefit when patients know “what to-do” and “how-to ask for help” when in distress, angry and/or agitated. The Response Client-based Curriculum integrates a “safety-first” crisis protocol used by trained staff into a self-help model for patients. Integrating a universally applicable crisis protocol, for both staff and patients, provides interveners and patients the opportunity to reach the goal of personal safety for all. Establishing a common language is a primary goal. This presentation will provide an overview of the client-based “crisis” curriculum and discuss the benefits of implementing a shared language and code of conduct for staff and patients alike –as a preventive measure, during a flash-point crisis, and post crisis evaluation.

## Educational goals

1. Participants will learn the structure and design of the 16-hour Response Client-based Curriculum.
2. Participants will be able to discuss the benefits of a client-based “crisis” curriculum and dispel the sense that trade secrets of crisis interveners are being exposed.

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# Chapter 12 – Risk and strength assessment, and prediction of violence

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## Predicting inpatient violence in a Psychiatric Emergency Service using a French version of the Brøset-Violence-Checklist: a prospective cohort study

### Paper

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**Keywords:** Violence, prediction, psychiatry, emergency, risk assessment, risk management

### Introduction

Research examining violence in the workplace has been on the rise (1). Aggressive behavior displayed by patients in psychiatric wards has a significant impact on both other inpatients and health care professionals (2). Until recently, the lack of standardised tools and the variety of measures made it difficult to establish the scope of this concern (3). Morrison has defined aggression as “any verbal, non verbal, or physical behavior that is threatening or physical behavior that actually does harm (to self, other or property)” (4). This definition has been incorporated with the aggression monitoring tool Staff Observation Aggression Scale-Revised : SOAS-R (5, 6). Each year, it is estimated that an average of 9.3 incidents per bed occur in acute inpatient psychiatry units for patients with mixed diagnoses (7). Prior studies have reported that 1.4% of patients were responsible for 56% of assaults (8).

Introducing standardised assessments of the risk of violent behaviors in acute psychiatric units has been proposed to reduce violence and coercion (9). Historically, three generations of predictive tools have been developed. The first approach was based on professionals’ clinical opinion. Most of the studies reported a weak accuracy with much variation across clinicians (10). The second approach accounted for statistical predictors. This approach improved predictive accuracy (11) but these fixed predictors are unsuitable factors for short term assessment (12). The third generation called “structured clinical judgment” is a combination of the clinical and the actuarial approach (13). It allows to assess the risk as a dynamic and continuous one.

A structured behavioral tool enabling the short term prediction of aggressive behavior named Brøset Violence Checklist (BVC) (14-17) was developed from the empirical work of Linaker and Busch-Iversen (18). BVC assesses the absence or presence of six behaviors: confusion, boisterousness, irritability, verbally threatening, physically threatening and attacking objects. Although BVC has been routinely used in several psychiatric units in different countries since 2000, only few studies examining the predictive properties of this tool are available worldwide (15, 17, 19-21). To our knowledge, to date, none exist in France.

BVC has been studied in a variety of settings including acute psychiatric inpatients units (17), psychiatric intensive care units (21) and psychogeriatric units (19), however, while acute emergency units are known to face a large number of violent behaviors each year (22), to our best knowledge, no study has investigated the use of this measure as a predictive tool in such a setting.

The aim of the present study was to assess the predictive power of a french version of BVC in an emergency psychiatric acute care unit.

## Methods

The study was conducted in the short-term emergency psychiatric acute care unit of Toulouse University Hospital, France. This unit was the sole in a catchment area of 800,000 inhabitants. All patients were involuntarily admitted regardless of diagnosis. The unit included eight beds of which two were in seclusion rooms. The nursing staff-to-patient ratio (total number of employed full time nursing staff divided by total number of beds) was 2.37. During the study period, from January to March 2010, 123 patients were consecutively admitted to the ward. Seventy (56.9% (n=70)) were male, the mean age was 37.18 (SD=14.7). The average length of stay was 4.0 (SD=3.0) days.

BVC is composed of 6 items, each of which is scored dichotomously- with 0 (absent) to 1 (present), with the total score ranging from 0–6 and higher scores indicating increased risk of violence. Studies in Australia, Switzerland and Sweden, provided evidence of the predictive validity of BVC (20, 17, 21), the interrater reliability was studied in the original version of BVC and showed a kappa value of 0.44 (15).

The BVC was translated into French by a French-native bilingual psychiatrist and then back-translated by an English-native bilingual Ph.D. level psychologist into English. Discrepancies in translation were reviewed by both translators and a consensus was obtained for each discrepancy.

The primary outcome was the occurrence of physical attacks on persons using the SOAS-R. This is an observer-based instrument that has been shown to accurately rate violent incidents (23). The SOAS-R includes 5 subscales: provocation (six items), means used by the patients (11 items), target of the assaultive behavior (six items), consequences for victims (nine items), and measures to stop aggression (nine items). The total severity score ranges from 0 to 22 points, with higher scores indicating greater severity. Incidents with severity score of 9 or more include all incidents that inflicted physical pain or injury on the victim. The original version was translated into French using the back-translation procedure detailed above. In earlier studies the SOAS-R has shown an acceptable inter-rater reliability with Cohen's kappa values of 0.61 - 0.74 (7).

The Ethics Committee for Medical Research of Toulouse University Hospital was informed of the study. The primary investigator trained the participating registered nurses during two one-hour sessions in the use of BVC french version (BVC-F). Additional written information on the use of the instrument was provided. The nurses completed BVC-F upon admission and at the end of every shift after one hour of close observation of the patient.

A secondary outcome was the implementation of intense preventive measures such as psychotropic drugs taken per os, forced injection of psychotropic drugs, seclusion and mechanical restraint.

Another secondary combined outcome was the occurrence of an attacks or the implementation of preventive measure.

During the study period, all aggressive incidents were registered using the SOAS-R form. Coercive measures were recorded on a purpose-designed study form as dichotomous data (present/absent). Additional data were collected by medical chart review using the hospital database. These data included admission and discharge dates, age, gender, and main International Classification of Diseases 10<sup>th</sup> revision psychiatric diagnoses (Table 1).

**Table 1**

Primary Diagnosis causing Psychiatric Emergency Admission (ICD-10)

Diagnosis	
Alcohol and drug use disorders	5
Schizophrenic or delusional disorder	60
Bipolar disorder, manic phase	13
Bipolar disorder, depressive phase	21
Neurotic, stress related or somatoform disorder, personality disorder	15
Other diagnoses (mental retardation)	6
No data	3
Total	<i>N</i> = 123

We calculated the sensitivity, specificity, positive and negative likelihood ratios, positive and negative predictive values for various cut-offs (Table 2), and the area under the Receiver Operating Characteristics (ROC) curve following a particular algorithm (24) for the three different outcomes. All data analyses were performed using medCalc (Version 11.4.0.0). The alpha level of significance was set to  $p < 0.05$  (two-tailed).

**Table 2**

Sensitivity, Specificity, Positive Likelihood Ratio, Positive Predictive Value and Negative Predictive Value at the different Cut-off Scores for the BVC-F (8 hours shift)

	Se	Sp	PLR	PPV	NPV
1 and above	90.48	55.95	2.05	11.38	98.95
2 and above	80.95	77.08	3.53	18.08	98.47
3 and above	66.67	91.37	7.72	33	98
4 and above	42.86	98.51	28.80	64.29	96.50
5 and above	19.05	99.40	32	66.67	95.16

## Results

We obtained 370 ratings. 13 had incomplete data and were excluded from the analysis. A total of 21 assaults were reported and involved 18 patients (10 males and 8 females). Eleven assaults (52.4%) occurred during the first shift, three (14.3%) during the second shift, and four (19%) during the third shift after admission. Eighteen (85.7%) violent incidents occurred during the first 24 hours after admission. The mean SOAS-R severity score of incidents was 13.66 (SD = 3.4). Fifteen patients caused 1 incident only, 3 patients caused 2 incidents. Among patients involved in violent incidents (14.6% (n = 18) of all patients), 11 (61.10%) were suffering from schizophrenic disorder, three (16.70%) from other diagnose (e.g. mental retardation), one (5.55%) from alcohol or drug use disorder, one (5.55%) from mania, one (5.55%) from a personality disorder, one (5.55%) from depression. The number of incidents per bed per year was 10.5.

Using a cut-off score of 3 or more, we focused on three outcomes : occurrence of an attack (n=21), occurrence of a preventive measure (n=54), occurrence of an attack or a preventive measure (n=60) during the eight hours shift. We also studied BVC-F accuracy during the whole hospitalization. Results are shown in table 3.

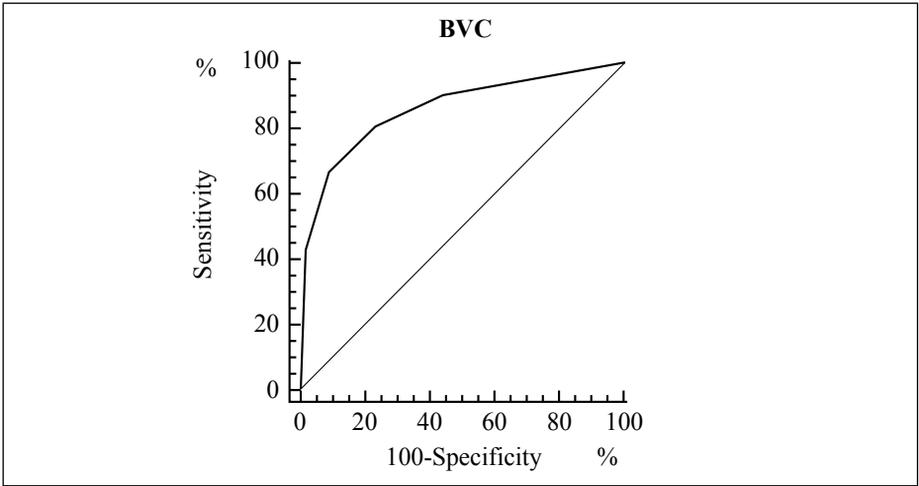
**Table 3**

Sensitivity, Specificity, Positive Likelihood Ratio, Negative Likelihood ratio, Odds Ratio, Positive Predictive Value, Negative Predictive Value and Area Under the ROC Curve of BVC-F for various outcomes and prediction periods (cut off score of three)

	Prediction of an attack		Prediction of preventive measure	Prediction of an attack or preventive measure
	Eight hours shift	Whole hospitalisation	Eight hours shift	Eight hours shift
Se	67% (95% CI 43 - 85)	55.6% (95% CI 30.8 - 78.5)	42.6% (95% CI 29.2-56.8)	41.67 (95% CI 29.1-55.1)
Sp	91% (95% CI 88 - 94)	91.7% (95% CI 84.2 - 96.3)	93.7% (95% CI 90.3-96.2)	94.26 % (95% CI 91-96.6)
LR+	7.7 (95% CI 5.7 - 10.5)	6.7 (95% CI 4.4 - 10.1)	6.8 (95% CI 5.0-9.2)	7.25 (95% CI 5.4-9.8)
LR-	0.36 (95% CI 0.2-0.7)	0.48 (95% CI 0.2-1.1)	0.61 (95% CI 0.4 - 1.0)	0.62 (95% CI 0.4-1)
OR	21.2 (95% CI 7.91 - 56.64)	2.06 (95% CI 0.85 - 4.98)	11.05 (95% CI 5.42-22.51)	11.72 (95% CI 5.77-23.83)
PPV	33% (95% CI 19.1-48.5)	55.6% (95% CI 30.8-78.5)	54.7% (95% CI 38.7-70.2)	59.5% (95% CI 43.3-74.4)
NPV	98% (95% CI 95.5-99.1)	91.7% (95% CI 84.2-96.3)	90.1% (95% CI 86.3-93.2)	88.9% (95% CI 84.8-92.1)
AUC	0.862 (95% CI 0.822-0.896)	0.815 (95% CI 0.731-0.881)	0.783 (95% CI 0.737-0.825)	0.798 (95% CI 0.753-0.839)

We calculated multilevel likelihood ratios and odds ratios. Multilevel likelihood ratios were 0.25 (95% CI 0.10 - 0.60) for Brøset scores of 0 - 1, 1.78 (95% CI 0.99-3.18) for scores of 2 - 3, and 28.80 (95% CI 10.59 - 78.32) for scores of 4 - 6. The odds ratio (OR) for an attack was 21.2 (95% CI 7.91 - 56.64) while there was a three-fold risk for each increase of one point on the BVC-F (odds ratio (OR) of 3.1 (95% CI 2.2-4.6)). During the study, a total of 54 intense preventive measures were taken. The logistic regression model revealed that the odds of a patient to be subjected to a preventive measure increased by 2.6 (95% CI 1.98-3.30) for every point increase on BVC-F score.

Figure 1 Receiver Operating Characteristic (ROC) Curve of the Brøset Violence Checklist (French version)



**Discussion**

To our knowledge, this was the first study to have evaluated the BVC in a French speaking population and in a psychiatric emergency unit. The results were comparable to those found with the original Norwegian tool. However, one main difference lied in the fact that our prediction period was shorter (eight hours) compared with the 24 hours of the original study.

Concerning the prevalence of incidents, in this study the annual number of incidents per bed was 10.5 compared with the mean annual number of incidents in psychiatric acute wards which has been reported to be 9.3 (7). The percentage of patients displaying aggressive behaviors was 14.6% of all patients, to be compared with prevalence rates between 10 and 15% (25, 26).

For the clinician, the most relevant figure appeared to be the Positive Predictive Value (cut off 3). More than one out of two patients with a BVC admission score of three or more have had an assaultive behaviour during his whole hospitalization (PPV of 55.6% (95% CI 30.8-78.5)). This was a useful finding for the unit staff that allows to select a group of patients who needs more closely attention during the stay. It support the predictive power of the initial BVC rating at admission in terms of violent behavior during hospitalisation. For a shorter period of eight hours, six out of ten patients with a BVC score of three or more have had assaultive behaviour or have needed preventive measure from staff (PPV of 59.5% (95% CI 43.3-74.4)). This finding allows to closely assess the risk and to modify the staff proposals for risky patients. The BVC appeared here as a good violence preventive tool.

Comparisons with previous studies was interesting. Ratings in present study showed a higher sensitivity and lower specificity than in the original study, with a sensitivity of 66.67% and a specificity of 91.37% compared to 50% and 97% for the original BVC (14). These findings were also comparable with those of the German version, which revealed a 64% sensitivity and 94% specificity (17).

Measures of test accuracy were also very similar to those reported in the original Norwegian study (15) and in BVC-G German validation study (17) (Table 4). Finally, the AUC in our study was good (0.86) and comparable to that reported in both the Norwegian study (0.82) and the Swiss study (0.88).

**Table 4**

Comparison of the Sensibility, Specificity, Positive Predictive Value, Negative Predictive Value, Accuracy (AUC), and number of Assaults of the BVC, BVC-G and BVC-F for Cut off score of Three

	Prediction		Ratings	Sen	Spe	PPV	NPV	AUC	Assaults
	period	Patients							
Almvik et al, 2000 BVC	24 Hours	109	901	50	97	x	x	0.82	34
Abderhalden et al, 2004 BVC-G	12 Hours	219	1263	64	94	11	99.6	0.88	47
Present study	8 Hours	123	370	66.7	91.4	33	98	0.86	21

The likelihood ratios obtained from our sample suggested that scores of 0-1 indicated a low risk for an ensuing physical attack (one out of 65), scores of 2-3 indicated a moderate risk (one out of 10) and scores of 4 or more indicated a very high risk (2 out of 3). In comparison, in a larger sample from Switzerland, Abderhalden and colleagues found a very low risk for 0-1 scores (one out 208), a moderate risk for 2-3 scores (one out of 10) and a high risk for 4 or more scores (one out of 3) (17). For very low or very high scores of BVC-F, the risk of an attack was higher in the French unit, this could be in relation to the emergency specificity. We hypothesize that initially patients calm could become agitated after being told they were going to be hospitalized against their wishes. Also, uncertainty and waiting for staff decisions may precipitate violent behaviors among initially nervous patients.

One of the important issues in the choice of a cut-off score includes the potential consequences for the patient of a false positive. If a false positive is likely to involve a restriction of liberty for the patient, only cut-off scores with a high PPV should be taken into account. Using a cut-off of 3 or more, in our sample, one out of three patients were violent during the following 8 hours and with a negative score 2 out of 100 patients were violent. Using a cut-off of 4 or more, two patients out of three were violent and with a negative score 7 out of 200 patients were violent. In the original Norwegian study, a cut-off of 2 was chosen because it yielded acceptable results in terms of sensitivity and specificity. This cut off was discussed by Abderhalden et al, (2004) taking into consideration the high proportion of false positives (17). They suggested considering active and immediate preventive measures only for scores of 4 and above. In the present study, acceptable results were obtained with a cut off of 3 and above in terms of sensitivity and specificity.

The prediction of violent behavior is most useful as part of a risk management plan. The objective assessment of the risk of violence is the first step towards planning and initiating preventive measures. Risk management must be seen as an essential intervention, possibly the most important in the therapeutic management of disturbed or violent behavior (27). If violence-risk is routinely assessed as part of a larger violence management program, staff members can calibrate their responses, starting out with de-escalation techniques (27). In this case, a false positive score may involve increased nurse observation and attention, with opportunities for individual interactions and the use of appropriate relaxation exercises. In this way, false positive scores can be tolerated when there are no negative consequences for the patient.

Overall the BVC proved to be quick and easy to use, which is an important concern for nurses in the often busy emergency service. Furthermore, the assessment can provide material for patient-feedback, specifically in a Psychiatric Emergency Service. Another advantage of the daily use was the improvement in communication between health-care providers and particularly between medical and non medical staff. The use of BVC in the entire Emergency Department has been considered. According to Clark et al. (2010) the BVC could be used to prioritize admissions, determine the most suitable unit and improve communication between emergency department and mental health nurses (28). The daily use provides continuous assessment of the risk of violence, increased awareness of staff regarding this kind of risk and the prevention of harmful consequences. Specifically in PES, the patient's immediate past behavior is more strongly related to current dangerousness than other enduring personality characteristics (29). Furthermore, intoxication with alcohol/benzodiazepines or recent history of violence could be strongly related to assault in the Emergency Department and should be screened for. It is known that pharmacological effects of alcohol and certain drugs can increase violence risk (30).

Our study was not exempt from a number of limitations. During the study period, only one out of four rating forms were filled out by nurses. We can assume that nurses had more time to fill the forms during less crowded periods in the Emergency Department. So these data may represent violence rates in the off-peak periods of the Psychiatric Emergency service. The rate of underreported incidents in this unit is unknown.

Violence in mental illness is undoubtedly a complex phenomenon with multiple etiological factors. Certain risk factors are patient-linked (demographics), however others are external (unit design) or interactional (staff/patient relations) (31). In this study, we focused solely on dynamic internal risk factors.

A further concern lies in the limited usefulness of prediction. In clinical practice, the main issue is to prevent or to manage violence. Staff will always intervene when warning signs of violence are detected and will go to lengths to avoid an outbreak of violence. For this reason, rates of violent incidents are probably underestimated which may contribute to explaining the rate of false positive. Furthermore, all of the patients in this sample were involuntary admitted to the hospital. Commitment can result in anger and may increase the likelihood of assault among initially calm patients. This limitation is that such sudden outburst may have contributed to false negatives.

## Conclusion

The French version of Brøset Violence Checklist appears to be a reliable instrument and compares favourably with previous versions. Our study found BVC to be effective in monitoring the risk of violence, predicting incidents and therefore preventing them. BVC was also useful in informing, structuring and clarifying the decision process in terms of patient care among care-providers which is a key concern in Emergency Departments.

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# Empirical findings of valid self-report of violence and self-injury: Why don't we ask the patients?

## Workshop

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## Abstract

The last couple of decades have brought increased focus on patients responsibility for and ownership of their own treatment. Patients undergoing mental health treatment experience problems and associated needs for help. When used systematically, needs assessment can improve the quality of care and facilitate a process of shared decision making in service provision. The main scope of this symposium is to address the issue of patient involvement in risk assessment of violence and self-injury. There will be two presentations, one on findings from a study of self-reported risk of suicidal and self mutilating behavior and one on violent behavior.

A literature search on patients structured self-reported assessment of future risk of violent, suicidal or self mutilating behaviour failed to disclose any published empirical research. In lack of other available instruments, a four-item self-report screen (SRS) with a seven-point scoring scale was constructed to measure the patients judgements of their subsequent risk for self-harm or violence. The patients were asked to respond to four items; what is your opinion about the risk that you: (i) will try to hurt or injury yourself, without the intention to kill yourself? (ii) will try to kill yourself? (iii) will threaten other people by acting violently? (iv) will act violently against others? For each question, the patients chose one of seven response options to express their risk estimate: no risk, low risk, moderate risk, high risk, very high risk dont know the risk, and, will not answer about the risk.

The prospective naturalistic study comprised all involuntary and voluntary acutely admitted patients (n=489) to a psychiatric hospital during one year. Patients self-reported risk of violence and self-harm at admission and at discharge were compared with episodes of threats and/or acts of violence and self-harm recorded during hospital stay and 3months post-discharge. Eighty-three percent completed the inpatient part of study, and 55 % the 3-months follow up after discharge. During hospital stay 4% were recorded with self-harm and 6% with violence, and 26% and 16%, respectively 3-months after discharge. Patients predictions were significant concerning violent, suicidal and self-injurious behaviour for hospital stay, and 3 months after discharge. Moderate or higher risk had the highest predictive accuracy, but also wont answer about the risk of violence and do not know the risk of suicide and self-injurious behaviour were significant predictors in multivariate analyses, and risk of violence even after gender stratification. Self-harm predictions were significant for women. With exception of SRSs of inpatient suicide and self-injury, more than half of the episodes of both self-harm and violence were recorded among those who rated themselves at no risk. The relatively high positive predictive values could be of clinical importance, especially if used in conjunction with other risk assessment methods. Still, low sensitivity values limit the validity of SRSs as screenings on their own. On the other hand, treatment interventions by the staff may have prevented episodes and led to increased rates of false positives and patients may have underrated their risks for fear of being held back in the ward.

In the subsequent discussion we would like to concentrate on the following issues:

- Is self-report a feasible adjunct measure to observer-rated risk assessments?
- If so, how do we manage the ethical issues that arise when we invite for patient participation and still confine the final assessment decision to professionals?

## Educational goals

1. Strengths and challenges pertaining to the validity of self-report in risk assessment of violence and suicidal behaviour
2. Ethical considerations concerning involving patients while the final decision of risk still is in the hands of mental health professionals.

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# Using the SOAS-R in Lausanne psychiatric department: Results and questions emerging after 30 months of investigation

## Paper

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## Abstract

The quality and safety of care are key elements for the public, health professionals and policy makers. In psychiatric settings, aggressive and violent incidents are well recognized as important phenomena threatening the goals mentioned above.

In the Lausanne University Psychiatric Department (DP-CHUV, Lausanne, Switzerland) the registration of aggressive and violent incidents with the Staff Observation Aggressive Scale - Revised (SOAS-R) has began on the first July 2008 in the psychiatric service for adults and was then developed in psychiatric hospitals for elderly and for children/adolescents. Before this, little was known about the frequency and the circumstances under which incidents occurred. The SOAS-R is now part of the violence management concept developed in our department.

This presentation aims to describe the work done to implement this tool as well as the precaution put in place to avoid what are called the “reporting industry” and the “reporting fatigue”. Another goal of the presentation is to describe the results of the assessment (nature of the incidents, patients’ and victims’ characteristics, differences between services) and the obvious links that we can make between violence and coercion in the field of psychiatric hospital treatments.

In addition, special attention will be given to questions emerging from clinicians about the utilization of this scale in clinical setting and to the correlation between severity scores and SOAS scores.

## Educational goals

1. To describe the violent patient population and risk factors related to violence in Lausanne psychiatric hospitals.
2. To share questions emerging from clinicians about the utilization (or not) of a specific tool to assess violent behaviors.

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# Aggression and affective temperament in unipolar depression and bipolar disorder outpatients and healthy volunteers

## Paper

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**Keywords:** Aggression, affective temperaments, TEMPS-A questionnaire, affective disorders

## Introduction

Violent behaviour and aggression appear to be widespread components of mood disorder symptoms. Several psychiatric disorders, including mood disorders, have been associated with increased rates of aggression and violent behaviour (Brennan, Mednick & Hodgins, 2000; Feldmann, 2001), that could also implicate diagnostic, prognostic, and therapeutic issues of mood disorders.

Perroud and colleagues (Perroud, Baud, MOUTHON, Courtet & Malafosse, 2011) report that patients with bipolar and major depressive disorder display more frequent and severe lifetime aggressive behaviours than healthy persons. Some data also indicate a higher criminality rate in bipolar patients than in patients with unipolar major depression (Cassidy, Ahearn & Carroll, 2002; Graz, Etschel, Schoech & Soyka, 2009; Sato et al., 2003). In the case of bipolar disorder, hostility and aggression have been assumed of particular importance as core features of manic and mixed states (Cassidy et al., 2002; Maj, Pirozzi, Magliano & Bartoli, 2003; Swann et al., 1994).

Aggressive behaviour might be closely intertwined also with temperament (Buss & Perry, 1992), inherited traits that appear early in life. Akiskal and his colleagues (Akiskal, Djenderedjian, Resenthal & Khani, 1977) postulated that temperament could represent the earliest subclinical phenotype of mood disorders and a potential contributor to the bipolar spectrum (Akiskal & Pinto, 1999). Numerous studies reported of specific temperament profile in patients with bipolar disorder (Hantouche et al., 1998; Matsumoto et al., 2005; Mazzarini et al., 2009; Mendlowicz, Jean-Louis, Kelsoe & Akiskal, 2005) and major depression (Matsumoto et al., 2005; Mazzarini et al., 2009), which may be of interest in the early screening of bipolar disorder in the first depressive episode.

So far there is a scarce of studies dealing with different aspects of aggressive behaviour among various affective disorders (Brennan et al., 2000; Graz et al., 2009), and most studies do not differentiate between bipolar disorder, mania and depression. Unresolved questions also persist about the state- versus trait-dependent nature of aggression and factors that mediate its expression in bipolar disorder and depression (Garno, Gunawardane & Goldberg, 2008).

## Study objective

The aim of our study was to examine the differences in aggression and affective temperaments between patients with bipolar disorder and unipolar depression in comparison with healthy volunteers. Furthermore, we aimed to assess the associations between affective temperaments dimensions and aggression components among all three groups to ascertain if temperament could be an underlying factor of aggression as a trait dependent factor.

## Methods

### Subjects

Thirty one patients with major depression, 21 bipolar patients, both in euthymic phase of illness, and 31 healthy volunteers without the history of affective disorders participated in our study. The participants were matched for age ( $F(2)=0,040$ ;  $p=0,961$ ) and education ( $F(2)=0,176$ ;  $p=0,839$ ). All subjects gave written informed consent. The demographic data of all included groups are displayed in Table 1.

Table 1 Demographic data of the samples included in the study

		Group		
		Depressive outpatients (N=31)	Bipolar outpatients (N=21)	Control group (N=31)
N	Female (%)	22 (71,0)	13 (61,9)	22 (71,0)
	Male (%)	9 (29,0)	8 (38,1)	9 (29,0)
Age	M	41,74	41,76	40,97
	SD	11,73	10,91	13,38
Education (years)	M	13,61	13,00	12,97
	SD	6,62	3,23	2,23

## Measures

All the participants were self-assessed with the Aggression Questionnaire (Buss & Perry, 1992), which constructs of four aggression subscales: physical and verbal aggression, anger, and hostility, and the short version of Slovenian TEMPS-A Scale (Temperament Evaluation of Memphis, Pisa, Paris and San Diego – Autoquestionnaire, Akiskal & Akiskal, 2005), that measures five affective temperaments, namely depressive, cyclothymic, hyperthymic, irritable and anxious. Descriptions of both scales are displayed in Table 2.

Table 2 Descriptions of the scales used in the study

Scale	Subscale	Description of the scale
Aggression Questionnaire	Physical aggression	Hurting or harming others (instrumental or motor component of behaviour).
	Verbal aggression	Hurting or harming others (instrumental or motor component of behaviour).
	Anger	Physiological arousal and preparation for aggression (emotional or affective component of behaviour).
	Hostility	Feelings of ill will and injustice (cognitive component of behaviour).
TEMPS-A	Depressive	Increased sensitivity to life's sorrows and disappointments.
	Cyclothymic	Labile mood swings.
	Hyperthymic	Enterprising, ambitious and driven.
	Irritable	Angry and dissatisfied.
	Anxious	Prone to worrying and anxiety.

## Procedure

We analysed the differences in aggression and affective temperaments between separate groups by using one-way ANOVA together with Cohen's  $d$  effect size measure. To determine the relationships between affective temperaments and aggression, Pearson's bivariate correlation coefficients were calculated together with Fisher  $Z$ -test to determine the significant differences in coefficients between groups. Statistical analyses were conducted with SPSS 19.0 for Windows.

## Results

The results of the differences in aggression (Figure 1) and affective temperaments (Figure 2) in all three groups revealed that depressive outpatients demonstrated higher physical aggression ( $p=0,032$ ;  $d=0,64$ ) and anger ( $p=0,025$ ;  $d=0,65$ ) in comparison with healthy control group. Depressive outpatients proved to have more pronounced depressive ( $p=0,011$ ;  $d=0,73$ ), cyclothymic ( $p=0,000$ ;  $d=1,04$ ) and anxious ( $p=0,000$ ;  $d=1,10$ ) temperament and less pronounced hyperthymic temperament ( $p=0,44$ ;  $d=-0,60$ ) in comparison to healthy controls. On the other hand, bipolar outpatients demonstrated with higher cyclothymic ( $p=0,047$ ;  $d=0,73$ ) and lower hyperthymic ( $p=0,022$ ;  $d=-0,82$ ) temperament in comparison to healthy control group. There were no statistically significant differences in aggression. The results also showed no statistically significant differences between both clinical groups of patients, however, effects size measures showed medium differences in physical aggression ( $d=0,35$ ), anger ( $d=0,43$ ) and anxious temperament ( $d=0,50$ ).

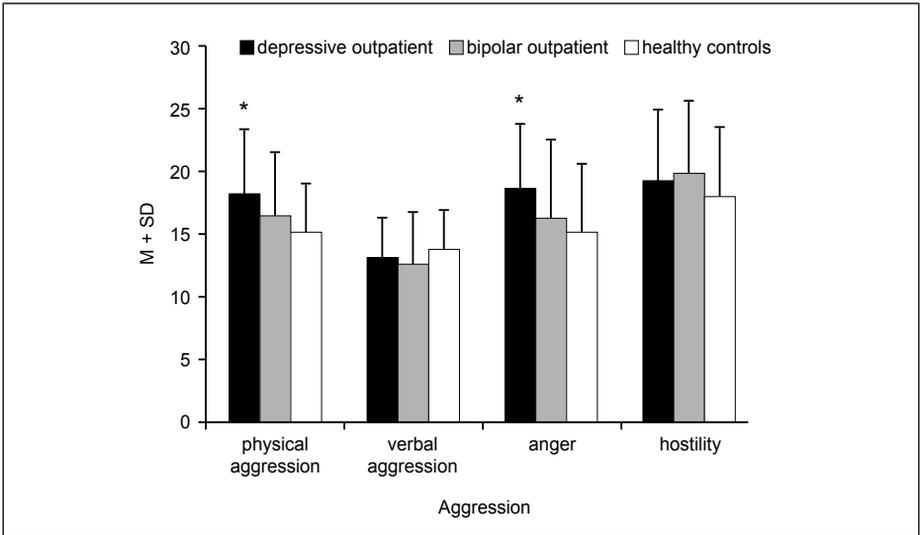


Figure 1. Comparison of mean scores (M) and standard deviations (SD) of all aggression subscales in euthymic depressive patients (N=31), bipolar patients (N=21) and healthy control group (N=31).

\*  $p < 0,05$  (Games-Howell posthoc procedure – depressive outpatients in comparison to the control group).

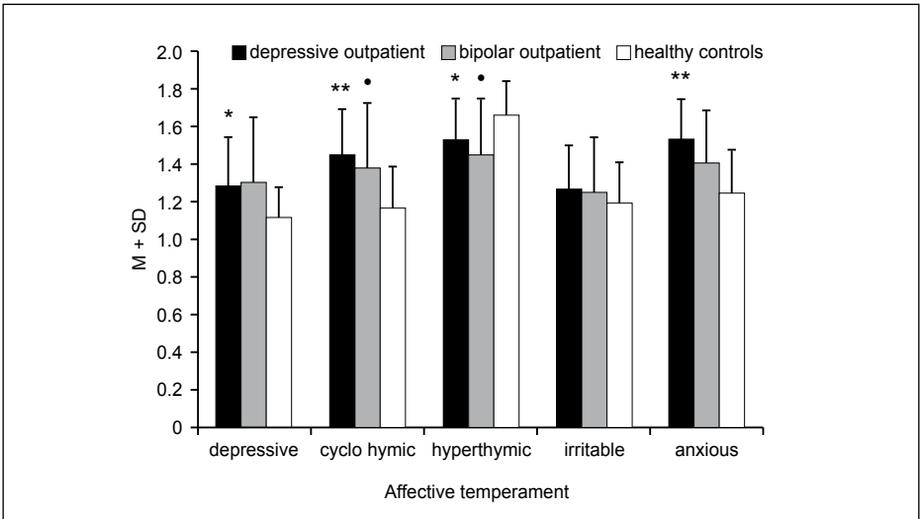


Figure 2. Comparison of mean scores (M) and standard deviations (SD) of affective temperament subscales as measured by short TEMPS-A in euthymic depressive patients (N=31), bipolar patients (N=21) and healthy control group (N=31).

\*  $p < 0,05$  (Games-Howell posthoc procedure – depressive outpatients in comparison to the control group);

\*\*  $p < 0,01$  (Games-Howell posthoc procedure – depressive outpatients in comparison to the control group);

•  $p < 0,05$  (Games-Howell posthoc procedure – bipolar outpatients in comparison to the control group).

Cyclothymic and irritable temperament proved to be positively linked with all aspects of aggression (Table 3). Depressive temperament positively correlated with hostility, whereas anxious temperament positively correlated with anger and hostility. Hyperthymic temperament did not show significant correlations to aggression. In general, hostility and anger showed the strongest connection to affective temperaments. Euthymic bipolar outpatients differed notably from healthy control group in the relationship between aggression and affective temperaments. The relationship between physical aggression and irritable and anxious temperament was much stronger in the group of bipolar outpatients in comparison to other two groups. All the other correlation coefficients were not statistically significant different in all three groups.

*Table 3 Pearson's correlation coefficients between aggression subscales and affective temperaments in the group of depressive (N=31) and bipolar (N=21) outpatients and control group (N=31)*

	Aggression			
	Physical	Verbal	Anger	Hostility
<b>Depressive temperament</b>				
Depressive outpatients	0,145	-0,013	0,211	0,578**
Bipolar outpatients	0,269	0,317	0,451*	0,628**
Control group	0,250	0,462**	0,513**	0,541**
<b>Cyclothymic temperament</b>				
Depressive outpatients	0,231	0,392*	0,486**	0,701**
Bipolar outpatients	0,453*	0,422	0,647**	0,667**
Control group	0,456**	0,451*	0,521**	0,469**
<b>Hyperthymic temperament</b>				
Depressive outpatients	0,026	0,161	-0,048	-0,083
Bipolar outpatients	0,163	0,234	0,115	-0,184
Control group	-0,230	-0,088	-0,028	0,022
<b>Irritable temperament</b>				
Depressive outpatients	0,564**	0,482**	0,573**	0,455*
Bipolar outpatients	0,724** <sup>a</sup>	0,630**	0,705**	0,636**
Control group	0,347	0,523**	0,756**	0,453*
<b>Anxious temperament</b>				
Depressive outpatients	-0,074	0,010	0,026	0,428*
Bipolar outpatients	0,415 <sup>a</sup>	0,328	0,654**	0,659**
Control group	-0,073	0,413*	0,419*	0,688**

\*  $p < 0,05$  (within group correlations);

\*\*  $p < 0,01$  (within group correlations);

<sup>a</sup>  $p < 0,05$  (Fisher Z test – difference in correlation coefficients between the group of bipolar outpatients and the control group).

## Discussion

The aim of our study was to examine the differences in aggression and affective temperaments between remitted bipolar and depressive outpatients in comparison with healthy volunteers. Furthermore, we aimed to assess the relation between affective temperaments dimensions and aggression components among all three groups.

The results demonstrated that physical aggression and anger are significantly more pronounced in the group of depressive outpatients in comparison with healthy control group (Figure 1). Patients with unipolar depression displayed more behaviour that is related with hurting or harming other people as well as more anger related behaviour, which involves physiological arousal and preparation for aggression (Buss & Perry, 1992). Bipolar outpatients and healthy controls did not significantly differ in aggressive behaviour, which is not in agreement with previous studies (Cassidy et al., 2002; Graz et al., 2009; Sato et al., 2003). In our sample, bipolar outpatients were in the euthymic phase of illness, however researchers report of higher aggressive behaviour and criminality rate in the manic episode of bipolar disorder (Cassidy et al.,

2002; Maj et al., 2003; Swann et al., 1994). According to our results, aggression is probably related to the manic phase of illness and is not a stable personality trait that persists also in the remission. However, depressive outpatients presented with higher physical aggression and anger, which could imply that those traits represent a stable personality characteristics that endure even in the euthymic phase, when patients do not display depressive symptoms. Both of the clinical samples included in our study were small and patients could respond to self-reported questionnaires with socially desirable answers, therefore more research needs to be done to determine the relationship between aggression and affective disorders.

Our study demonstrated that both clinical groups display a specific temperament profile in comparison with healthy control group (Figure 2). Depressive outpatients revealed more pronounced depressive, cyclothymic and anxious temperament and less pronounced hyperthymic temperament. Likewise, bipolar outpatients exhibited more prominent cyclothymic temperament and less pronounced hyperthymic temperament in comparison with healthy controls. Our results are in agreement with some previous studies (Hantouche et al., 1998; Matsumoto et al., 2005; Mazarini et al., 2009; Mendlowicz et al., 2005) where authors emphasized that elevated depressive, cyclothymic and anxious temperamental scores could indicate a vulnerability to pathological mood regulation, also during the remission phase of mood disorders. In our study both clinical groups demonstrated a significantly lower score in hyperthymic temperament than non-clinical group. So far, studies on hyperthymic temperament revealed a vague boundary between adaptive attributes that could be a constitutional part of a healthy personality on one hand and pathology on the other, implicating an indistinct nature of the scale itself.

Our study demonstrated a strong relationship between all aspects of aggression and cyclothymic and irritable temperament (Table 3). In general, hostility and anger showed the strongest association with affective temperaments. In addition, the relationship between physical aggression and irritable and anxious temperament is significantly stronger in the group of bipolar outpatients in comparison to other two groups, indicating that those traits could be more intertwined in the group of bipolar outpatients. These results imply that bipolar outpatients with distinct irritable and anxious temperament display more physical aggression and behaviour, related with hurting or harming others.

Understanding aggression, violent behaviour and its association with psychiatric disorders is of importance for a variety of reasons, especially from the standpoint of the prediction of dangerousness and suicidal behaviour (Feldmann, 2001). Namely, impulsive and aggressive traits can increase the risk of suicidal behaviour in patients with either bipolar or major depressive disorder (Oquendo et al., 2004). Higher rates of suicide attempts exist among patients with major depressive disorders (Goldney, Dal Grande, Fisher & Wilson, 2003) and aggression as a stable trait, particularly physical aggression that was significantly more pronounced in the group of patients with unipolar depression in our study, could contribute to self directed violent behaviour. Therefore it is of extreme importance for the clinicians to recognize those patients' traits in time in order to prevent possible violent acts.

The main limitation of our study was a small sample of included patients that could result in a discrepancy with previous studies. Moreover, bipolar disorder has many endophenotypic presentations, which are referred to as bipolar spectrum disorders (Akiskal & Pinto, 1999), and were not considered in our study. Patients with bipolar disorder type I and II were included in uniform group of bipolar outpatients, although persons with bipolar disorder type I or II could differ in aggression as a result of more pronounced manic episode in type I disorder. Furthermore, in our study we used self-report questionnaires where subjects tend to respond in a socially desirable way, therefore it would be useful to examine the differences in aggression with more reliable instruments.

## Conclusions

Our study demonstrated a distinct temperament profile among patients with bipolar disorder and unipolar depression. These results are in agreement with several previous studies (Hantouche et al., 1998; Matsumoto et al., 2005; Mazarini et al., 2009; Mendlowicz et al., 2005) where authors emphasized that elevated depressive, cyclothymic and anxious temperamental scores could indicate a vulnerability to pathological mood regulation. Although some studies confirmed that aggressive behaviour appears to be more pronounced in bipolar patients than in patients with unipolar major depression and healthy controls (Cassidy, Ahearn & Carroll, 2002; Graz, Etschel, Schoech & Soyka, 2009; Sato et al., 2003), our results do not support this hypothesis. Bipolar outpatients and healthy control group did not differ in any aspect of aggression, however depressive outpatients showed more pronounced physical aggression and anger related behaviour in comparison to healthy controls, implicating that motor component of physical aggression and affective component of anger could represent a distinct trait characteristic of major depression. These traits could potentially separate patients with unipolar depression from patients with other affective disorders. Our sample was relatively small, therefore further research needs to be done to determine whether affective temperaments and aggression represent an underlying biological disturbance

intrinsic to major depression and bipolar disorder. Aggression, especially anger and hostility, and affective temperaments proved to be strongly intertwined, giving rise to a question whether genetically predisposed temperament represent one of the determinants of aggressive behaviour.

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# Emotional profile in association with aggression in patients with major depression and bipolar mood disorder in comparison with healthy volunteers

## Poster

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## Objectives

Plutchik claims that most emotions are mixed states made up of more primary emotions. He defines eight basic adaptive prototype functions: protection-destruction, reproduction-deprivation, incorporation-rejection and exploration-orientation. Hence, aggressive behaviour could be associated with the specific emotional profile, especially with the protection-destruction prototype function. Moreover, different psychological disorders, including affective mood disorders, have been linked to deficits in emotions and emotional regularity as well as to increased aggressiveness.

## Aims

The aim of our study was to examine the differences in emotional profile and aggressiveness between remitted outpatients with bipolar disorder and unipolar depression in comparison with healthy volunteers. Given that emotional regularity is strongly related to aggressive behaviour, we aimed to assess the associations between specific emotions and aggressiveness.

## Methods

28 patients with major depression, 18 bipolar patients, both in euthymic phase of illness, and 25 healthy volunteers without the history of affective disorders were self assessed with the EPI Questionnaire (Emotions Profile Index, Plutchik, 1980) and Aggression Questionnaire. EPI is a self-rated forced-choice scale. The results give an eight-dimensional emotional profile, which provides the basis for identifying the emotional components of traits and a basis for measuring the conflict of mixed emotions and traits. The Aggression Questionnaire (Buss and Perry, 1992) constructs of four aggression subscales: physical and verbal aggression, anger, and hostility.

## Results

Our data revealed significantly more pronounced deprivation and rejection and less pronounced orientation in the group of patients with major depression in comparison to healthy volunteers. On the other hand, bipolar outpatients demonstrated with significantly less traits of reproduction, orientation and more traits of deprivation in comparison to healthy volunteers. Patients with major depression and bipolar mood disorder exhibited no significantly important differences in their emotional profile. Moreover, both groups of patients with unipolar depression and bipolar disorder proved to have significantly more pronounced traits of deprivation on one hand and reproduction on the other, which indicates a conflict between those two emotions and consecutive behaviour. Furthermore, results revealed elevated anger in depressive outpatients in comparison to healthy volunteers, whereas bipolar outpatients and healthy controls did not differ significantly in aggressiveness. Different aspects of aggression and destruction proved to be positively correlated, whereas incorporation proved to be negatively linked with aggression.

## Conclusions

Both clinical groups proved to have a distinct emotional profile with explicit deprivation and low orientation, showing stereotypic and nonflexible personality structure with depressive, pessimistic and melancholic traits. Bipolar outpatients proved to show less reproductive traits (joy and enthusiasm), whereas patients with major depression demonstrated more rejection (disgust). Moreover, the results revealed a conflict between deprivation and reproduction, showing a tendency toward apathy and indifferent behaviour on one hand and extravert and social behaviour on the other. Furthermore, depressive outpatients proved to show most anger related behaviour in comparison to both groups of participants. Although our sample was

relatively small, a trend of distinct emotional profile with disparate affective component of aggression can be seen from our results.

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# Safety risk profile at Dimence, a mental health care organisation in The Netherlands

## Poster

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## Abstract

### Background

In 2010 the social welfare inspection (Inspectie SZW i.o.) conducted evaluations on aggression policy in mental health care. The results show that 'a proper risk analysis at the moment of client admission is often lacking, as is an accurate risk evaluation per unit. A proper risk assessment provides a solid foundation for improvement, evaluation and adjustments.' Dimence is one of the leading organisations concerning safety and risk management in Dutch mental health care. Dimence research showed that teams were insufficiently aware of the risks on their ward. Hence a safety risk profile (SRP) has been developed by Dimence's safety consultants and health & safety controller.

### Introduction

The SRP is a practical application of Dimence's risk management and can be used to measure and analyse safety risks in teams. The SRP is a checklist which can also be used as an interview, consisting of questions about (social) safety related subjects, such as building safety, safety policy and safety perception. From 2012 on the SRP will be used in every team at Dimence, as to conduct a clear risk assessment. It lists both risks and possible measures, as well as a time frame and the person responsible for making improvements. The SRP can also be used as a hands-on instrument for team members to communicate about (social) safety issues with one another. It describes the team's situation concerning safety, and the team write their own plan for improvement.

### Objectives

- Gaining insight in the risks teams run;
- Being able to take proper action and diminish avoidable risks;
- Tackling risks structurally instead of provisionally;
- Determining Dimence's safety standard;
- Reducing coercion and compulsion;
- Adding to a risk aware environment that is safe for work, treatment and living.

### Method

Every year, Dimence's safety consultants interview each team using the SRP. The interview is now part of a more general risk assessment. Both employees and clients are interviewed, since everyone is responsible for safety on the ward in his/her own way. Reciprocity is the key element here; 'my safety is your safety'. In case massive changes occur at a unit, such as a move or a change of client population, a risk analysis should be done soon after the change, not after a year since the last assessment.

### Conclusions

The safety risk profile is a clear, practical and result oriented instrument. It is applicable for all teams, is easily translated into action and enhances safety perception in employees as well as clients by clearly marking risks and listing possible measures. Using this profile, integrating the various elements of safety in the organisation's general safety policy becomes a much simpler task.

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# Aggression and violence in Psychiatric, Emergency and General Hospital settings: an Italian experience

## Paper

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**Keywords:** Workplace violence, nurses, health care settings

## Introduction

Health care professionals, especially nurses, are at the highest risk of violence in the workplace (Lanza et al. 2006; Winstanley & Whittington, 2004). Nurses are at a 16 times more frequent risk of victimization than other workers (Elliot, 1997) and psychiatric nurses report the highest rate of violent assault in comparison to other nurses (Peek-Asa et al., 2009; Islam et al., 2003). The National Institute of Occupational Safety and Health (NIOSH) (2002) defines violence in the workplace as “all situations of physical assault, threatening behavior or verbal abuse that occur in the workplace”.

This phenomenon, which is steadily increasing, may affect the professional resilience of operators and may account for the high rate of burn out syndrome in health care professionals (Estryn-Behar et al., 2008, Alexander et al., 2004, Astrom et al., 2004, Ito et al., 2001). Moreover, workplace violence can lead to low worker morale, increased job stress and worker turnover due to the frequent decision to change profession (Needham et al., 2005; Ray, 2007). The International Council of Nurses (2006) condemns acts of abuse and violence committed against all people, including health professionals, and considers it necessary to eliminate all forms of abuse and violence in the workplace. Incidents of violence against health workers can be considered sentinel events of risky situations that require appropriate preventive measures in order to protect workers (Ministero della Salute, 2007).

The epidemiology of this phenomenon is difficult to establish because its frequency is different in each country and clinical unit (Zampieron et al., 2010). According most authors, violence and aggressiveness occur more frequently in Emergency Departments, Psychiatric and Geriatric Wards (Zampieron et al., 2010; Estryn-Behar et al., 2008). In the waiting areas of all health structures, the rate of aggressiveness against professionals is higher than in other health care areas (Gacki-Smith, 2010). According to NIOSH, many risk factors could increase the frequency of violent incidents:

1. clinical situations such as acute psychiatric diseases and drug abuse;
2. structural problems such as unrestricted access of visitors to hospitals, poor lighting of parking areas attached to health structures or inadequate safety measures;
3. organizational difficulties such as reduced number of staff, presence of a single professional in contact with patient, long waits in emergency or in other clinical areas;
4. professional competence such as inadequate staff training and insufficient safety procedures in managing aggressive patients.

All these factors can induce anxiety and frustration in patients and in their carers due to the failure to obtain immediate relief and can trigger aggressive behaviour.

In November 2007, the Italian Department of Health (2007) issued “Recommendations for preventing acts of violence against health workers” in order to prevent violence through the implementation of measures to facilitate the reduction of risky conditions and the acquisition by operators of skills to manage these events. Concomitantly, worldwide health organizations, especially nurse associations like Emergency Nurses’ Association (ENA) (2010), International Council of Nurses (ICN) (2006) and American Nurses’ Association (ANA) (2006), are promoting new programs of violence prevention in the health sector.

Specific surveys to obtain information on the prevalence of violence in health care settings by means of questionnaires and / or interviews are recommended (Woods & Ashley, 2007). Many authors indicate that aggressive behaviour should neither be considered a normal reaction in the health care system nor accepted as part of illness and invite nurses and institutions to never justify violence in the workplace

(Zampieron et al., 2010). Up to now, although many studies have examined psychiatric setting, few investigations have been conducted in order to evaluate violence and aggression in Emergency Department (Ferns et al., 2006), as well as in General Hospital (Winstanley & Whittington, 2004). In Italian health care institutions, violence and aggressiveness, particularly directed at nurses, are common phenomena, scarcely investigated (Zampieron et al., 2010).

## Study aim

It is a preliminary cross-sectional investigation among health professionals (nurses) in order to evaluate the rate and the features of violence incidents that occurred during the previous 3 years in the following health care settings: Emergency, Psychiatric and General Hospital.

## Materials and methods

A self-assessment questionnaire, "Violent Incident Form" (VIF) (Arnetz, 1998), was administered in order to identify the following features of aggressiveness which occurred during the previous 3 years in the health care workplaces mentioned above:

- rate of assaultive behaviour against professionals,
- circumstances of aggression (time and place),
- type of violence (physical and/or verbal),
- features of aggressors (gender, age, patient or carer or professional),
- capacity by professionals to foresee the violent incident,
- physical and/or psychological consequences of violence on the professionals,
- response by professionals to aggression.

During a period of one month (May 2010), the VIF was anonymously administered to the staff of the following health care settings of Modena and its province (250,000 inhabitants):

- Emergency Departments (7 hospital emergency and 1 emergency outpatient service),
- Psychiatric wards (2 acute public psychiatric wards and 6 acute psychiatric wards of a private psychiatric hospital),
- General Hospital Wards (17 wards of Medicine and Surgery including Cardiology, Cardiovascular Medicine, Gastrointestinal Medicine, Metabolic Medicine, Digestive Endoscopic Medicine, Neurology, Gerontology, Physical Rehabilitation, 3 Intensive Care Units, Orthopedic Clinic, General Surgery, Neurosurgery, Long-term Medical and Geriatric Rehabilitation and Vascular Surgery).

The data reported by each health care setting were compared. Finally, we evaluated the rate of response to the questionnaire in the different health care settings.

## Results

In Table 1 both the rate of response to questionnaire and the rate of aggression in the three health care settings are shown.

*Table 1 Response rates and reported aggression frequency*

	Number of questionnaires delivered	Number and percentage of questionnaires with response	Number and percentage of aggressions reported
General Hospital Wards	454	260/454 (57%)	175/260 (67%)
Psychiatric Wards	123	95/123 (77%)	80/95 (84%)
Emergency Departments	410	184/410 (45%)	142/184 (77%)
Total	987	539/987 (55%)	397/539(74%)

Data collected from the VIF, across the 3 settings, are shown in Table 2.

Table 2 VIF data across the 3 study settings

VIF data	HEALTH CARE SETTING		
<b>AGGRESSOR</b>	Emergency Departments	Psychiatric Wards	General Hospital Wards
Type	Patients: 45% Relatives or Carers: 53% Professionals: 2%	Patients: 97% Relatives or Carers: 0% Professionals: 3%	Patients: 45% Relatives or Carers: 39% Professionals: 16%
Gender	M: 76% F: 24%	M: 74% F: 26%	M: 61% F: 39%
The most frequent age range	40-49	30-39	50-59
<b>VIOLENCE</b>	Emergency Departments	Psychiatric Wards	General Hospital Wards
Type	Physical: 37% Verbal: 54% Physical + Verbal: 9%	Physical: 40% Verbal: 27% Physical + Verbal: 33%	Physical: 13% Verbal: 64% Physical + Verbal: 23%
Place	Waiting Room: 35% Corridor: 22.50% Triage Areas: 16.30% Surgery: 16.30% Outside Areas: 6.20% Others: 3.7%	Corridor: 42.50% Patient's Room: 37.50% Dining Room: 7.50% Outside Areas: 6.25% Surgery: 5% Others: 1.25%	Patient's Room: 60% Corridor: 34.2% Surgery: 4% Others: 1.8%
Nurse Shifts	Morning: 37 (20.3%) Afternoon: 56 (30.7%) Night: 89 (49%)	Morning: 29 (36%) Afternoon: 35 (44%) Night: 16 (20%)	Morning: 78 (44%) Afternoon: 66 (38%) Night: 31 (18%)
<b>REACTIONS TO VIOLENCE</b>	Emergency Departments	Psychiatric Wards	General Hospital Wards
Physical damage in comparison to aggressions	10/142 (7%)	18/80 (23%)	15/175 (9%)
Accident reports in comparison to number of aggressions	Police reports: 19/142 (13%) Injury reports: 14/142 (10%)	Police reports: 0/80 (0%) Injury reports: 17/80 (21%)	Police reports: 4/175 (2%) Injury reports: 4/175 (2%)

The psychological reactions of all professionals are evidenced in Table 3.

Table 3 Psychological reactions to aggression

	Number	Percentage
Anger	186	25%
Irritation	160	22%
Humiliation	90	12%
Disappointment	83	11%
Helplessness	79	11%
Fear	57	8%
Anxiety	46	6%
Guilt	12	2%
Other	8	1%
No reaction	12	2%
Total	733	100%

The rates of aggressiveness differed among the 3 health care settings analyzed, as did the other features: circumstance, consequence of violence and type of aggressor. In Psychiatric Wards, violence appeared more frequent inside the ward, without a specific pattern in comparison to nurse shifts; physical attack was prevalent; aggressors were more frequently young and male patients; most consequences were physical damages reported by professionals, but their reaction was never represented by a police report.

In Emergency Departments, verbal aggression was prevalent and took place most frequently in waiting rooms during night shifts; aggressors were more frequently male relatives of patients, with an age ranged

between 40-49 years; the most frequent reaction of professionals was a police report even without physical damages reported. In General Hospital Wards, violence was less frequent than in the other settings; verbal attacks were prevalent and most frequently occurred inside the ward during day shifts; aggressors were represented similarly by both patients and relatives, with an age ranged between 50-59 years; the most frequent reactions of professionals were both police and incident reports.

## Discussion and Conclusion

The comparison of our data to other studies' ones is difficult due to the differences among many criteria adopted: populations, settings, violence incident definitions, period of observation, questionnaire and modality of collecting data. Nevertheless, if we compare our results to the other two Italian studies, we find that our rate of response to questionnaires (55%) was inferior: 85% (Zampieron et al., 2010) and 97% (Grottole et al., 2007). The whole rate of aggression reported in our study (74% in 3-year period) presented a different frequency in comparison to others: 49.4% in 1-year period (Zampieron et al., 2010), 8.5% in 1-year period (Grottole et al., 2007).

Our results, in accordance with the literature, highlight that aggressiveness in health care settings is a frequent and notable phenomenon which can be strongly conditioned by illnesses of patients and by the way they are assisted them in each setting (Duxbury & Whittington, 2005).

In particular, we observed that Emergency Department presented higher risk for violence in comparison to General Hospital (Winstanley & Whittington, 2002), whereas Psychiatry Ward represented the most dangerous place due to the highest frequency of violence (Islam et al., 2003; O'Connell et al., 2000).

According to our data, we can infer that:

- in Psychiatry, where assaults occurred inside the ward and represented the most dangerous attacks due to the highest number of physical consequences, violence is strictly related to illness since it constitutes a frequent symptom of many psychiatric disorders and often constitutes the reason of admission (Di Lorenzo, 2011; Nijman, 2002; Palmstierna et al., 2000);
- in Emergency Department, where aggressiveness more frequently occurred in waiting room from relatives of patients, violence may be related to high level of anxiety in both patients and relatives due to acute and sometimes dramatic situations which this department has to face daily, as underlined by other authors (Esmailpour, et al., 2011; James et al., 2006; Pich et al., 2011; Ray, 2007);
- in General Hospital, since violence was often verbal and occurred during the day, it may represent an extreme debate between patients or their relatives and physicians or nurses, in accordance with other studies which have put in evidence that in this setting, causes of violence are frequently represented by dissatisfaction with the service, delays in care, receiving bad news, etc (Zampieron et al., 2010).

According to our data, the reactions of professionals may represent the climate and the mission of workplace: in Psychiatry, where the most severe physical consequences of attacks were registered, no police report was collected, whereas in Emergency, the highest number of police reports was registered although the professionals of this department referred the lowest frequency of physical damages. At this point, we highlight that in Psychiatry, the aggressor was always a patient whereas in Emergency and in General hospital relatives or carers were often the authors of aggression. This observation put in evidence that aggression of a patient can be partially justified but not violence by presumably healthy people. Anger and irritation were the most frequent psychological reactions to violence, which may constitute the motivation to stop working or to reply in a symmetric way, as some authors have indicated (Chapman et al., 2010; Estry-Behar et al., 2008).

Moreover, our data show that all professionals had limited expectation of aggression, probably due to insufficient training or inexperience. In fact, as most studies have shown, that younger professionals are more frequently victims of violence in the workplace. We have to add that poor capacity to foreseen dangerous situations in the workplace may be related to the psychological mechanism of "denial", which constitutes a physiological defence of all workers, especially health care professionals.

In light of our preliminary results, we suggest that the little modifications of structure and organization specific for each setting could reduce the risk of violence: eg. reduced waiting time, more numerous staff in Emergency; space dedicated to informing patients and relatives in General Hospital; more attention to unsafe structures and staff psychological training on managing aggressive patients in Psychiatry.

We underline that, in all health care settings, the resources needed to reduce the risk of aggression and to promote the best possible working conditions would be represented awareness and preparation about this phenomenon, because, as suggested by most studies, only the expected violence can be avoided or mitigated through preparation (Johnson, 2004; Steinert, 2002). So, staff psychological training on managing hostile patients, good debate among staff and encouraging participatory leadership, clear and sufficient information to patients and their relatives or carers, correct and systematic monitoring of this

phenomenon and, finally, an emphatic approach to the patient can constitute appropriate modality to avoid aggressiveness (Stubbs et al., 2009). At this regard, we suggest that an empathic approach can be extended to the family or carers of patients, who sometimes behave aggressively due to the stressful burden of care they have to bear. In any case, these resources should be supported by a well-organized health service, which takes into account both the needs of patients and the challenges of the team. We conclude with a reminder that an ethical approach to patients and their relatives, in accordance with our mission, may be the first prevention of violence incidents.

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# Aggression Profile and Guidelines

## Poster

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## Abstract

The Psycho-physical consultants and the Dept. of education have developed a risk profile which is both a risk assessment tool and a method to manage the risk – the Aggression Profile and Guidelines – APG.

The potentially aggressive or self-harming behaviour is described in 5 different phases:

- Baseline – the individual is functioning optimally. For a normally functioning person baseline will be without aggression and frustration.
- The trigger phase – the first signs of frustration or aggression is observable.
- The escalation phase – the level of aggression/selfharm increases.
- The Crisis phase – the aggression gets physical towards others and for some patients self-harming.
- The de-escalation phase – the aggression/frustration decreases and returns to baseline.

The APG is a description of:

- The behaviour/signs indicating a risk of violent/self-harming behaviour in the different phases.
- A description of risk situations.
- Appropriate action strategies, both psychological, pedagogical and physical in the different phases.

Thus the APG is an actual description to be used in the work with the patient, as a means of help to intervene quickly and relevantly when the aggression appears.

Additionally it is a process where the staff and the patient – where possible – develop an increased realisation of the knowledge and the strategies they already have and use as well as a more varied understanding of the patient, what frustrates or what is behind the behaviour and more predictable, joint, clearer and agreed action strategies are developed.

## Testing of APG

Over the last couple of years we have been applying the APG in a number of organisations e.g. Sikringen the institution where the most dangerous mentally ill criminals in Denmark (by decree of dangerousness) are admitted, forensics wards, social-psychiatric institutions etc. The reason for contacting us has been major difficulties in relation to handling an especially challenging patient with violent or self-harming behaviour. The APG has in these organisations shown a considerable effect and our actual experience shows a significant reduction in the number of:

- Conflicts and violent episodes
- Work related injuries
- Expulsion of residents
- Admittance to mental hospital
- Use of restraint

## Research project

The previous work with the APG has not been scientifically founded so we have decided to carry out a research project in order to study if we can obtain the same large effect as the tests have shown in a scientific design.

The aim of the research project is to study if the application of the APG can reduce the number of violent and self-harming episodes and of violence-related work place injuries in a sound scientific design. The study is carried out as a case-control study with 10 organisations, comparable 1 to 1. The study is a longitudinal study. The study population includes staff in 10 work places with an especially difficult patient/resident with a challenging/self-harming behaviour.

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# Vulnerability factors in the explanation of workplace aggression: A longitudinal study among Dutch penitentiary workers

## Paper

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**Keywords:** Workplace aggression, type D personality, ADHD, PTSD, theoretical framework

## Introduction

Workplace aggression has become a well-known problem. Especially workplace related violence and aggression in the health and (semi-)public sector is very much under study [1-11] Current research focuses mainly on perpetrators' personality, typologies, the approach of the perpetrators and context characteristics. Workplace related victim research on the causes of workplace violence from a victim perspective is under-represented. Our recent article focuses on victim vulnerability factors and their relationship with experiencing workplace aggression in prison settings.

## The main paper

As mentioned above, most current research on workplace aggression and violence focuses on perpetrator characteristics (criminology and clinical forensic psychological perspective) and context factors. In light of workplace aggression, perpetrator characteristics are studied in a co-workers or employee-employer relationship. Perceived injustice can trigger unsatisfied employees to display aggression towards co-workers or managers/superiors [2, 12]. Dupré and Barling [13] specifically mention perceptions of interpersonal injustice and add the aspect of perceived supervisor's control (less independence and less joint decision making may cause frustration and enhance the chance of displaying aggressive behavior). Context characteristics that are under study in the current literature in relation to workplace aggression concern poor lighting, low security, amount of hours worked, and poor staffing [3]. In a prison setting or a forensic psychiatric institution, factors like being locked up for most of the time and great dependence on penitentiary or social workers may tense the atmosphere and make it prone to violence and aggression. After all, penitentiary and forensic inpatients settings are "unnatural" contexts that can cause stress and frustration by detainees and workers.

The main focuses in our research are victim characteristics/vulnerability factors that can be seen as contributing factors for the escalation of tense situations in a patient/detainee-prison/social worker encounter. The current literature on the relationship between aggression and victim characteristics focuses on victims being more anxious, insecure, cautious, sensitive, quit, and socially withdrawn than non-victims [14, 15]. According to Aquino and Bradfield [14] "Victims (do) either knowingly or unknowingly participate in the sequence of events that lead to their becoming a target of others' aggressive actions" (p.526). Their victim precipitation theory states that all victims participate somehow in their own victimization by presenting themselves (willingly or unwillingly) in a certain manner.

Our study also departs from this point of view. We suggest that certain individual characteristics may be positively related to victimization. Our main expected contributors to experiencing workplace aggression are PTSD, Type D personality and ADHD (especially hyperactivity and inattention). We assume that the inattention as well as the hyperactive-impulsive component of the ADHD diagnose will act as a risk factor to become a victim of workplace aggression. The lack of sustained and selective attention causes the individual not to be able to focus properly and on the potentially threatening signals during an encounter to be able to foresee an aggressive escalation. The hyperactive component of ADHD can cause the individual to respond with motor responses and not react properly to the (potentially threatening) situation. He/she may respond automatically, not adequately to the situation and with that not adjusting to the situation which may enhance the chance of escalation.

As for PTSD we expect primary the avoidance aspect to act as a vulnerability factor for experiencing workplace aggression. Unconsciously ignoring important signals that remind of an earlier traumatic event, like an aggressive or violent encounter, may create a situation of extreme vulnerability. If an individual

does not recognize a threatening situation as such, he/she may not be able to react in an adequate way to prevent the situation from escalation.

Finally, we assume that personality factors such as type D personality will increase the likelihood of workplace victimization. This relationship is already well studied in the victimological literature [16, 17]. Type D personality is characterized by negative affectivity (NA) and social inhibition (SI). People with type D personality have the tendency to experience more negative emotions than others and at the same time tend to inhibit the expression of these negative emotions [18, 19]. People high in NA generally respond in a more negative way to others or situations than people low in NA. This way of reacting can be perceived as hostile or distant by an encounter. In an already tensed situation, this can be the final push for displaying aggressive behavior. People who have high levels of social inhibition have low levels of interaction with others and are not confident in these interactions. Due to these facts, encounters may not feel at ease when they are around socially inhibited persons. They may feel avoided or even unwanted. This can cause frustration and even aggression in the encounter, especially when the situation was already tensed.

## Future directions

This study attempts to close the knowledge gap by taking on psychological characteristics in an explanatory and hypothetical model for workplace victimization. The suggested relationships in our article will be empirically tested by means of a longitudinal panel study among Dutch penitentiary workers. Approximately 600 Dutch penitentiary workers will fill in 3 questionnaires, the first one at T1, 6 months later the second at T2 and another 6 months later the third at T3. Planning to start with the data collection in November 2011. Furthermore, in-depth interviews will be held to receive more delicate information about the underlying mechanisms. With empirical results on the association between personality characteristics and workplace violence in prison settings we are able to confirm or reject the hypothesized paths in our theoretical framework, and subsequently draw conclusions on the impact or influence of ADHD, PTSD and Type D personality.

## Conclusion and discussion

In this paper we presented a small part of our theory-driven conceptual model in which personality characteristics are expected to be vulnerability factors for workplace aggression among prison workers. The whole model is presented in Klerx-van Mierlo en Bogaerts [20]. We suggested that the presence of type D personality, ADHD and PTSD in a penitentiary worker brings along a higher chance of risk for workplace aggression. Personality factors alone will only explain a part of the victimization process. Therefore, in our study it is very important that we include a qualitative research focus on processes of interactions between professionals and inmates and managers and also pay attention on organizational aspects (e.g. organizational justice). Behavioral outcomes are a combination of personal mechanisms and contextual factors [21]. This interplay will also be examined in this study based on in-depth interviews that will be carried out with prison workers, in addition to the quantitative research we will conduct. By interviewing prison workers that own personality characteristics that are determined as vulnerability factors for experiencing workplace violence, we can make a clear description of how these personality characteristics are expressed and revealed during daily life and if or how these characteristics may collide with the specific context of a prison worker with its rules, autonomy, responsibility, etc. Also the possibility of going deeper into the intrinsic mechanisms of behavior and experiencing workplace violence will give more insights in how the assumed associations between personality characteristics and workplace aggression work.

Finally we want to conclude with the notion that we don't want to be fixated only on the negative impact of the personality characteristics mentioned in this article on experiencing workplace violence. In our research we must also pay attention to the characteristics that may function as a protective factor for workplace aggression, such as well adapted coping strategies.

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# An introduction to the SAFE-E Comprehensive: A user-friendly electronic data package for violence risk assessment and management in forensic psychiatry

## Poster

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## Abstract

This poster reports from an ongoing research project, where the main goal is to develop a national standard for comprehensive individual risk assessment and management of violence for patients in transition from forensic institution. The electronic package contains a diversity of tools to assess different risk factors of violence. However, this poster is limited to four electronic versions of instruments from this package. They comprise procedures to: (1) report aggressive episodes, (2) monitor early warning signs of violence, (3) assess individual vulnerability situations of violence, and to (4) combine these measures into individual risk management strategies. A live demonstration of the system will be available under the poster presentation.

(1) to introduce the SAFE-E Comprehensive package as an approach to secure and simplify the decision making process prior to discharge from forensic units. (2) to report clinical experience from use of the package in four forensic units

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# The efficacy of violence prediction: can homogeneity of the target populations make a difference?

## Paper

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**Keywords:** Actuarial violence prediction, predictors, ASPD, NNs, CART, logistic regression

## Background and aim

The efficacy of actuarial violence prediction much depends on four key factors: *specificity of predictors, criteria of outcome, target population for homogeneity, and choice of prediction models* (Steadman & Monahan 1994, Liu et al 2011). Much of the risk prediction literature have focused on identifying effective predictors for construction of risk prediction tools and generalization of those predictions to other samples from different countries or with different mental health and criminal justice characteristics. Recent meta-analytic reviews have shown little difference in predictive efficacies between different risk tools (Yang et al 2010). Limited studies on prediction models produced controversial findings using different outcomes, largely mixed population, and varied risk predictors (Palocsay et al 2000, Granne & Langston 2007). A recent study based on a large prospective prisoner cohort showed little difference among models when predictors, outcome, and population were all fixed (Liu et al 2011). As yet, little has been done to explore differences in risk prediction efficacies within relatively homogeneous samples of clinical interest in conjunction with the use of different prediction models. Antisocial personality disorder (ASPD) is a mental disorder that has prevalence similar to schizophrenia, has clear links to psychopathy, violence, and criminal behaviors, and generates much clinical interests in its assessment and treatment.

The aim of this prospectively designed study is to examine differences in the efficacy of violence prediction between two relatively homogenous samples and to test such differences by different prediction models.

## Methods

### 1. Sample and measures

This was a prospective study of a cohort of male prisoners in England and Wales released between 14 November 2002 and 7 October 2005. The offender cohort sample was generated from the Prison Service Inmate Information System, or Central System Database, if they met the following criteria: 1) serving a prison sentence of two years or more for a sexual or violent principal offence (excluding life sentence prisoners), 2) aged 17 years and over, and 3) having one year left to serve, at time of selection. Information was provided on previous criminal history using the Home Office Offenders Index on all prisoners in England and Wales meeting these criteria. Participants were interviewed during a 6 to 12 month period before their expected date of release by trained interviewers using a battery of clinical and risk assessment measures for violent and other criminal behavior. More information of the sample were published elsewhere (Coid et al 2007). The violent offences comprised homicide, major violence, minor violence, weapons offences, aggravated burglary, and robbery. Outcome data were derived from reconvictions recorded in the Police National Computer (PNC), an operational police database containing criminal histories of all offenders in England, Wales and Scotland up to the date 09 February 2007. This source has a lower failure rate than the previous Home Office Offenders Index for non-identification and is updated more regularly (Howard & Kershaw 2000).

To examine differences in the efficacy of violence prediction between two relatively homogenous samples and to test such differences by different prediction models, the targeted population of a cohort of 1,304 prisoners were divided into two sub-groups: those with a DSM-IV diagnosis of antisocial personality disorder (ASPD,  $N=856$ ) and those without ASPD diagnosis (non-ASPD,  $N=448$ ).

### 2. Predictors and outcome variable

Seven predictors (criminal versatility, age at index offence, victim injury, female victim of index offence, substance use problems, lack of insight, and previous violent appearances) were selected from four commonly used risk assessment instruments (PCL-R, HCR-20, VRAG, and RM2000V) to form a new

set of predictors. All predictors possess significantly independent predictive power identified by means of both univariate correlation analysis and multivariate stepwise regression procedure using the same entire cohort. The rationale of selecting predictors from multiple risk assessment instruments by means of pure statistical procedure, instead of using any one instrument, was to avoid specific issues in each of the tool coming from their constructs of origin, validation and utilization in practice. In addition, the predictors statistically selected here were more general and useful to serve our purposes of methodology investigation.

The outcome variable was the presence of reconviction for violent offenses as defined above, in the binary form. The violent re-offending rate was 27.2% in this cohort, namely, 355 prisoners were reconvicted for violent offenses, whilst 949 prisoners had at most non violent re-offending. The choice of the outcome category in this study was mainly for the purpose of consistency and comparability as most previous studies in this field categorized the target variable this way.

### 3. Statistical models and evaluation indicators

For predicting category outcomes, logistic regression (LR) has emerged as the conventional statistical technique of choice in the development of models and in the testing of existing instruments (Hosmer & Lemeshow 1989). Many of its applications can be found in the fields of psychiatry and psychology (Thomas et al 2005). We chose this method as robust control.

Meanwhile, certain previous scholars have argued that violence risk assessment instruments should reflect actual clinical thinking processes and that classification tree (CT) models may be a better representation of logical and clinical judgment by clinicians typically in their practice of risk assessment (Steadman et al 2000). Classification and regression tree (CART) is one of the classical CT models, and has been well applied in this area (Silver et al 2000, Rosenfeld & Lewis 2005).

Furthermore, neural networks (NNs) emerged from research in artificial intelligence, mostly inspired by attempts to mimic the fault-tolerance and “capacity to learn” of biological neural systems by modeling the low-level structure of the brain (Patterson 1996). They are mostly used in computationally intensive applications to identify complex patterns and relationships between multiple inputs that are not recognizable by the human brain (Bigi et al 2005). The model is potentially a useful tool to complete a risk assessment task. The application of NNs for prediction/classification in psychiatry has also attracted growing interest (Florio et al 1994, Price et al 2000).

In this study, the predictive efficacies (AUCs, Sensitivity, Specificity, and Accuracy) were assessed by three different prediction models (LR, CART, and NNs), using the same set of seven predictors. Each model was checked by a built-in testing sample and an external validation sample to monitor possible over fitting.

## Results

### 1. Description of the sample

The prisoners with and without ASPD were followed up prospectively after released to the community for a mean of 3.3 and 3.2 years respectively. The mean ages (ranged 17 to 75 years) of participants with and without ASPD were 27.7 years (SD=8.4 years) and 36.6 years (SD=13.9 years) at the time of interview. During the follow-up period, 34.5% men in the ASPD group reconvicted violent re-offending, and 13.4% reconvicted in the non-ASPD group.

Table 1 presents significant differences between the two groups in both individual and total score of the seven predictors. Except Victim Injury, all other scores in the ASPD group were found higher than that of non-ASPD. Table 2 shows that five predictors (except Victim Injury) had significant correlation with the outcome variable in ASPD group, and similar five predictors (except Lack of Insight) in non-ASPD group.

Table 1 The descriptive of ASPD and non-ASPD groups

predictors	ASPD (N=856)	non- ASPD (N=448)	P
Criminal versatility	1.48±0.70	0.74±0.83	<0.001
Age at Index Offence	0.74±2.04	-0.98±2.83	<0.001
Victim Injury	1.16±1.02	1.31±1.05	0.012
Female Victim (for Index Offence)	0.28±0.96	-0.04±1.00	<0.001
Substance Use Problems	1.59±0.67	0.94±0.89	<0.001
Lack of Insight	0.45±0.71	0.27±0.58	<0.001
Violent appearances	1.52±1.15	0.88±1.05	<0.001
total	7.21±3.08	3.12±4.32	<0.001

Table 2 Correlation coefficient of individual predictors with violent reconviction in ASPD and non-ASPD groups

predictors	ASPD (N=856)	non- ASPD (N=448)
Criminal versatility	0.151**	0.251**
Age at Index Offence	0.153**	0.208**
Victim Injury	0.061	-0.093*
Female Victim (for Index Offence)	0.120**	0.142**
Substance Use Problems	0.099**	0.142**
Lack of Insight	0.095**	0.054
Violent appearances	0.160**	0.353**

\*≤0.05, \*\*≤0.01

**2. Comparison of predictive accuracy among different models**

Table 3 presents predictive validity of LR, CART, and NNs models using Sensitivity (Sen.), Specificity (Spe.), Accuracy (Acc.), AUCs and 95% CI of AUCs as the evaluation indicators.

With regard to Accuracy, the LR model generated an accuracy value from 0.57 to 0.66 in ASPD group and 0.65 to 0.72 in non-ASPD group, with slightly better performance from the training sample than the testing and validation samples. A similar pattern was found for the CART and NNs model. With regard to AUCs, for the ASPD group, AUCs for the training, testing and validating samples are 0.73, 0.69 and 0.62 respectively by LR, 0.74, 0.67 and 0.58 by NNs, 0.68, 0.60 and 0.55 by CART. For the non-ASPD group, AUC values were markedly larger than the ASPD group from all training, testing and validation samples by the LR and NNs, i.e. 0.83, 0.80 and 0.72 respectively by the LR, 0.83, 0.81 and 0.70 by NNs, and somewhat less marked difference by CART with the AUCs 0.77, 0.63 and 0.59 respectively. Overall, AUCs and Accuracy for non-ASPDs are larger than ASPDs regardless of models.

As with the Accuracy, AUC and 95% CI of AUC comparisons, Table 3 suggest that, in general, the three models demonstrated similar levels of validity in predicting violent reconviction. The NNs showed a small improvement, but did not reach statistical significance. While the performance of CART was not very stable, LR was robust overall.

*Table 3 The comparison between ASPD and non-ASPD prisoners using LR, CART, and NNs by Sensitivity, Specificity, Accuracy, AUC value and 95% CI of AUC value*

Methods	Sub-samples*	ASPD (N=856)				non-ASPD (N=448)			
		Sen.	Spe.	Acc.	AUC(95%CI)	Sen.	Spe.	Acc.	AUC(95%CI)
LR	Training	0.70	0.63	0.66	0.73 (0.68, 0.78)	0.83	0.70	0.72	0.83 (0.75, 0.90)
	Testing	0.65	0.59	0.61	0.69 (0.61, 0.76)	0.67	0.67	0.67	0.80 (0.71, 0.90)
	Validating	0.58	0.56	0.57	0.62 (0.54, 0.70)	0.53	0.67	0.65	0.72 (0.61, 0.83)
	Total	0.66	0.60	0.62	0.69 (0.65, 0.73)	0.72	0.69	0.69	0.79 (0.74, 0.85)
CART	Training	0.77	0.54	0.62	0.68 (0.63, 0.73)	0.70	0.80	0.79	0.77 (0.67, 0.86)
	Testing	0.69	0.49	0.56	0.60 (0.52, 0.68)	0.47	0.74	0.71	0.63 (0.48, 0.79)
	Validating	0.64	0.46	0.52	0.55 (0.47, 0.64)	0.40	0.73	0.69	0.59 (0.43, 0.75)
	Total	0.72	0.51	0.58	0.63 (0.59, 0.67)	0.57	0.77	0.74	0.69 (0.61, 0.76)
NNs	Training	0.68	0.67	0.67	0.74 (0.69, 0.79)	0.80	0.72	0.73	0.83 (0.75, 0.91)
	Testing	0.62	0.64	0.63	0.67 (0.60, 0.75)	0.73	0.73	0.73	0.81 (0.71, 0.91)
	Validating	0.52	0.62	0.59	0.58 (0.50, 0.66)	0.53	0.73	0.71	0.70 (0.60, 0.81)
	Total	0.62	0.65	0.64	0.68 (0.65, 0.72)	0.72	0.73	0.73	0.79 (0.74, 0.85)

\* Note:

a. ASPD prisoners were divided into four sub-samples: training sample including 148 violent re-offenders and 280 non-violent re-offenders; testing sample including 74 violent re-offenders and 140 non-violent re-offenders; validating sample including 73 violent re-offenders and 141 non-violent re-offenders.

b. Similarly, non-ASPD prisoners were divided into four sub-samples: training sample including 30 violent re-offenders and 194 non-violent re-offenders; testing sample including 15 violent re-offenders and 97 non-violent re-offenders; validating sample including 15 violent re-offenders and 97 non-violent re-offenders.

c. All three methods used the same training, testing, and validating samples.

## Discussion

Improving violence prediction should focus on a number of methodological areas: homogeneity of target population, specificity of predictors, definition of outcome criterion, and choice of statistical models. Within each area there are different methodological issues of concern. These areas are interlinked with each other. To study one area, other areas have to be fixed on the same base. This study mainly examined some key issues in the target population for homogeneity. The best examples of current practice in considering dealing with homogeneity of target population are risk assessment scales specifically developed for juvenile violence and sexual offenders. However, for assessing general violence recidivism, all major tools made no differentiation between clinical characteristics of their construction samples (Yang et al 2010). Without dealing with homogeneity of the sample, our previous study reported similar predictive performance from the LR, NNs and CART models (Liu et al 2011). This study demonstrates that by separating sub-group of prisoners with ASPD diagnosis from the male prisoner population, one could achieve a larger efficacy in predicting violence among those without ASPD diagnosis. The reason for low predictive accuracy among the ASPD population could be due to high prevalence or low variability of risk factors among them, which weakens predictability of risk factors statistically. Clinically, for high risk population like the ASPD group, there could well be specific risk factors that trigger violent behavior of them with large probability. In another word, among violence offenders, there could be subgroups with different profile or different risk factors for the same violent behavior. Further research in classifying subgroups or typology study among violent offenders and in identifying specific risk factors for distinguishable such subgroups will be necessary for risk management and treatment in a near future.

As for the comparison among different prediction models, LR is the most widely used one to develop risk assessment tools. However, as actuarial prediction of violence hits a ceiling effect around 0.70 in AUC value, both researchers and clinicians in this field sought for ways to break the ceiling effect. In last decade there has been increased literature to propose CART and NNs models with inconsistent findings of those models in their predictive performance. Comparison of models on their performance has to take into account other key factors in the predictive equation, i.e. specificity of predictors, criteria of outcome, target population for homogeneity. Having carefully selected predictors on the commonly defined violence outcome with separate samples from two different targeted populations, this study demonstrates that LR

and NNs are rather comparable in terms of their performance which showed good robustness by means of testing and validating samples. In contrast, performance of CART is less robust, in particular when it was tested on small validation samples. More suggestions for future methodological research in predicting violence behavior can be seen in the other paper (Liu et al 2011) from the same project.

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# Women in medium secure care: Changes in risk profiles and engagement over treatment

## Poster

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**Keywords:** Women, medium secure, risk behaviour, engagement

## Introduction

Only 8–12% of patients admitted to medium secure (MSU) settings are women (Dent, 2006) and follow up studies have only recently highlighted areas for therapeutic focus that may enhance rehabilitation (Sahota et al, 2010). Offender risk classification schemes decline in predictive validity when compared to women (Van Voorhis, 2010); violent behaviour in women is increasing (Loper, 2000) and they are more likely than men to have a personality disorder diagnosis; to have been victims of violence; to have a past history of trauma and to have committed arson (Flannery et al, 2006; Coid et al, 2000). Rates of engagement in treatment is a particular issue for personality disordered patients (McMurran et al, 2002) since this is linked to risk management (Daffern et al, 2004). There is a need to understand the relationship between traumatic histories, clinical presentation and antisocial behaviour and how these impact on assessed risk, treatment and outcome.

The aims of the following study was to (i) describe the risk management approach taken in a medium secure service for women, (ii) examine changes in risk behaviours (aggression inwardly or outwardly directed) and risk ratings/classification over the duration of stay, (iii) assess whether changes in risk profiles are paralleled by changes in treatment engagement.

## Methodology

### Design

Use was made of a prospective single cohort pre-test-post-test design (Cronbach, 1982) where risk comparisons were made between the first 6 months (pre) and the last 6 months (post) of treatment.

### Participants

Seventy consecutive admissions to an MSU at St Andrew's Healthcare, Northampton, UK were sampled. All patients were detained under the Mental Health Act 1983 and had a secondary diagnosis. Characteristics of the patient group and treatment service are described in Long et al (2008).

### Treatment Regime and Risk Management

Progress through the treatment system is determined by a system of six risk status levels each associated with defined restrictions and requirements: status 1 represents immediate risk of aggression/self harm and 6 represents the ability of the patient to manage her own actions safely with staff support.

The psychosocial treatment uses a Manualised, gender specific, cognitive behavioural group programme (Long et al, 2008). This is underpinned by the RAID (Reinforce Appropriate Implode Disruptive; Davies 2001) and a 3 level (A.B.C.) financial incentive scheme to reward engagement.

### Measures

1. Risk: Health of the Nation Outcome Scale (HoNOS-Secure: Sugarman & Walker, 2007); risk behaviours classified according to the Overt Aggression Scale (OAS; Yudofsky et al, 1986) categories; Risk Status Categories; and Prevention and Management of Violence (PMAV) incidents.
2. Engagement: percentage of core programmed sessions attended; incentive level A-C attainment.

## Results

Participants mean age 31.3 years with most having a primary diagnosis of emotionally unstable personality disorder (51.4%), or schizophrenia (12.7%). All had a secondary diagnosis with substance abuse absent in a protective environment the most common (47.1%). Index offences included major violence (38.6%) and arson (21.4%).

### Length of Stay and Subsequent Placements

60 patients (average stay = 19.52 months) were discharged in the study period, mostly to low secure facilities (88.3%). At one year post discharge, most (64.5%) were in an open unit.

### Risk Ratings

The reliable Change Index (RCI; Jacobson and Truax, 1991) was used to determine clinically significant change in OAS risk behaviours. A significant pre-post reduction in total risk behaviours (RCI = 3.3) was reflected in self injurious behaviours and suicide attempts (RCI = 4.2), physical assaults (RCI = 3.6), physical aggression against objects (RCI = 3.7) and verbal aggression (RCI = 2.2).

Significant changes were also evident in terms of PMAV's / Seclusions ( $2 = 4.2df = 56, p < 0.05$ ) and HoNOS-Secure A-G Security Scales, Risk of harm to adults/children; Risk of self harm; Need for building security; and Need for escort on leave (all  $p < 0.01$ ). In addition the majority of women changed from risk status 2 & 3 to status 5 & 6 ( $X^2(1) = 22.14, p < 0.05$ ).

### Treatment Engagement

Session attendance increased from 42% to 60% reflected in the majority moving from incentive stage B to stage C ( $X^2(1) = 19.21, p < 0.05$ ).

## Discussion

Risk reduction and treatment engagement represent two of four milestones to recovery that can support decisions regarding placement within secure settings (Holloway et al, 2010). In the current study time in an MSU for women was paralleled by a reduction in care programmed treatment sessions. Findings accord research showing shorter stays for patients who engage in psychosocial or group activities (Castro et al, 2002). The current gender specific treatment programme contains adaption's of dialectical behaviour therapy (DBT; Linehan, 1993) shown to be effective in reducing risk behaviours in patients with borderline personality disorder (Verheul et al, 2003). The effectiveness of treatment is also attested to by the finding that two thirds lived in open rehabilitation units one year after MSU discharge. Sample size and the absence of a control group limit conclusions about treatment effectiveness and long term follow ups are needed to establish the generalisation of treatment effects across settings. However, in contrast to previous findings (Sahota et al, 2010) the current study shows evidence of post discharge progress along a pathway of care that has been maintained at follow up.

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# Psychiatric wards crowding and incidents of aggression and violence

## Poster

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## Background

Violence on psychiatric wards is a growing concern because of its prevalence and the increasing number of incidents. The problem is so severe that many mental health professionals expect to encounter violence in their work with psychiatric patients. The factors identified as leading to violence on acute inpatient units can be broadly divided into four categories: patient, staff, environment, and staff-patient dynamics.

Patient factors include gender, age, history of violence social and economic status and diagnosis, especially schizophrenia. Staff factors include inexperience or lack of training, lack of a clear role, and low staff-to-patient ratio. Environmental factors are the time of day or day of the week, location within the unit, patient overcrowding, an untherapeutic ward environment, and ward turmoil. Factors related to staff-patient dynamics include lack of control by the staff, few or poorly organized activities; uncertainty, confusion, or fear about the staff-patient relationship, and poor staff-patient interaction.

Definitive conclusions about the factors involved in violent patient behavior cannot be drawn from the studies cited above. Most of these studies looked broadly at risk factors for violence; issues of crowding and staff-to-patient ratios were either ignored or emerged as secondary findings. The definitions of violence were not consistent, and the distinction between physical and verbal aggression was often overlooked. Our study was designed specifically to examine the relationship between ward occupancy levels and staff-to-patient ratios and violent incidents, either physical or verbal, on an acute psychiatric ward. We hypothesized that an increase in the number of violent incidents would be positively associated with a low staff-to-patient ratio and with a high ward occupancy.

## Methods

Our study was conducted at a teaching Hospital in Isfahan, Iran. The hospital has one acute adult inpatient psychiatric unit with 14 general beds and two intensive-care beds. The total built-up area of the psychiatric unit is 720 square meters. Each patient has a separate room measuring nine square meters. The communal area includes a lounge, dining hall, kitchen, courtyard, activity room, and library.

Patients are admitted to the unit on a voluntary and involuntary basis. Criteria for admission include any acute psychiatric condition for which community interventions have failed, with or without risk to self or others. No child or forensic admissions are accepted. Typically when all 14 beds are occupied, six registered staff nurses work on the morning shift (7 a.m. to 3 p.m.), five on the afternoon shift (3 p.m. to 11 p.m.), and two on the night shift (11 p.m. to 7 a.m.). A maximum of two nurses or two nursing aides from an agency may be called in if regular nurses are not available or the acuity level is high; agency nurses and nursing aides may not have psychiatric training. In addition, two third-year nursing students are placed for eight weeks in a supernumerary capacity on the morning and afternoon shifts three times a year.

Data were extracted retrospectively from the unit's census records for 12 months, from December 2009 through November 2010. Data on the total number of patients with a current ward admission, the number on leave from the ward, and the number actually present on the ward are routinely collected every day on the unit. For this study, we used the data on the number of patients actually present on the ward for the occupancy and staff-to-patient ratio analyses. The corresponding number of nursing staff directly involved in patient care was noted for each of the eight-hour shifts. Hospital records of all admissions to the inpatient unit for the 12-month study period were obtained, including each patient's sex, age, diagnosis, and number of admissions.

The log of ward incidents, which contains descriptive accounts of all violent incidents that occur on the unit, was reviewed. We defined a physical incident as any unwelcome physical contact initiated by a patient against another patient or staff member or wilful damage to property. Incidents of self-harm were not included. We defined verbal aggression as any threat — with or without a weapon — of physical or

sexual harm. All logged incidents that fit our definitions of physical or verbal aggression were included in our study. Of 87 logged incidents, 29 did not fit our definitions or did not contain adequate information and were not included. The type, time, and location of each incident and the persons involved were recorded.

The census data and the data on violent incidents were merged and analyzed using logistic regression to model the relationship between explanatory variables and the binary outcome variables. In logistic regression the assumption is that the errors have a binomial distribution rather than a normal distribution as in linear regression. The unit of analysis was the nursing shift. Occupancy was calculated as the number of patients on the ward during the shift divided by the number of available beds, expressed as a percentage.

Logistic regressions were performed to determine whether frequency of incidents or type of incident was associated with ward occupancy, staff-to-patient ratio, shift time, or day of the week.

## Results

During the 12-month study period, 268 patients were admitted to the unit a total of 381 times; 192 patients had one admission, 55 had two admissions, 12 had three admissions, six had four admissions, and three had five or more admissions. Women accounted for 55 percent of admissions. The mean $\pm$ SD age of admitted patients was 34 $\pm$ 12.5 years, with a median age of 32 years and a range of 12 to 84 years. The mean $\pm$ SD duration of admission was 10.8 $\pm$ 16 days, with a median of seven days and a range of one to 124 days. The majority of patients were diagnosed as having psychotic disorders, including drug-induced psychoses, schizophrenia or schizoaffective disorder, depression, bipolar disorder, and adjustment disorder.

A total of 58 incidents were recorded during the one-year study period: 25 incidents of verbal aggression and 33 incidents of physical violence. The study period contained 1,092 shifts. One incident of some type occurred on 54 shifts, and four shifts had more than one incident. Twenty-four verbal incidents and 32 physical incidents occurred during the morning and afternoon shifts. Night shifts were excluded from the second type of analysis because only two incidents, one verbal and one physical, were reported.

Ward occupancy was found to be related to whether or not an incident of either type occurred ( $2=7.9$ ,  $df=1$ ,  $p=.005$ ). The average occupancy when an incident occurred was 77 percent, compared with 69 percent at other times. Occupancy rate was also found to be associated with the type of incident ( $2=8.5$ ,  $df=1$ ,  $p=.003$ ); the occupancy rate was higher when verbal incidents occurred (80 percent) than when physical incidents occurred (70 percent).

Shift time was found to be related to whether or not an incident occurred ( $2=12.3$ ,  $df=2$ ,  $p=.002$ ). Incidents occurred on 29 afternoon shifts (8 percent), compared with 23 morning shifts (6.3 percent) and two night shifts (.6 percent). Shift time was not significantly associated with type of incident, and the day of the week was not associated with whether incidents occurred. No significant associations were found between staff-to-patient ratios and either type or occurrence of incidents.

Generalized additive models were used to examine whether the relationship between occupancy and the probability of a violent episode was linear. These models are nonparametric regressions that allow the data to determine the shape of the relationship between binary outcomes and independent continuous variables. No significant difference was found between the fit of the model with occupancy as a linear term compared with a smooth term. Hence occupancy was fitted as a linear term in the logistic model.

## Conclusions

Several studies have reported an association between crowding on acute psychiatric units and incidents of violence, but none have reported on the association between crowding and type of incident, that is, physical violence or verbal aggression. The findings of our study suggest that crowding is significantly associated with violent incidents, and in particular with verbal aggression.

Our study suggests that crowding on an acute psychiatric unit is associated with aggressive incidents of a mostly verbal nature, and particularly during the afternoon shifts. Further prospective studies are needed to confirm these findings. Providers and planners of mental health services need to be constantly aware of the association between crowding and aggressive incidents. In future studies it may be worth examining whether dispersing patients, either by placing some on leave or by engaging them in activities off the unit, reduces the occurrence of aggressive incidents.

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# Anxiety and anger as predictors for violent behavior in psychosis: An experimental study

## Paper

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**Keywords:** Violence; mental disorders; psychosis; anxiety; anger

## Introduction

Meta-analytic studies have indicated that psychiatric patients, and in particular patients diagnosed with a psychotic disorder, are more often engaged in violent acts than healthy subjects (Douglas, Guy, & Hart, 2010; Fazel, Gulati, Linsell, Geddes & Grann, 2010). However, it remains largely unclear which intra-individual risk factors might explain this behavior. It seems plausible to assume that feelings of anger are an important trigger of aggressive behavior (e.g., Berkowitz, 1990), although the precise link between anger and aggression has been rarely investigated. Meanwhile, there may be other negative emotional states that fuel aggressive behavior. A good example is anxiety, which is most often linked with flight behavior, but sometimes also appears to be associated with fight behavior (Cannon, 1915). Again only a few studies have examined the relationship between anxiety and aggression (e.g., Kashani, Deuser, & Reid, 1990).

Junginger (1996) hypothesized that anxiety and anger might precede the aggressive behavior in patients with a psychotic disorder. This notion was based on the findings in the studies of Kennedy, Kemp, and Dyer (1994) and Buchanon et al. (1992). However, the link between these negative emotions and aggressive behavior in psychotic populations was only demonstrated by means of correlational designs. Therefore, no causal interpretations can be made and thus there is a considerable need for experimental research into this relationship. In the present paper, the preliminary results of an experimental study in students and patients will be presented. The effects of induced anger and anxiety on aggressive attitudes will be examined by means of a mood manipulation and a word-stem completion task. First, a pilot study in an undergraduate student sample was carried out. This design was replicated in a group of stabilized patients (inpatients and outpatients) who were diagnosed with schizophrenia or a related psychotic disorder.

## Methods

### Participants

A pilot study was conducted with 120 university students (90 women and 30 men); Mean age 20.29 years, SD 2.60 years, range 18-36 years. Students were recruited via an online message on the online channel of the university. Most students were from Dutch origin (95%).

In a second study, 62 stabilized patients (29 inpatients, 33 outpatients) with a mean age of 34.94 years, SD 9.96 years, range 20-60 years, were recruited in two psychiatric hospitals in the Netherlands. All patients were male and diagnosed with schizophrenia or a related psychotic disorder (e.g., schizoaffective disorder, delusional disorder).

### Instruments

#### *Mood induction*

To induce an angry or anxious mood in the participants, a combined mood induction procedure of guided imagery by means of vignettes and mood-congruent music was employed, following the method of Mayer, Allen, and Beauregard (1995). A neutral condition was also added as a reference condition. Participants were randomly assigned to one of the three conditions and verbal as well as written information about the task was provided. Note, however, that participants were blind to the condition they were assigned to. When the task started, music was played for about 60 seconds. Then, eight different vignettes such as 'Someone files a false legal claim against you' for anger, 'You are driving down an unfamiliar road on a stormy night when your car skids out of control' for anxiety, and 'It is late at night, you are tired. You take a long shower, wash yourself, and watch some television' for the neutral condition were presented at 45 seconds intervals. To check the change in emotional mood state levels, participants completed Visual Analog Scales (VASs) prior to (baseline) and after the mood induction. For all conditions, there was a separate line for anger and anxiety, ranging from 0 (not at all) to 100 (extremely).

### Aggression task

A word-stem completion task was developed to measure participants' state level of aggression. This task consisted of 45 word-stems that could be completed in either an aggressive or non-aggressive way (e.g., 'ANG...' can be completed as ANGER or ANGEL, and DEA... can be completed as DEATH or DEAR). The word-stems were presented to the participants in a random order. Scoring of the completed stems, whether the completions represented aggressive or non-aggressive words, was conducted by three independent raters. The inter-rater reliability  $r$ 's were between .95 and .98,  $p$ 's < .001; ICC .96 (CI between .93 and .97). The number of aggressive completions was supposed to reflect the aggressive attitude of the participant at that moment (i.e., the more aggressive completions, the stronger the aggressive attitude).

## Preliminary results

### Pilot study in the student population

First, a manipulation check was conducted with a 3 Group (Anger vs. Anxiety vs. Neutral) x 3 Mood VAS (Anger vs. Anxiety vs. Happiness) x 2 Time (Pre vs. Post induction) ANOVA with repeated measures on the last two factors and indicated a differential pattern for each group in means over time [ $F$ Greenhouse-Geisser (2.60,304.26) = 240.27,  $p$  < .001]. Post-hoc analyses revealed the expected results. That is, the anger group experienced higher levels of anger than the other groups ( $t$ 's > 2.64,  $p$ 's < .05) and the anxiety group showed higher levels of anxiety than the other groups ( $t$ 's > 3.01,  $p$ 's < .01).

Then, the main analyses were carried out. The mean number of aggressive word-stem completions in the student sample was 16.63 ( $SD = 5.49$ ). The highest aggression score was found in the anger condition ( $M = 18.93$ ,  $SD = 6.25$ ), followed by the anxiety condition ( $M = 17.05$ ,  $SD = 4.34$ ) and the neutral condition ( $M = 13.93$ ,  $SD = 4.59$ ) (see Figure 1). A One-way analysis of variance was carried out to examine the mean differences in aggressive word completions between the three mood-induction groups, and a significant effect for the conditions was found [ $F(2,117) = 9.70$ ,  $p$  < .001]. Further, post-hoc analysis revealed significant differences between the neutral and anger condition ( $t = 4.66$ ,  $p$  < .001) as well as between the neutral and anxiety condition ( $t = 2.75$ ,  $p$  < .05), which indicates that both emotional states induce an aggressive attitude, reflected by the number of aggressive completions on the word-stem task.

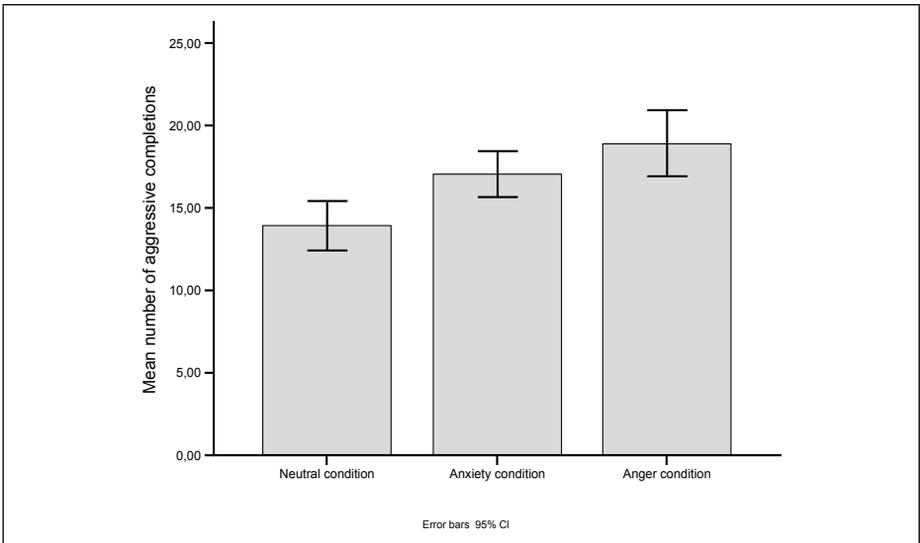


Figure 1. Mean number of aggressive word-stem completions on the word-stem task for the student population (with error bars) in the neutral ( $N = 40$ ), anxiety ( $N = 40$ ), and anger ( $N = 40$ ) mood-induction conditions.

### Preliminary results in the patient population

The design, as used in the pilot study, was replicated in a group of stabilized psychotic patients ( $N = 61$ ). First, the association between the extent of psychosis and the aggressive attitude was examined and yielded a correlation of .21, indicating that positive psychotic symptoms occur with higher levels of an aggressive attitude. However, this correlation was non-significant ( $p > .10$ ) probably due to a limited sample size. The

mean number of aggressive word-stem completions in the patient sample was 14.16 ( $SD = 4.59$ ). When looking at the three mood conditions (i.e., anger, anxiety, and neutral) the highest aggression score was found in the anger condition ( $M = 14.58$ ,  $SD = 4.50$ ), followed by equivalent mean scores in the neutral ( $M = 14.00$ ,  $SD = 5.03$ ) and anxiety conditions ( $M = 13.95$ ,  $SD = 5.03$ ) (see Figure 2). An additional analysis of variance confirmed that no significant differences were found between these three conditions [ $F(2,58) = 0.11$ ,  $p > .10$ ]. That is, the level of aggressive behavior did not differ between emotional states of anger, anxiety or a neutral state, indicating that emotional state does not predict the level of aggression in a stabilized psychotic patient group.

Additional analyses were carried out to see whether there were differences between stabilized inpatients and outpatients. When looking at the relationship between psychosis and aggression, it was found that stabilized inpatients showed a strong significant association between psychosis and aggressive behavior ( $r = .40$ ,  $p < .01$ ,  $N = 29$ ), whereas the outpatients did not show this association ( $r = .08$ ,  $p > .10$ ,  $N = 33$ ). However, when comparing these groups on aggressive word completions, no group differences were found [ $t(59) = -.82$ ,  $p > .10$ ]. This means that the aggressive attitudes, as measured with the word-stem completion task, do not differ between inpatients and outpatients in the present sample.

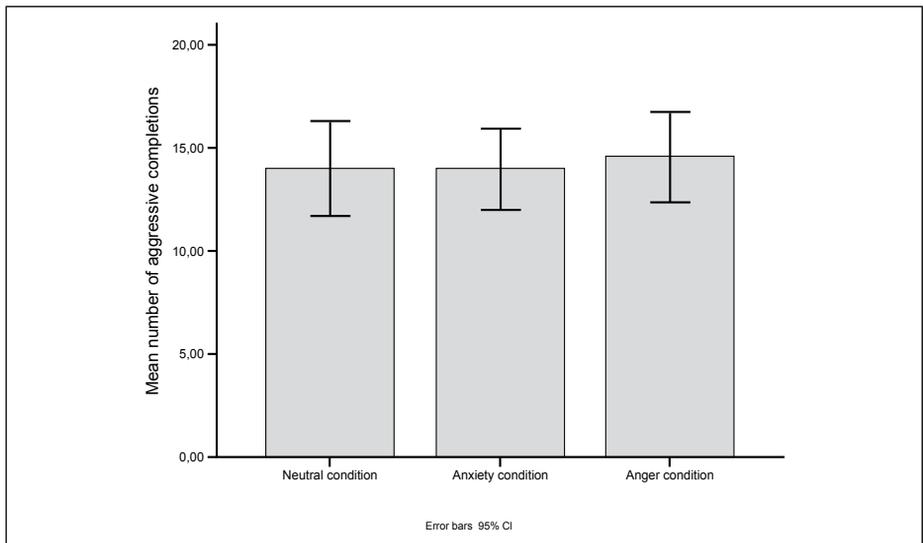


Figure 2. Mean number of aggressive word-stem completions on the word-stem task for the stabilized patient sample (with error bars) in the neutral ( $N = 21$ ), anxiety ( $N = 21$ ), and anger ( $N = 19$ ) mood-induction conditions.

## Conclusion and discussion

In the present paper, the effects of the induced emotions of anger and anxiety on aggressive attitudes were examined. The findings of a pilot study in undergraduate students and the preliminary results that were obtained in a stabilized patient sample were presented. Further, differences between inpatients and outpatients in aggression and the link with psychotic symptoms were reported. Although the data collection is still going on, preliminary results already reveal some interesting findings.

First, it was found that healthy students who were brought into an angry or anxious mood show a more aggressive attitude than people with a neutral mood. The strongest effect was found for anger, which is well in line with the original idea that feelings of pure anger would lead to aggressive behavior (Berkowitz, 1990), however, now supported by experimental data. A smaller but also worth noting effect was found for feelings of anxiety in triggering aggressive behavior, which supports the fight part of the fight or flight hypothesis, according to the old notion of Cannon (1915). However, in the patient sample that was tested, this finding could not be replicated, which suggests that patients who act aggressively might display this behavior regardless of their emotional state. On the other hand, this inconsistent finding might be explained by a difference in the sensitivity for- or the intensity of emotional experiences. It could be that the mood induction was too subtle for the patients to have such emotions induced. This result was

similar for inpatients and outpatients; however, the association between positive psychotic symptoms and an aggressive attitude was more prominent for the inpatient group than for the patients who were not in hospital.

## Acknowledgements

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# Predicting recidivism in two forensic psychiatric populations in the Netherlands

## Paper

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**Keywords:** HCR-20, PCL-R, recidivism, Art. 37, TBS

## Introduction

In the Netherlands a special time limited hospital order, called “Strafrechtelijke machtiging” (Art. 37), is often given to offenders with a psychiatric disorder after conviction in a criminal court. The intention is to reduce violence and the risk for future violence through medical treatment for one year. The crime committed must have been directly related to a psychiatric disorder and the offender cannot be held accountable for the offence. The order is often imposed on offenders with psychotic disorders. The aim is primarily to protect society and the public from dangerous mentally ill offenders. However, the order can also be imposed to ensure that the offender is protected from self-harm. Prolongation of the order is only possible for one more year by the civil court. In this article we refer to this order as ‘one year hospital order’.

A more long term hospital order is the ‘Terbeschikkingstelling’ (TBS), literally translated as: at the discretion of the state. This court order remains in force as long as the person is considered dangerous and is made after conviction in criminal court when a plea of “insanity and unfit” is made. A person may be sentenced to TBS when he or she commits an offence while suffering from “developmental deficiencies and pathological mental disturbance”. Hence there must be a connection between the disturbance and the offence. This means that the crime committed must have been directly related to a psychiatric disorder and the offender can not or only partially, be held accountable for the offence. The disorder must be ascertained by two experts, a psychiatrist and a psychologist, before the court can pass sentence. The aim of this court order is that society and the public are protected from dangerous, mentally ill offenders for as long as necessary. After four years, the court order can be prolonged repeatedly by one or two years by the criminal court.

Even though the one year hospital order was admitted into Dutch criminal law in 1884, little research has been done into its effectiveness in preventing violent behaviour. In daily practice the impression exists that these patients are more difficult to treat and cause more incidents on the ward than patients for whom duration of treatment is not set or known in advance. This may have something to do with the time-limited nature of the one year hospital order and may also predict the risk of recidivism following discharge.

To test this hypothesis a pilot study was carried out in a medium secure forensic psychiatric service (Peek en Nugter 2009). All discharged forensic patients, with a TBS order (N=11) or a one year hospital order (N=30) between 2002 and 2006, were assessed. The results showed that 50 percent of the patients with the one year hospital order reoffended after discharge, which is rather high compared to patients with the TBS order, of whom 30% reoffended. Both measurements: HCR-20 and the PCL-R had predictive power. In addition patients with a one year hospital order showed more disruptive behaviour and violation of hospital rules than patients with a TBS order.

The present study sought to replicate previous research, using a greater sample and a more precise operationalization of recidivism.

## Materials and methods

### Patients

All patients who were discharged between 2002 and 2009, with a TBS order or a one year hospital order were included. The patients with a one year hospital order all had a psychotic disorder. We chose to compare them to TBS order patients who also had a psychotic disorder.

**Instruments**

Biographical characteristics were extracted from the electronic patient records. As predictors the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 1991 and 2003), the Historical, Clinical, Risk Management-20, Version 2 (HCR-20; Webster e.a., 1997) and the number of violent and disruptive behaviours during hospitalizations were used. Although the PCL-R was not originally designed as an instrument for risk assessment, it is more and more used to assess likely future recidivism and violent offending. The instrument is developed to assess symptoms of psychopathy. It has been shown that people with a higher rate on this scale, have a higher risk of reoffending after discharge (e.g. Hare e.a., 2000; Hildebrand e.a., 2004). Factor analysis showed that psychopathy consists of 2 factors. The first, Factor 1 measures interpersonal or affective features of psychopathy, such as superficial charm and callousness. The second, Factor 2 measures the behavioural features of psychopathy (antisocial behaviour), such as irresponsibility and poor behavioural controls (Hare, 1991 and 2003). The PCL-R contains 20 items, rated on a 3 point rating scale, ranging from 0 (not apply), 1 (applies somewhat) to 2 (fully applies).

The HCR-20 consists of three main areas: historical, clinical, and risk management. The HCR-20 domains are coded with a rating of 0 (not present), 1 (possible/less serious), or 2 (definite/serious). The HCR-20 is a structured clinical assessment tool and consists of a list of 20 probing questions about the person being evaluated for violence. The clinician gathers qualitative information about the person being assessed, guided by the HCR-20, and the results are used to make treatment decisions.

Both the PCL-R and the HCR-20 were scored with the information of the patient's record. When no information was found with regard to the items of these instruments, we assumed that the patient was not having these problems and the score 0 was assigned.

Violations and disruptive behaviours during hospitalisation were assessed with a form called 'Reporting Incidents in Patient Care' filled in by the ward after an incident has happened. The violations are divided into the following: Violation of the rules, Provocation, Aggression or Violence, Isolation, Sexual intimidation and Other.

Recidivism rates were requested via the administrative database of the Ministry of Justice.

**Operationalization of recidivism**

Recidivism was defined as: any new legitimate judicial contact, except cases that end up in acquittal, shelved cases or other technical verdicts. The Research and Documentation Centre of the Dutch Ministry of Justice defines five different kinds of recidivism ([www.wodc.nl](http://www.wodc.nl)):

1. General reconviction: a new contact with the court, regardless of the type and the seriousness of the new convicted crime.
2. Severe reconviction: new legitimate judicial contact, with a lawful punishment threat of at least 4 years.
3. Very severe reconviction: new legitimate judicial contact, with a lawful punishment threat of minimal 8 years.
4. Special reconviction: new legitimate judicial contact that falls into the same category as the index crime. (voyeurism/frotteurism, both paraphilic preferences)
5. Specific reconviction: new legitimate judicial contact that is the same as the index crime.

**Procedure**

Patient records were requested with the approval of the medical director of the hospital board. Records were scored by a trained researcher, who was blind to the outcome in terms of recidivism. Recidivism rates were collected after scoring the patient records. Data on recidivism were requested with the permission of the Research and Documentation Centre of the Ministry of Security and Justice.

**Analysis**

A receiver operating characteristic (ROC) analysis was done. This is a graphical plot of the sensitivity, or true positive rate, versus false positive rates for recidivism. The analysis provides tools to select possibly optimal models and to discard suboptimal ones. It provides an Area Under the Curve (AUC), this is equal to the probability that a classifier will rank a randomly chosen positive instance higher than a randomly chosen negative one.

Next survival analyses were done for the predictors that had an AUC-value of .70 or more. This analysis involves modelling of time (in months) to recidivism.

Finally we performed a multiple regression analysis to test the relationship between recidivism and the different predictors.

## Results

### Patients

The research population (N=104) consisted of 100 men and 4 women. Nine patients were excluded (8.65%) from the research, six did not have a psychotic disorder, one is still in treatment, one patient destroyed all his files after discharge and the file of one patient contained not enough information. Analyses were done over N=95, 4 women and 91 men.

### Recidivism

Results showed that 43% of the patients with the one year hospital order reoffended after discharge. 16% had a general reconviction, 9% severe reconviction, 5% with a very severe reconviction, and 13% reoffended with a new legitimate judicial contact that was similar or exactly the same as the index crime. Of the TBS order patients 27% reoffended after discharge. 11% had a new general contact with the court and 16% had a new legitimate judicial contact, with a lawful punishment threat of at least 4/8 years.

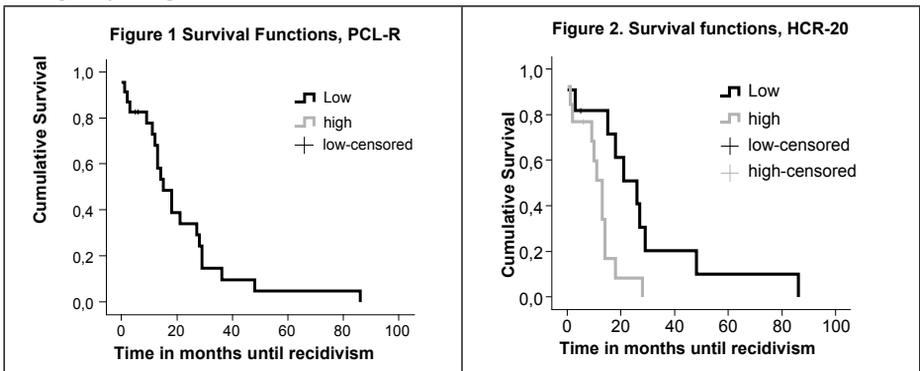
### Predictors of recidivism

The HCR-20, the PCL-R and PCL-R factor 2 (antisocial behaviour) were good predictors of violent reconviction in the two forensic populations, achieving an AUC between .70 and .80, which is a medium to large effect size (Table 1). Factor 1 of the PCL-R and the number of violations had poor AUC-values.

Table 1 AUC values of predictors

Predictors	AUC
PCL-R - total	.76
PCL-R - Factor 1	.56
PCL-R - Factor 2	.80
HCR-20	.70
Violations	.50

In Figures 1 and 2 the survival functions of the PCL-R and HCR-20 are depicted. The survival time variable was the time between discharge and the sentence for a new offence in months. The survival analysis showed that patients with a higher score on the PCL-R (>25) or the HCR-20 (>26), reoffended more quickly than patients with a lower score on this measurement.



Finally, results on the Regression analysis showed that the HCR-20 is the best predictor for the prediction of future recidivism in terms of type and seriousness. The HCR-20 predicted 31.7% of the total variation.

## Discussion and conclusions

Our findings indicate that patients with a time limited hospital order continued to have relatively high recidivism rates compared to patients with hospital orders of which the duration is not set in advance. The recidivism rate of the last group of patients is comparable to national data on recidivism of this group (30% recidivism). This may indicate that the effectiveness of treatment may be comparable to that of other mental hospitals in the Netherlands and that the high recidivism rates of the one year hospital order may

found in other hospitals as well. One wonders whether the hospital order of one year actually achieves its purpose.

Our data clearly show the efficacy of the HCR-20 and the PCL-R in predicting recidivism in both forensic psychiatric patient populations. Factor 2 of the PCL-R, which measures the antisocial behaviour was the strongest predictor for further violence. This is in line with most research evidence that suggests that the relationship between psychopathy and violence is due largely to the antisocial behaviour elements captured by Factor 2 of the PCL-R (e.g. Harris, Rice, & Quinsey, 1993; Hemphill et al., 1998; Skeem & Mulvey, 2001). Noticeable is that Factor 1 of the PCL-R was not a strong predictor for further violence. Factor 1 measures the interpersonal and affective features of psychopathy, such as superficial charm, callousness and flat affect. These affective features are similar to the negative symptoms of schizophrenia. However schizophrenic patients with mostly negative symptoms tempt to withdraw and are generally not violent.

Finally, our results suggest that the strongest predictor of future violence seems to be the HCR-20. 32% of the variance in outcome is predicted by the HCR-20. This finding may confirm the fact the HCR-20 and not the PCL-R is designed as a risk assessment tool.

Our research provides strong evidence for reconsideration of the one year hospital order. Better aftercare for this population could reduce the reoffending rates. For example, we found that the one year hospital order patients that went to a sheltered living environment after inpatient treatment did not engage themselves into a new legitimate judicial contact.

Furthermore, our results support that the HCR-20 and the PCL-R, assessed by a trained specialist, could be used as an assessment for predicting further violence. The decision about discharging a one year hospital order patient should be based on the scores of these instruments, and not only on duration of inpatient treatment.

## Acknowledgements

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# Risk Assessment: Predicting physical aggression in child psychiatric inpatient units

## Paper

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**Keywords:** Child, inpatient, mental disorders, risk assessment, aggression

## Introduction

Aggressive behaviour is a frequent reason for admission of young people to youth mental health services [1, 2]. The diverse range of psychiatric diagnoses among youth admitted to inpatient facilities results in many individuals diagnosed with disorders that include aggressive behaviour among their symptoms. It is not surprising then that aggressive incidents are common during inpatient admission [3]. For the purpose of this research, aggression was confined to those physical acts against other people and property destruction.

Identification of high risk patients is crucial in the management of aggression in the inpatient population. Mental health professionals are frequently required to conduct risk assessments as part of hospital policy. In spite of advances in risk assessment practices, empirically validated risk assessment tools are seldom utilised in clinical practice. Furthermore, the development of aggression risk assessment tools has for the most part used adult samples. Consequently, research on youth specific measures are limited due to their recent development. While there is growing empirical evidence on risk factors for aggression in youth, the limited number of empirically validated risk assessment tools for this age group often results in the use of adult tools in young populations. Not surprisingly, it has been suggested that adult tools should not be utilised in youth samples [4]. Lack of temporal stability and the developing nature of young people from an emotional, social and physical perspective, makes it difficult to assess and characterise youth at a single point in time when making clinical judgements [5]. This suggests that the application of aggression risk assessment is more complex in young people and adult measures cannot be directly transferable to young people.

The aim of this study was to retrospectively examine the predictive validity of unstructured clinical risk assessment of aggression, based on the clinician's expertise, prior experience and intuition, by examining the association between risk assessment rankings assigned by psychiatric staff on admission and subsequent incidents of aggression recorded in critical incident reports by nursing staff occurring within the first four weeks of inpatient stay. Additional risk factors for aggression in child inpatients were also assessed including history of physical aggression and trauma and diagnosis.

## Method

The study was conducted at the State-Wide Child Inpatient Unit (SWCIPU). The SWCIPU is a 12-bed inpatient unit at the Austin Health Child and Adolescent Mental Health Service in Melbourne, Australia providing short to medium term assessment and treatment for children with serious psychiatric, behavioural and emotional disturbances.

A file audit of admissions for the period of September 2006 to July 2009 was conducted examining unstructured clinical risk assessment practices. Inclusion criteria required children to be aged eight to 13. Medical files and databases for each child were accessed to obtain demographic and clinical information including age, length of stay, admission type, admission risk assessment ratings, discharge diagnoses, and history of aggression and trauma. Risk assessment ratings were based on the subjective judgement of the child psychiatrist or psychiatric registrar and completed at the time of patient admission. Risk assessments were ranked from one to four; low, medium, high and very high.

Episodes of aggression were recorded from critical incident reports. Frequency of aggression was rated by the number of times a patient engaged in aggression in the first four weeks of stay. Episodes of aggression that occurred during the study period were then assessed for severity. The severity of aggression for any one incident was determined as not being severe if SWCIPU staff were able to manage the child, and severe if SWCIPU staff required the assistance of staff external to the unit to contain the child.

## Results

A total of 154 children were admitted during the study period. Of these, 20 children under the age of eight were excluded from further analysis. Seven children were excluded due to incomplete risk assessments. Ages of the remaining 127 children ranged from eight to 13 years (mean = 10.35 years,  $SD = 1.32$ ). The sample was predominantly male (72.9%) and comprised largely of planned admissions (75.6%). The mean length of stay was 27 days (range = 1 to 53 days).

Well over half (62.2%) of the children were assigned a high or very high risk rating and just under half (44.9%) were aggressive. Nearly one in five, (18.9%) children engaged in severe aggression. A history of physical aggression was common (87.4%), as was a history of trauma (67%). Half (50.0%) of the children with a primary diagnosis of a disruptive behaviour disorder (DBD) were aggressive. After accounting for multiple diagnoses, children with any diagnosis of a disruptive behaviour (Any DBD) were more likely than those without a diagnosis of a disruptive behaviour disorder to engage in aggression with 58.3% engaging in aggression and 25% engaging in severe aggression.

Non-parametric Spearman rank correlation analyses examined the relationship between risk assessment rankings, the additional risk factors and aggression. Low significant positive correlations were found between aggression and the risk assessment, history of aggression, victim of trauma, and Any DBD. No significant correlations were found between aggression and witnessing trauma or having a primary diagnosis of DBD. The risk assessment was not significantly correlated with severe aggression. Similarly, there were no significant correlations between severe aggression and a primary diagnosis of DBD, nor were there any significant correlations between severe aggression and Any DBD. Witness and victim of trauma were the only variables found to be significantly correlated with severe aggression, although correlations were low.

Binomial logistic regressions assessed the extent to which risk assessment ratings predicted engagement in aggressive behaviour. Variables assessed for predictive validity of aggression represented a significant model,  $\chi^2(3, N = 127) = 23.74, p = .00$ , and accounted for between 17.0% and 22.8% of the variability in aggression. The predictor variable history of aggression was removed from the regression analysis as it was not found to significantly contribute to the variability in aggression. The model correctly identified 64.3% of children that did not engage in aggression and 79.1% that did engage in aggression. The risk assessment was the strongest predictor of aggression and the odds ratio indicated that those with higher risk rankings were 2.15 times more likely to become aggressive. Any diagnosis of DBD and being a victim of trauma were also significant predictors, suggesting that these children were 2.23 and 2.53 times more likely to become aggressive, respectively.

Variables assessed for the prediction of severe aggression represented a significant model  $\chi^2(3, N = 127) = 15.97, p = .00$  indicating that the model was able to distinguish between children that did and did not engage in severe aggression. However, the model only accounted for 11.8% and 19.0% of the variability in severe aggression. Being a victim of trauma was the strongest predictor of severe aggression indicating that those with a history of victimization were 3.19 times more likely to engage in severe aggression. The risk assessment rating was not a significant predictor in the model.

## Discussion

This study supports the use of unstructured clinical risk assessment in predicting engagement in one or more acts of aggression in an Australian child psychiatric inpatient unit. However, as with prior studies [6, 7] the association between risk assessment rankings and aggression was relatively moderate. This was evident by low correlations and the small amount of variance in aggression accounted for by the risk rankings. Even so, these results suggest that unstructured clinical risk assessment is a better indication that an individual will engage in aggressive behaviour than a prior history of aggression or any diagnosis of a disruptive behaviour disorder alone.

In contrast, the risk assessment was not predictive or correlated with severe aggression. Low frequency of severe aggression during the study period may have impacted on the power of the analyses to define this relationship. Another plausible reason is that the variables that impact on the frequency of aggression and those that impact the severity of aggression are quite different and the latter were not included in this study. A history of being a victim of trauma was the only risk factor that remained significant with the severe aggression following logistic regression analyses suggesting that children with a history of being a victim of trauma were more likely to engage in severe aggression.

It was also expected that a history of physical aggression would be predictive of aggression in child inpatients, as past aggression has empirically been found to be the best predictor of aggression [1, 5].

However, although history of physical aggression was correlated with aggression, this variable did not make a significant contribution to the regression model and was subsequently removed from the regression analysis. This departure from previous research results may well be due to the nature of the sample studied. Aggression is the main reason for referral to the SWCIPU. As such the current sample varied little in history of aggression with a substantial proportion (87.4%) of children having a prior history of physical aggression. Nevertheless, a history of physical aggression prior to admission is one of the main risk factors considered by the clinician when conducting the clinical risk assessment and as a result more than half of the children (62.2%) were classified as high or very high risk.

## Conclusion

This research sought to examine the predictive validity of unstructured clinical risk assessment in predicting aggression in child inpatients. Based on professional expertise, prior experience and intuition clinicians are able to successfully predict engagement in aggressive behaviour during patient admission to child psychiatric inpatient units.

## Acknowledgements

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# Risk assessment of self and other directed aggression in adolescent psychiatric inpatient units

## Paper

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## Abstract

Identification of patients at high risk for aggressive behaviour is crucial in the management of aggression in adolescent psychiatric inpatient facilities. In spite of advances in risk assessment practices, empirically validated risk assessment tools are seldom utilised in clinical practice. Furthermore, the development of aggression risk assessment tools has for the most part used adult samples. While there is growing empirical evidence on risk factors for aggression in youth, very few risk assessment measures have been developed for this age group, often resulting in the use of adult tools in young populations. It is important that the risk factors and information in aggression risk assessments are tailored and relevant to young people to provide an accurate indication of risk for the individual. Research on risk assessment practices of aggression was conducted at an Australian adolescent psychiatric inpatient facility. The aim of this study was to examine the predictive validity of unstructured clinical risk assessment in adolescent inpatients by retrospectively examining the association between risk assessment rankings assigned by psychiatric staff on admission and subsequent incidents of self and other directed aggression recorded in critical incident reports by nursing staff occurring within the first four weeks of inpatient stay. Additional risk factors for aggression in adolescent inpatients were also assessed to determine whether unstructured clinical risk rankings were more predictive of engagement in self and other directed aggression than certain risk factors alone.

A retrospective review of patient records was conducted at the Marian Dummond Adolescent Unit during late 2009 for the period September 2006-July 2009. Information collected included admission risk assessment ratings, aggressive incident reports, patient diagnoses, gender and history of aggression and self-harming behaviour. One-hundred and ninety-three adolescents (aged 13-18 years old) were included in retrospective analyses. The hypothesis that unstructured clinical risk assessment would be predictive of self and other directed aggression was partially supported. High risk assessment scores were predictive of engagement in other directed aggression. A history of physical aggression was also found to be predictive of engagement of other directed aggression however it was not as predictive as the risk assessment rating. High risk assessment scores were not predictive of self-directed aggression. A history of engaging in one or more acts of self-harm or suicide was the most predictive of engagement in self-directed aggression during inpatient stay. Female gender also predicted engagement in self-directed aggression.

The results of this research indicate that unstructured clinical risk assessment methods are relatively good predictors of other directed aggression in adolescent inpatient units however are less useful in successfully predicting self-directed aggression in this population. It is possible that unlike other directed aggression, self-harming behaviour is heavily dependent on environmental factors and the admission to the inpatient unit removes these triggers from the individual's environment.

## Educational goals

1. Unstructured clinical risk assessment is more predictive of frequency of other directed aggression than a history of physical aggression alone in an adolescent psychiatric inpatient unit however was not predictive of engagement in self-directed aggression.
2. A history of engaging in one or more acts of self-harm was the best indication that an adolescent inpatient would engage in self directed aggression during inpatient stay.

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# Assessing aggression risks in patients of the ambulatory mental health crisis team

## Paper

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**Keywords:** Aggression, violence, community mental health services

## Introduction

The prediction of violent behaviour of psychiatric patients is not an easy task. Especially being on duty in a crisis team of the Mental Health Service can be a highly emotional and stressful experience. Pressed for time and providing a 24-hour service, team members often have to make major decisions that don't necessarily have the agreement of all the parties concerned. The East Brabant Mental Health crisis team felt they needed to find out more about the risk factors associated with aggressive behaviour of their patients during outreaching crises contacts. In order to prevent dangerous situations, a method to assess risks, before patients in psychiatric crises are contacted might be helpful.

An overview of the literature shows that in forensic psychiatry in particular much has been learned already about methods for predicting violent or delinquent behaviour. Methods for risk assessment, can be divided into various types (Hildebrand, 2004; De Vogel, 2005), such as clinical judgment, fully based on the knowledge and experience of the caregiver involved, and actuarial risk assessments such as the Violence Risk Appraisal Guide of Harris, Rice and Quinsey (in: Quinsey *et al.*, 1998) that 'calculate' risk solely on the basis of certain objectively quantifiable factors. Finally a method exists that could be described as a combination of the former two, called Structured Professional Judgments. Such a standardized risk assessment is carried out by an expert with the help of a checklist with scientifically grounded risk factors, as is the case with Historical, Clinical and Risk indicators (HCR-20; Webster *et al.*, 1997).

Scientific research shows that actuarial risk assessment tends to be more accurate than clinical predictions (Monahan & Steadman, 1994; 2001; Grove *et al.*, 2000; Borum, 1996). Research done by De Vogel (2005) further indicates that structured clinical risk assessment may be superior to purely actuarial risk assessment. In using structured clinical risk assessment instruments, static factors (such as history of aggression), dynamic factors, which can vary (such as the patient's current condition), and sometimes also factors concerning situation or context (such as a patient's living environment) are taken into account in relation to one another.

To summarize, the literature shows that there are many instruments available for estimating the risk of aggression in various settings, but that there is no single instrument that is suitable for all situations. In addition, most of the above mentioned instruments are not intended for predicting risks in the short term. It would appear that there are fewer instruments available for predicting aggression in the short term (up to one week) (Nijman *et al.*, 2002). One exception is the Broset-Violence-Checklist (Almvik *et al.*, 2007; Bjorkdahl *et al.*, 2006) which is used in the closed acute psychiatric ward.

As it turns out, there are few specific instruments for psychiatric crisis teams when it comes to predicting risks prior to crisis visits. A possible reason for the difficulty in making such assessments is that crisis team members often do not know the patient in question, which means they have to get by on the rather scanty information provided by others (often the general practitioner) during the patient's registration. This study seeks to find whether it is possible, on the basis of such limited information, to predict the risk of the patient displaying aggressive behaviour during the crisis visit. So we tested the predictive validity of the Checklist Risk Crisis intervention (CRC) used in the 24-hour psychiatric crisis service. This instrument was specially designed to assess aggression risks of outpatients in psychiatric crisis, before the team member goes to visit the patient.

## Method

The study was carried out by the members of the crisis team of Mental Health Institute Oost-Brabant in the Netherlands. The crisis team members completed the CRC before all outreaching visits to patients in

psychiatric crisis (March 2006 to April 2008). In addition, if patients showed any aggressive behaviour during the visit, this was documented using the Staff Observation Aggression Scale-Revised (SOAS-R; Nijman et al., 1999). Also the list of team members being on duty was available, as well as information on the psychological profiles (NEO-PI-R), from the crisis team members themselves.

The CRC contains a number of items that may be related to an increased risk of aggression. For instance:

- Who called in the crisis team?
- What is the first assessment of the patient's condition/diagnosis?
- Are there any other patient-related risk indicators such as prior aggression, possible paranoid delusions, etc.?
- Are there any indicators of increased risk in the patient's living environment, such as the presence of dangerous pets, possible weapons, etc.?

## Results

An earlier study concerning the years 2003-2005 (Penterman & Nijman, 2009), indicated that with the items of the CRC, about 90% of the outreaching crisis contacts might be correctly classified as involving aggressive patients or not. In the workshop more recent results of research conducted in the period March 2006 till April 2008 will be presented. Potential associations between psychological characteristics of the crisis team members and the aggressive incidents will also be addressed.

## Discussion

Various CRC items were related to patient aggression, as documented by the crisis team members after visits. Many of these relations seem to possess a considerable amount of 'face validity', for instance the relation between reports made by the police and aggressive behaviour during crisis team visits. In addition, many of the found associations correspond with what we already know from the literature about predicting aggression, such as the fact that prior aggression is one of the best predictors of future aggression.

Similarly, a lack of significant associations between aggression and some of the variables studied might be of interest also to psychiatric crisis teams. For example, the present study indicated that unfamiliarity with the patient before the visit was not significantly related to a heightened risk of aggression. Although unfamiliarity with the patient will mean a higher level of unpredictability of the situation, this does not mean that more aggression actually occurs in these situations (on the contrary, this relation rather seems to be likely to exist in the opposite direction).

Either way, since the CRC needs to be completed prior to each crisis visit, more routine and standardization will be incorporated into the assessment of crisis team caregivers of possible risk factors. Also the relation between personality profiles (NEO-PI-R) and aggression will be discussed.

## Conclusions

1. The clinical view together with the structured checklist (i.e. the CRC) predicted aggressive behaviour of outpatients rather good.
2. The results indicate that the use of the so-called Checklist of Risks Crisis team (i.e., the CRC) presented in advance of outreaching crisis team visits is useful in assessing aggression risks. This may create more possibilities for specific precautionary measures, such a calling in police assistance.

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# PCL-R defined psychopathy and the prediction of inpatient behaviour

## Paper

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## Abstract

The construct of psychopathy is one of the most important clinical constructs in the prediction and management of problem behaviours in forensic settings. Recent exploration of the construct of psychopathy as defined via the Psychopathy Checklist-Revised (Hare, 2003) has suggested that the construct can be subparcelled into four facets, which reflect Interpersonal, Affective, Lifestyle, and Antisocial features of the personality disorder. We therefore examined how these separate features of psychopathy were related to problem behaviours (namely, physical aggression, verbal aggression, self-harm, self-neglect and being victimised) in a small sample of mentally disordered patients in an in-patient setting.

We obtained data from both patient files and clinical interviews at sites in South Wales. The PCL-R was scored by trained raters based on this information. The patients were followed for up to 6 months or until discharge from the inpatient facility (many were acutely mentally ill patients with relatively short stays). Incidents were scored according to a coding scheme called the Aggression Vulnerability Scale (AVS) that records both the frequency and severity of events across a range of event types.

Overall, total PCL-R score was not a good predictive of these behaviours. However, this was (often) because of differential performance of the facets. For all problem behaviours, high Facet 3 (Lifestyle) was predictive of problems (AUCs .61-.73). On the other hand, high scores on Facet 1 (Interpersonal) were predictive of a reduced number of problems. Facet 4 (Antisocial) was predictive of verbal aggression, but predicted a lack of being victimised. The complex pattern of results shows that the facets of psychopathy, alongside the global PCL-R score, should be considered when predicting and managing difficult behaviour to self and others in mentally disordered patients.

## Educational goals

1. To understand the facets of psychopathy and their differential prediction of behaviour.

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# Correlations among mental illness, substance abuse, and partner abuse: The profile of violence, service utilization, and consequences

## Paper

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**Keywords:** Mental illness, Substance abuse, partner abuse, negative psychological consequences

## Introduction

Do mental disorders cause violence? This question has been a public concern and has caused controversial debate. Based on the review by Solomon, Cavanaugh, & Gelles (2005), the rates of violence toward family members by a relative with a mental illness is between 10% and 40% since diagnosis of the disease. The 5-year prevalence of non lethal violence in Britain was 12%. The risk of violence was substantially increased by alcohol dependence, drug dependence, and antisocial personality disorder (Coid, Yang, Roberts, & Ullrich, 2006). The conclusions of the existing research revealed: (1) mental illness appears to be a risk factor for violence in the community, however, the absolute risk for violence posed by mental illness is small; (2) no clear understanding of the causal mechanisms that produce the association between mental illness and violence currently exists; (3) substance abuse raises the risk of violence by people with mental illness substantially (Frenza, Gilover, Hutchings, & Radack, 1999; Silver, 2006).

Drugs and alcohol are strongly associated with violence. Among psychiatric patients, a coexisting diagnosis of substance abuse is a strong predictor of violence. In the cross-sectional study by Coid et al. (2006), hazardous drinking was associated with 56% of all reported violent incidents. Steadman et al. (1998) found that substance abuse tripled the rate of violence in non-patients and increased the rate up to five times in psychiatric patients.

Based on the review by Solomon et al. (2005), more than half of the assaults committed by people with mental illness were against family members, primarily parents and spouses. This finding leads to the concern of the association between mental illness, substance abuse and domestic violence. However, there has been paucity concerning what types of domestic violence might be committed by these two populations. Nor do we know what psychological consequences such domestic violence might be associated with. Thus, this study aimed to explore these potential associations, specifically focusing on partner abuse.

The existing research findings have shown that partner abuse could have negative psychological consequences, especially depression and PTSD (Hicks & Zhonghe, 2003; Lundy & Grossman, 2001). As for the differential effects of each type of abuse and levels of negative effect, no definite conclusions have been made. Thus, this study had three aims: (1) to test the correlations between mental illness and substance abuse and types of partner abuse; (2) to scrutinize the psychological consequences of violence in their association with these two problems; (3) to examine the associations between types of partner abuse and negative psychological consequences.

The negative psychological consequences focused in this study were depression and negative appraisal of current situation. The inclusion of the former was due to the fact that it is the primary mental health response and the primary reason for battered women going to a health care setting (Campbell & Soeken, 1999). The latter is important in that it addressed how battered women felt after they coped with partner abuse. Moreover, to achieve the third aim, some variables that appear to be significant for the dependent variables in question were taken into account while multivariate analysis was conducted, including demographic variables (education, income, and age), violence variables, social support, coping strategy, and social service variables.

## Method

This study conducted a survey through self-administered questionnaires on women with experiences of partner abuse. Each participant was given a gift voucher (worth US\$6.30) to a convenience store.

## Participants

The sources of the participants were from the Centers of Prevention and Intervention for Domestic Violence and private sectors in each county or city in Taiwan. The Domestic Violence Law enacted in 1998 and there are 24 Centers for Domestic Violence Prevention and Intervention (DVPI) in Taiwan. Twenty-three centers agreed to collaborate with the investigator, and the total number of social workers available was 316. The investigator asked social workers to recruit the participants for this study. A total of 265 social workers were willing to contact and invite their clients to participate in this study. The criterion for inclusion was that the clients had received social services and had either terminated services or their lives had remained relatively stable and would soon have services terminated. As a result, 392 questionnaires were given to the clients through their social worker. Within a three month period, the process yielded a valid sample of 191 participants.

## Measures

*Demographic variables* The variables included actual age, marital status, living with others or not, education, employment, and income.

*Mental illness and substance abuse of abusers:* This variable was measured by asking the participants the causes of domestic violence. Mental illness and substance abuse of the abuser each was one of the causes. The response category was: yes or no.

*Social support* Two questions were designed to measure this variable. One asked the perceived sufficiency of the support from family members, relatives, friends, and neighbours within a year and the other asked the satisfaction of that support. The response categories of each were (1) very insufficient (unsatisfied), (2) insufficient (unsatisfied), (3) fair, (4) sufficient (satisfied), (5) very sufficient (satisfied). The correlation between the two measures was 0.79; thus, a summation score was computed to represent the level of perceived support.

*Coping strategy:* This variable was measured by an 18-item scale developed by Bell (1977). This scale taps two types of coping strategies: emotional-focused and behavior-focused coping. Each item was rated on three response categories: never (0), once in a while (1), and often (2). A mean summation score was computed for emotional coping and behavioral coping, respectively

*Experience of partner abuse:* Five variables were used to tap the domains of this concept. 1. Types of violence included the four types: physical abuse (e.g. beating, being pushed), verbal abuse (e.g. cursing, demeaning words), psychological abuse (e.g. disturbing one's sleep, controlling ones' action), and sexual abuse (e.g. forced sexual intercourse). The participants were asked to check the types they experienced. Each item had a yes or no response. 2. Intensity of abuse levels, with four levels of response categories: at least once a week, 2-3 times a month, once per month, once every 2-3 months. 3. Fear of abuser was measured by asking the participant to what extent she feared her abuser while in his presence. The response category was: no, a bit, and very much. 4. Negative impact from abuse was measured by ten items of impact designed for this variable, such as feeling disappointed about marriage, work disruption due to being abused, etc. The items checked were counted as the negative impact score. 5. One question asked if the participant was still being abused. The response category was: yes or no.

*Social service:* There were four service variables used in this study: 1. "Service duration" was the number of months the subject had been receiving the service from their social worker. 2. "Intensity of contact" was measured by four response categories as "intensity of abuse". 3. "Relationship with social worker" included six items which were designed to tap this concept, including to what extent the participant trusted the social worker, if the participant thought that her worker cared about her, if the participant thought the worker understood her, etc. The response category was a three-point scale, ranging from "a little" to "very often." The internal consistency among the six items was 0.81. The responses of "very often" among items were counted as a good relationship score. 4. "Number of service types" was indicated by the participants checking the types of service received, including consultation, support, assistance, shelter, rehabilitation and therapy, and learning facilitating services. The checked items were counted to represent this variable.

*Depression* The Center for Epidemiologic Depressive Mood Scale (CES-D; Radloff, 1977) was utilised to measure depression.

*Negative appraisal* Five items were designed to capture this variable based on the investigator's previous in-depth interviews with women with partner abuse experience. The items included: (1) feeling inferior due to past abused experience, (2) feeling inferior due to the failure of marriage, (3) feeling disappointed

and fear of marriage, (4) feeling regret on reporting domestic violence, and (5) feeling not sure if I can get by. Each item was checked as “yes” or “no,” and items checked as “yes” were counted as the total score.

## Data analysis

The investigator conducted MANOVA to examine the association between types of abuse and the two dependent variables while demographic characteristics, violence variables, protective variables, and social service were taken into account.

## Results

### Sample characteristics

The average age of the 191 participants was 39.3 years, ranging from 19 to 75. Most of them were married (65.3%) and living with others (91%). The majority of them held an education of either high school (41%) or junior high or less (38.8%). Most of the participants were employed (46.1%), and 26.2 percent were not employed. A bit over two-thirds of them earned monthly income between US\$315–629.

### Mental illness and partner abuse

Among the participants, 18 (9.5%) indicated that their partner had mental illness. The  $\chi^2$  analysis revealed significant correlation was found between mental illness and psychological abuse. Among the participants who indicated that the abusers had mental illness, 88.9% reported experiencing psychological abuse as compared to 64.5% of their counterparts. In addition, mental illness significantly associated with sexual abuse. Among the participants who indicated that the abusers had mental illness, 44.4% reported experiencing psychological abuse as compared to 22.7% of their counterparts. Furthermore, there was no significant correlation between mental illness and other violence variables.

### Substance abuse and partner abuse

In the sample, 91 participants (47.9%) reported that their partner had a substance abuse problem. The results showed that there were significant associations between substance abuse and psychological abuse and sexual abuse. Among the participants who indicated that the abusers had a substance abuse problem, 74.7% of them experienced psychological abuse as compared to almost 60% of their counterparts. Moreover, the former reported higher percentage (31.9%) of sexual abuse as compared to their counterparts (18.2%). No association was found between substance abuse and physical abuse and verbal abuse ( $p > 0.05$ ). Partners with a substance abuse problem significantly associated with higher intensity of violence compared to their counterparts. For example, 40.2% of the former reported experiencing violence at least once a week as compared to 21.4% of the latter. Substance abuse had no association with other violence variables ( $p > 0.05$ ).

### Mental illness, substance abuse, and negative psychological consequences

The results revealed that overall there was no significant association between either mental illness or substance abuse and negative psychological consequences. ( $p > 0.05$ ), except for the one between mental illness and more negative appraisal ( $t=-2.886$ ,  $p < 0.05$ ).

### Partner abuse and negative psychological consequences

Only psychological abuse was significantly associated with a higher depression score. On the other hand, the association between the other three types of abuse and depression was not significant. Verbal abuse, psychological abuse, and sexual abuse each significantly associated with more negative appraisal as compared to those who with no such abuse.

### The correlates of depression and negative appraisal

The results of MANOVA indicated that six independent variables significantly associated with the linear function of depression and negative appraisal: sexual abuse ( $\eta^2=0.039$ ), still being abused ( $\eta^2=0.043$ ), negative impact from abuse ( $\eta^2=0.122$ ), emotional coping ( $\eta^2=0.159$ ), behavioral coping ( $\eta^2=0.123$ ), and social support ( $\eta^2=0.177$ ).

For the individual dependent variable, all of the predictors accounted for 48.9% of the variance in depression. Psychological abuse and sexual abuse were significantly and almost equally associated with depression; nevertheless, the effects were weak ( $\eta^2=0.028$  and  $0.026$ , respectively). As expected, participants with psychological abuse had a higher depression score than their counterparts. However, interestingly, participants not being sexually abused had a higher depression score than their counterparts while other variables were taken into account. The other four significant variables had more effects on depression, especially social support ( $\eta^2=0.164$ ) and emotional coping ( $\eta^2=0.159$ ), followed by behavioral coping ( $\eta^2=0.119$ ) and negative impact ( $\eta^2=0.049$ ). Social support and behavioral coping negatively

associated with depression; whereas the association between emotional coping and negative impact and depression were positive. Obviously, social support and coping were stronger correlates of depression than violence variables.

All of the independent variables accounted for 32.3% of the variance in negative appraisal. None of the four types of abuse was significant. Three variables were significant correlates of negative appraisal: negative impact from abuse ( $\eta^2=0.114$ ), still being abused ( $\eta^2=0.043$ ), and behavioral coping ( $\eta^2=0.042$ ).

## Discussion and conclusions

The findings of this study revealed that mental illness and substance abuse seemed to correlate with higher incidence of psychological abuse and sexual abuse but not with physical abuse and verbal abuse. The mechanism for such an association cannot be drawn from this study. However, the insecure attachment, financial dependency, threats of suicide, and functional impairment affiliated with these two problems might cause conflicts and deteriorating the relationship between couples. Psychological abuse and sexual abuse might be used more as ways to ensure their control in the relationship and meet their needs.

Overall, mental illness and substance abuse were not directly associated with negative psychological consequence. Psychological abuse and sexual abuse appeared to be associated with depression, however the effects were weak. Taking the findings together, the investigator hypothesizes that mental illness and substance abuse might have an impact on depression via their effects on psychological and sexual abuse. However, the effects may be weak.

The important findings in this study were that persons with mental illness and substance abuse were at a higher risk of committing psychological abuse and sexual abuse against their partners. Thus, practitioners working with women who had experienced partner abuse should assess whether the women were exposed to these two types of abuse and their potential influence on depression. Nevertheless, the protective factors (behavioral coping and social support) deserve more attention because of their possible impact on the mitigation of depression of this population.

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# Protective factors for violence risk. Clinical results with the SAPROF

## Poster

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## Abstract

The Structured Assessment of PROtective Factors for Violence risk (SAPROF) was developed as a positive and dynamic counterbalance to commonly used risk factors in forensic psychiatry, like those in the HCR-20 (Webster, Douglas, Eaves & Hart, 1997). The instrument was developed in response to the demand of clinicians in forensic psychiatry for more focus on positive, changeable and treatment related issues in risk assessment. De Vogel, De Ruiter, Bouman and De Vries Robbé (2007; English Version 2009: German and Italian versions published in 2010, Spanish, French, Swedish, Norwegian, Danish, Portuguese and Russian versions available in 2011) developed the SAPROF as a positive supplemental approach to the assessment of risk of future (sexually) violent behavior. The SAPROF has been implemented since 2007 into general risk assessment practice for violent and sexually violent offenders in the Van der Hoeven Kliniek in The Netherlands, to complement traditional risk assessment with the HCR-20 and SVR-20. Previous research results with the SAPROF in Dutch samples of violent and sexually violent offenders showed good inter-rater reliability and good predictive validity for no violent recidivism after treatment and significant improvements in SAPROF scores during treatment. The present study focuses on the use of the SAPROF in clinical practice. Results of a multiphase prospective study with samples of male and female, violent and sexual offenders will be shown to illustrate the value of the SAPROF for the treatment of (sexually) violent offenders.

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## Educational goals

- To learn about protective factors for violent offenders.
- To learn about the Structured Assessment of Protective Factors for violence risk (SAPROF).
- To learn about new clinical research results with the SAPROF.

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# Working with the Structured Assessment of Protective Factors for violence risk (SAPROF), instrument for the assessment of protective factors in (forensic) clinical practice

## Seminar

*Michiel de Vries Robbé, Vivienne de Vogel, Ellen van den Broek, Kirsten Corporaal Van der Hoeven Kliniek, Utrecht, The Netherlands*

## Abstract

This Seminar comprises an extended 3 hour SAPROF workshop.

The Structured Assessment of Protective Factors for violence risk (SAPROF; Dutch Version 2007; English Version 2009; German and Italian versions published in 2010, Spanish, French, Swedish, Norwegian, Danish, Portuguese and Russian versions available in 2011) is an instrument for the assessment of protective factors. It is a structured professional judgment checklist designed to be used in combination with other structured risk assessment instruments like the HCR-20 (Webster, Douglas, Eaves & Hart, 1997). The addition of the structured assessment of protective factors aims to complement the risk assessment process creating a more balanced assessment for future violence risk. The dynamic factors of the SAPROF can be helpful in formulating treatment goals, evaluating treatment progress and stimulating positive risk communication. In doing so, protective factors enable a more positive approach to violence prevention. Previous research results with the SAPROF in samples of violent and sexually violent offenders showed good inter-rater reliability and good predictive validity for no violent recidivism after treatment and no violent incidents during treatment. Moreover, SAPROF scores showed significant improvements during treatment and the positive development of protective factors during treatment proved predictive of less violent recidivism.

This workshop will focus on the additional value of protective factors for clinical practice. Participants will be introduced to the SAPROF and will gain first hand practice working with the instrument. Advantages for risk assessment and risk management will be discussed and new clinical research results with the SAPROF will be presented.

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## Educational goals

- To learn about protective factors.
- To learn about the SAPROF.
- To demonstrate practical working with the SAPROF.
- To learn about research results with the SAPROF.
- To learn about using structured professional guidelines in clinical practice.

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# Violence risk assessment and management practices in inpatient psychiatry units

## Paper

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**Keywords:** Violence, risk assessment, risk management, inpatient psychiatry

## Abstract

Advances have been made in violence risk assessment and management in forensic mental health, yet it is unclear the extent to which these advances have been incorporated into daily practices of civil mental health. Some suggest that civil mental health settings are capable of successfully transferring knowledge of violence risk assessment and management into practice. While others suggest that these settings face significant challenges when attempting to do so. The purpose of this study is to survey the largest civil mental health system in Western Canada to determine what these settings are actually doing with respect to the practice of violence risk assessment and management. Key informants from 13 inpatient psychiatry units took part in semi-structured interviews about their current risk assessment and management practices. Results suggest that few inpatient psychiatry units used established instruments for screening and assessing violence risk and many relied on unstructured professional judgment. Although inpatient psychiatry units used many strategies to manage short-term risk of violence, they reported using more restrictive management strategies that are reactive in nature rather than less restrictive management strategies that are preventative in nature. Alternatively, inpatient psychiatry units used few strategies to manage long-term risk of violence and tended to rely on communicating in general terms as opposed to making specific recommendations. The findings of this study will be used to highlight promising practices, areas for future improvement, and potential facilitators and barriers to advancing systems change in civil mental health.

## Introduction

Although the vast majority of individuals with mental illness do not commit violence, serious mental illness is a major risk factor for violence. A recent meta-analysis of studies published in North America suggests that between 17% and 50% of committed psychiatric inpatients have a history of violence (Choe, Teplin, & Abram, 2008). Placing this in a broader context, research consistently demonstrates that individuals with serious mental illness are at approximately double the risk of being violent in comparison to individuals without serious mental illness (Douglas, Guy, & Hart, 2009).

Violence perpetrated by individuals with serious mental illness has major implications for victims and perpetrators, as well as the broader society. Victims of violence often suffer from physical and psychological trauma (Flannery, 1996; Gerberich et al., 2004). Perpetrators of violence may face increased stigma leading to limited access to services and decreased quality of care (Hodgins et al., 2007; Kingma, 2001). Violence results in a financial burden to criminal justice, social service, and health systems as well as decreased productivity, increased absences and high turnover for staff when violence spills over into the workplace (Fernandes et al., 1999; Jackson, Clare, & Mannix, 2002).

Due to the potential costs associated with violence, assessing and managing violent ideation and behaviour is considered one of the core competencies for practicing clinicians (Simon & Tardiff, 2008). Mental health professionals are obliged under statutory law, common law, and professional codes of ethics to assess for and respond appropriately to signs of violence risk. Professionals who take care to recognize obvious signs of violence risk and to respond appropriately significantly decrease their exposure to legal liability.

Major advances have been made in violence risk assessment and management in forensic mental health, yet it is unclear the extent to which these advances have been incorporated into daily practices of civil mental health. Some suggest that civil mental health settings are capable of successfully transferring knowledge of violence risk assessment and management into practice (McNeil, et al., 2008). While others suggest that these settings face significant challenges when attempting to do so (Elbogen, Mercado, Scalara, & Tomkins; 2002, Higgins, Watts, Bindman, Slade & Thornicroft, 2005).

The purpose of this study is to survey the largest civil mental health system in Western Canada to determine what these settings are actually doing with respect to the practice of violence risk assessment and management. The findings of this study will be used to highlight promising practices, areas for future improvement, and potential facilitators and barriers to systems change.

## Method

### Participants

This study examined the violence risk assessment and management practices of the largest civil mental health system in Western Canada, consisting of 13 inpatient psychiatry units, between July and August 2009. The number of beds per unit ranged between 4 and 100 beds (Mdn = 20 beds), the number of cases admitted ranged roughly between 34 and 887 (Mdn = 245 patients), and the average length of stay ranged between 1 and 80 days (Mdn = 12 days). Specifically, this study explored the responses of 11 key informants who represented the disciplines of nursing (64%), psychiatry (27%), and social work (9%).

### Procedures

**Recruitment:** The medical manager and patient services coordinators of each unit in the health region was sent a letter informing them about the purpose and nature of the study, describing what their participation would involve, and requesting the participation of their unit. One week after sending the letter, the medical manager and patient services coordinator were contacted by phone to invite their unit to participate in the study and to request the participation of at least one key informant who was familiar with the violence risk assessment and management practices of their unit. Arrangements were made with each key informant identified to take part in an interview.

**Measures:** A semi-structured interview that was developed based on a review of the research literature and consultation with experts was conducted with key informants from each unit. The interviews lasted approximately one hour and consisted of several major sections. Specifically, key informants were asked questions about policies and procedures related to violence risk, screening and assessing for risk of violence, practices for managing risk of violence, standard communication about violence risk, knowledge and attitudes about violence risk assessment and management in their unit, and strengths and weaknesses of their units approach to assessing and managing for violence risk.

## Results

### Violence Risk Assessment

All units (13) reported screening for risk of violence upon admission to their units. However, few units used a formal screening instrument (15%), while the remaining used either routine questions and observations (70%) and unstructured professional judgment (15%). See table 1 for a summary of the presence and quality of violence screening across units.

*Table 1 Presence and Quality of Violence Screening and Violence Risk Assessment*

Inpatient Psychiatry Unit	Violence Screening	Violence Risk Assessment
Unit 1	)	*
Unit 2	*	*
Unit 3	0	*
Unit 4	0	*
Unit 5	0	*
Unit 6	0	*
Unit 7	)	)
Unit 8	0	*
Unit 9	0	*
Unit 10	0	0
Unit 11	0	*
Unit 12	*	0
Unit 13	0	0

) = Definite Violence Screening/Violence Risk Assessment; 0 = Partial Violence Screening/Violence Risk Assessment; \* = No Violence Screening/Violence Risk Assessment

Alternatively, few units (4) reported conducting violence risk assessments during a patient's stay on their unit. Of those, only one unit reported using a formal risk assessment instrument (8%) while the remainder (92%) reported relying on unstructured professional judgment to assess risk for violence. See table 1 for a summary of the presence and quality of violence risk assessment across units.

### **Violence Risk Management**

Units used many strategies to manage short-term risk for violence during a patient's stay on their unit ( $m = 6.54$  and  $SD = 1.45$ ). In general, more restrictive management strategies were reported being used that tend to be reactive in nature (e.g., medication, seclusion, restraints, security), rather than less restrictive management strategies that tend to be preventative in nature (e.g., talking, observation, object removal, reducing stimulation).

In comparison, units reported using fewer strategies to manage long-term risk for violence following a patient's stay on their unit ( $m = 1.92$  and  $SD = 1.32$ ). Most commonly units reported communicating generally about risk for violence (100%). Less commonly, units reported recommending specific management strategies for violence risk including monitoring (23%), treatment (23%), supervision (38%), and safety planning (8%).

### **Violence Risk Communication**

With respect to mode of violence risk communication, units reported most frequently using verbal or written communication (100%) and least frequently used electronic or visual communication (8%). They were most likely to communicate with mental health professions and least likely to communicate with care providers.

With respect to content of violence risk communication, units were most likely to share information about recent history of violence and risk factors for violence and least likely to share information about recommended management strategies and general statements of the risks posed. Units did not share information about clinical formulation of violence, plausible scenarios of future violence, or specific summary judgments, all of which are considered critical components of violence risk assessment and management.

## **Discussion**

### **Promising Practices and Needed Improvements**

This study highlighted several promising practices and needed improvements to violence risk assessment and management in inpatient psychiatry. Promising practices some units reported using included the use of formal screening instruments, nonrestrictive management strategies, and multiple modes of communication. Needed improvements most units could benefit from included implementation of established violence risk assessment instruments, evaluation of training for prevention and management of violence risk, and development of guidelines for communication and documentation of violence risk.

### **Implications for Practice**

Given that previous research and experience has identified potential barriers to making needed improvements to practices in inpatient psychiatry, there is a need to determine how to effectively implement violence risk assessment and management strategies into clinical practice. For instance, will systems change be most effectively accomplished through additional research and training, the development of new positions or policies, or improved leadership or political pressure?

### **Implications for Research**

In the event that violence risk assessment and management practices are effectively implemented into inpatient psychiatry, there is a need to examine the extent to which implementation of violence risk assessment and management strategies improve clinical practice. For instance, do these practices enhance the detection and documentation of past violence, improve communication about and prediction of violence risk, and lead to better management and prevention of future violence?

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# Chapter 13 – Service user perspectives on violence

## Mental health and the movies

### Workshop

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From its inception, cinema has been used to inform and persuade as well as to entertain. And from its earliest beginnings mental illness and psychiatric treatment have been a reoccurring theme, for example texts such as *Movies and Mental Illness* (Wedding, Boyd, and Niemiec, 2009) and websites such as *Psychflix* list hundreds of films that portray some aspect of mental health. Within this larger genre is a subgenre that explores inpatient psychiatric hospitalization. These films provide audiences with a view of an environment and culture few will directly experience: “movies about the mentally and neurologically ill are a unique and engaging breed of film - there is something magnetic about the subject matter.” (Gabriel, p. 1, 2000)

It has been suggested that films about inpatient mental health influence the public’s perception of mental illness, treatment, the consumer of mental health services, and public policy. Rissmiller and Rissmiller (2006) indicate that abuse of patients as depicted in *One Flew Over the Cuckoo’s Nest* contributed to public policy reforms whereas Gabriel (2000) notes that these films help to reinforce the notion that individuals with mental illness are alien, weird, and violent. Several studies suggest that these movies can influence attitudes toward mental illness and not always favorably. For example, a study by Walter, et. al. (2002) found that after viewing films that included use of ECT medical students were less inclined to support the use of this treatment. A study in which college students viewed a made-for-television movie about a mentally ill killer resulted in less favorable attitudes toward mental illness and community-based care of the mentally ill (Wahl and Lefkowitz, 1989).

Four movies were reviewed to examine how they portray the inpatient mental health experience: *One Flew Over the Cuckoo’s Nest* (1975), *Chattahoochee* (1989), *Mr. Jones* (1993), and *Girl Interrupted* (1999). Of interest was how realistically the inpatient experience is depicted, for example, the physical environment, relationships between peers and care-givers, and the nature of violence within the inpatient setting.

In all four films the protagonists are presented as troubled and at times overwhelmed by their problems, but otherwise cognizant and able to navigate the mental health environment without cognitive distortions; in other words they are as much ‘one of us’ as they are ‘one of them’. In *One Flew Over the Cuckoo’s Nest* the main character, Randle McMurphy (Jack Nicholson) is a malingerer, who feigns mental problems in order to be transferred from prison to what he believes is a cushier setting, i.e., a state mental hospital. Based on true events, *Chattahoochee* is the story of Emmett Foley (Gary Oldman), a Korean War vet suffering from post-traumatic stress disorder. After brandishing a gun while trying to commit suicide, he is committed to the state’s mental hospital for the criminally insane in Chattahoochee, Florida. *Girl Interrupted* is based on the memoir of Susanna Kaysen (Winona Ryder) whose suicide attempt in 1967 led to a diagnosis of borderline personality disorder and a two year hospitalization. *Mr. Jones* (Richard Gere) provides a more contemporary rendering of inpatient treatment. Diagnosed with bipolar disorder, Gere shuns medications, noting that euphoria is not a handicap.

The complexity of interpersonal relationships within an institutional setting is well represented in all four films. The protagonist is presented as more lucid than the other patients and thus capable of befriending and protecting his or her more vulnerable peers. For the most part, care-givers are represented as either supportive and altruistic, such as the empathic and helpful Dr. Wick (Vanessa Redgrave) in *Girl Interrupted* or concerned psychiatrist Dr. Bowen (Lena Olin) in *Mr. Jones* or controlling and domineering, such as *Cuckoo’s Nest* infamous Nurse Ratched (Louise Fletcher). For the most part, psychiatric technicians appear as back-ground figures, kept around to maintain order and who appear in numbers when a patient must be subdued and restrained. Even less benevolent are *Chattahoochee*’s prison guards, whose cruelty ranges from verbal jeering and threats to beating of physically and mentally impaired inmates.

Finally, all of the films present violence in the psychiatric setting, initiated by both patients and staff including violent confrontations between the protagonists and authority figures. In many cases the films succeed in explicating the motivation behind the behavior. In *Chattahoochee* Foley attacks guards after he witnesses them beating to death an older, confused, and physically frail patient. Barricading himself in a corner, Foley reenacts the trauma that led to his hospitalization - fending off his attackers much the way he did as a foot soldier during the war. In *Cuckoo's Nest*, Nurse Ratched's tyrannical and manipulative behavior leads Billy Bibbit to commit suicide. McMurphy, in a frenzy of rage and despair, responds to his friend's death by choking Nurse Ratched nearly to death and is only stopped when staff beat him unconscious. The filmgoer is left with the question of who is more disturbed - the patients or the care-givers?

Both *Mr. Jones* and *Girl Interrupted* provide ample scenes of violent behavior, physical restraints and seclusions. One scene in *Mr. Jones* could be used as a teaching tool in aggression management training. Dr. Bowen (Lena Olin) observes a patient who has gotten off the ward and is clearly upset. Her initial approach is to use a supportive tone of voice. She learns the man is distressed because he did not receive a visit from a family member. Noting his increased agitation, she encourages him to return to the ward with her. However, she makes several tactical errors: she does not call for assistance and in an attempt to comfort the man moves into his personal space. The patient responds by grabbing her and begins to choke her, lifting her completely off her feet. Only the intervention of the protagonist saves the doctor. He sets off the fire alarm in order to summons help and then is able to talk the other patient into releasing the doctor. When the psychiatric attendants arrive they see both Mr. Jones and the other patient and, not asking questions, immediately tackle and restrain both.

Review of these four films suggests that contemporary (American) cinema does provide a realistic depiction of inpatient psychiatric hospitalization, albeit with dramatic flair. In particular, all of the movies portray organizational cultures based on external control of service recipients which can contribute to confrontations and aggressive behavior.

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# An audit upon use of advance statements surrounding management of disturbed behaviour on a UK Psychiatric Intensive Care Unit (PICU)

## Poster

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## Abstract

### Aim

Within one PICU to audit use of a mechanism that formally records individual patient preference in management of episodes of acute disturbed behaviour.

### Background

PICUs traditionally manage patients who can display disturbed behaviour. Recent guidance has advocated patient engagement in outlining preferences regarding management strategies should they display such behaviour. Many patients have a clear preference regarding this (Veltkamp et al, 2008; Van Critters et al, 2007) and the concept has been advocated within UK national guidance (NICE, 2005) that has outlined a framework for engagement of patients. The guidance further asserts that "Service users identified to be at risk of disturbed / violent behaviour should be given the opportunity to have their needs and wishes recorded in the form of an advance directive (sic)." which "should... clearly state what intervention(s) they would and would not wish to receive."

One PICU introduced of a formal method of recording patients' preferences if they display disturbed behaviour. This consisted of, at the earliest reasonable opportunity following transfer / admission, a member of the multi-disciplinary team (medical or nursing) interviewing the patient and providing information about rapid tranquillisation, seclusion and physical restraint. The process also included the member of staff completing, with the patient, a form outlining the patient's preferences of management should they become disturbed. Should the patient display obvious lack of capacity to understand, it was decided to regularly review this on an at least daily basis. The form was used as a basis for discussion and as evidence that a patient had received relevant information.

### Method

Two sets of fifteen retrospective case note analyses in an audit cycle. The following standards were used:

1. All patients admitted should receive the opportunity to complete the advance statement documentation.
2. If displaying a need for management of disturbed behaviour that is above de-escalation measures, a patient's wishes (as completed on the form) should be followed as much as possible.

First analysis was 3 months following introduction and the second was 6 months following changes to practice.

### Results

Initial findings revealed that advance statements were completed by eight of the fifteen patients admitted (53%). Patients' wishes were followed for two thirds of patients following incidents needing interventions. The following changes in practice were recommended:

1. Staff to handover outstanding advance statements every shift and the task to attempt completion with the patient to be allocated
2. To document reasons when not completed
3. To attach a copy of the completed advance statement with the prescription card as an aide memoire in case of an incident.

Following these changes, although only minimal improvement occurred in patients completing advance statements (60%), they were completed sooner after admission and, despite more incidents needing

interventions, patients' wishes following episodes of disturbed behaviour were still followed in two thirds of those who completed an advance statement.

## **Conclusion**

This small one cycle audit demonstrates that it is possible to engage with extremely unwell patients regarding their management preferences related to disturbed behaviour. Patients can be given appropriate information and empowered (as much as possible) regarding their care in traumatic and at times risky processes. Use of advance statements regarding this can be introduced in PICUs and should be advocated.

## **Educational goals**

1. Cognitive: Information about specific areas of NICE guidance is given as well as examination of potential capacity issues in relation to unwell individuals who are at risk of displaying disturbed behaviour.
2. Affective and psychomotor: It highlights that through sustained engagement a process of examining patient preference, respecting this decision and acting upon it can be introduced and challenges other services to improve standards in management of disturbed behaviour.

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# Early intervention by early recognition: patients self-efficacy, coping and detached concern

## Paper

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**Keywords:** Aggression, mental health, prevention

## Background

Patient aggression is a frequently occurring problem in mental health institutions (Foster, Bowers & Nijman, 2007; Serper et al., 2005; Nijman, Bowers, Oud & Jansen, 2005). Aggression is a complex phenomenon. The causes of patient aggression are multidimensional; internal, external and interpersonal factors are of importance (Foster et al., 2007; Irwin, 2006; Bisconer, Green, Mallon-Czajka, Johnson, 2006). Aggression has consequences for the patient, the health care practitioner, the therapeutic relationship between both and the environment (Serper et al., 2005). Considering the frequency of aggression and the impact on patients and staff, a sound aggression management is important.

Interventions to prevent or handle aggression are often focused on actions taken by health care practitioners. Hereby the patient is put in an inactive position of undergoing and enduring the staff's actions. Recently more interventions have been developed to enable and promote cooperation between the patient and the staff. The Early Recognition Method (ERM; Fluttert et al., 2008) is an example of such an intervention.

Within the ERM the management of aggression is a shared responsibility of the patient, the nurse and (if possible) the patient's social network. The focus of this method is on the recognition of early signs of aggression. By mapping and monitoring these signs the development of aggressive behavior can be prevented. Working with this protocol enables patients to take responsibility for their own (aggressive) behavior (Fluttert et al., 2008). The ERM proved its effectiveness in forensic psychiatric care settings in The Netherlands (Fluttert, Van Meijel, Nijman, Björkly & Grypdonck, 2010).

## Aim

The ERM protocol is introduced, implemented and evaluated in nine Belgian hospitals on non-forensic psychiatric wards. The focus of the evaluation is the impact of the ERM on self-efficacy, coping style and detached concern of patients after implementation of the protocol.

## Method

Nine hospitals are selected to participate in the study. From each hospital at least one, and maximum three wards take part, with a total of 17 participating wards. The wards are selected by two main criteria: length of stay and incidence of aggression. A certain comparability between the different wards is aimed at. Despite this a high diversity exists in terms of patient population and treatment methods, which makes standardization impossible. For this reason a pre-post design is chosen to evaluate the effectiveness of the ERM protocol.

All nurses of the participating wards are asked to take part in the research. Patients are excluded if they are younger than 18, don't speak or understand French or Dutch and have less than two aggressive incidents in the anamnesis. Both verbal and non-verbal aggressive acts are included, the anamnesis encompasses the incidents before and during the current admission.

All nurses of the participating wards receive a training in preparation for working with the ERM protocol. The formation consists of two main parts. First it covers theoretical components about the causes and development of aggressive behavior. Besides this the use of the protocol (underlying principles, practical application) is taught during the course. This training is a crucial part of the research because the nurses are responsible for the patient contacts and the implementation of the protocol together with the patients.

The ERM protocol is introduced to the patient by a ward nurse and the patient is asked to cooperate. After signing the informed consent, a pre-measurement is conducted. The questionnaire assesses three outcome

measures: self-efficacy, coping strategy and relation with the staff. It is therefore composed of three different measuring scales: Trait Hope Scale (Snyder et al., 1991), Ways of Coping (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986) and V-Stacon (Betgem, 2000).

The protocol is implemented either until the patient leaves the ward, or until the end of the intervention period (eight months after the start of the implementation phase). In a final stage a post-measurement is carried out, consisting of the same outcome variables as the pre-measurement.

## Results

The implementation phase started February/March 2011, the protocol will be implemented for a period of eight months. The effect of using the Early Recognition Method on patient self-efficacy, coping strategy and relation with the staff will be examined. The scores of the patients on the different scales will be linked to different demographical variables (age, sex, diagnosis) as well as to the number of incidents and the nature of incidents (verbal, non-verbal aggression).

## Discussion

This research is part of the development of a comprehensive aggression management. By informing and involving patients more actively, they can play a crucial part in controlling their own behavior. The research is relevant to practice because of the emphasis on the cooperation between the nurse and the patients.

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# Chapter 14 – Specific populations: child and adolescent

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## Bullying in youth with epilepsy

### Poster

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### Abstract

Background Bullying has been identified as one of the core problems that children with epilepsy face. Bullying is a serious problem in our schools, especially for children with developmental disabilities.

Our working hypothesis is that children and adolescents with a diagnosis of epilepsy have greater vulnerability to and more deleterious responses to bullying. Children who are bullied experience real suffering that can interfere with their social and emotional development, as well as their school performance.

### Methods

This is an on-going in-school intervention, in classrooms where youth with epilepsy had reported being bullied. There is a psycho-educational curriculum offered to help the parents and the youth with epilepsy to understand some of the psychosocial and mental health issues that children with epilepsy face. All the youth in this workshop are filling out the APRI-BT and the anti-bullying workshop is offered to the schools where more bully victims are identified.

### Results

We expect that classrooms who have participated in the anti-bullying workshop will have decrease incidence of bullying. This program aims to build strong staff-students connections, help students be accountable for their actions, empower bystanders to decrease bullying and inspire a positive peer environment.

### Conclusions

School and peer awareness of some of the different challenges that youth with epilepsy face, will help decrease the bullying and improve the quality of life of youth with epilepsy.

### Educational goals

1. At the end of this poster presentation attendees will be able to recognize bullying as an important problem youth with epilepsy face.
2. At the end of this poster presentation attendees will be able to identify some school interventions that have been proven effective to decrease bullying in youth with special health care needs.

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# Group treatment of reactive aggressors by social workers in a Hong Kong school setting. A two-year longitudinal study adopting quantitative and qualitative approaches

## *Paper*

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## **Abstract**

The most widely adopted school bullying interventions include mediation, support groups, and the restorative justice, strengthening the victim, shared concern and traditional disciplinary approaches. The schoolchildren involved in these interventions are classified simply as aggressors or victims. This article aims to expand social workers' understanding of aggression and ways of treating particular types of reactive aggressors using the Social Information Processing model. It reports the results of a two-year longitudinal study of 66 11- to 16-year-old high-risk reactive aggressors randomly assigned to intervention groups administered by social workers in 10 Hong Kong secondary schools. The study employs five checkpoints for an evaluation of effectiveness. The results of single-factor repeated-measures analysis show significant differences in participants' aggression levels at the different checkpoints, with post-hoc analysis indicating a significant decline in these levels at the three-month and one- and two-year follow-ups relative to the pre- and post-tests. Polynomial contrasts reveal a significant linear trend for aggressive behaviour, qualified by the significant higher-order trend for the different aggression subscales, which suggests a possible curvilinear treatment effect. The study's qualitative results provide strong evidence-based support for the effectiveness of the treatment programme and show the need to differentiate amongst specific aggression types in interventions.

## **Educational goals**

N/A

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# Risk of violence measured by the SAVRY: a retrospective study in a China sample of male adolescents

## Poster

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**Keywords:** Risk assessment, violence prediction, SAVRY, receiver operating characteristic analysis, logistic regression

## Abstract

### Background

Risk assessment of violence is of major importance for both public protection and care planning. However, for now in China, the research on risk assessment of violence, especially in adolescent population, is rare. There has been a significant increase using structured clinical assessments as they can offer objective and accurate assessments. Consequently, risk assessment through the validation of the structured instrument in Chinese sample is necessary and valuable.

### Aim

This study explores the predictive validity of the Structured Assessment of Violence Risk in Youth (SAVRY) among male adolescents (age between 14 to 18 years) in China.

### Methods

Actuarial scores were obtained retrospectively in two populations: violent group (N=239) and non-violent group (N=243). The predictive accuracy was evaluated with receiver operating characteristic analysis using violent offending as the criterion variable. Stepwise logistic regression analysis was applied to identify which items were most predictive of violence.

### Results

The AUC values for the total score, and historical items score, social/contextual items score, individual items score, protective items score were 0.798, and 0.779, 0.727, 0.763, 0.658 respectively. In the final logistic regression model, items 1 (history of violence), 2 (history of non-violent offending), 16 (community disorganization), 21 (low empathy/remorse), and P6 (resilient personality) were the most significant predictors. The AUC value was improved from 0.798 to 0.847 after the total score replaced by the weighted sum of scores on items 1, 2, 16, 21, and P6.

### Conclusion

The SAVRY total score demonstrated good predictive validity for violence in male adolescents population in China. As for the subscales of this instrument, historical items and individual items were significantly better than protective items. Although the predictive validity of weighted sum of scores based on the logistic regression was better than that of the total score, it didn't reach significant improvement.

### Educational goals

1. Risk assessment of future violent acts is important for any country or society. As studies in this domain has been few in China, there is an urgent need to explore what kinds of actuarial assessments are suitable for different Chinese populations (e.g. males, adolescents). This study represents a useful effort not only for the improvement of risk assessment in China but also for the validations of the common structured instrument in different international populations.
2. This is the first study to validate the efficacy of the SAVRY in Chinese male adolescents population. Although this instrument was developed in North America, we found that the SAVRY demonstrated

good predictive validity for violence in China as well. While the historical items and individual items were significantly better, social/contextual items were moderate, and protective items were poorer.

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# Adolescent violence: the parallel psychiatric histories of two teenagers

## Paper

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## Introduction

Violent behaviour in children and adolescents can include a wide range of behaviour: explosive temper tantrums, physical aggression, fighting, threats or attempts to hurt others, use of weapons, cruelty toward animals, setting fires, intentional destruction of property and vandalism. Most studies have pointed out that exposure to violence in the home and/or community, the presence of stressful socio-economic factors in the family environment, being the victim of physical abuse and/or sexual abuse contribute to an increased risk of violent behaviour in children and adolescents (Wolfe et al., 2001). These conditions can affect dimensions of development such as peer and intimate relationships, self-regulation of emotions and behavioural adjustment (Kaplan et al., 1999; Thompsona & Tabone, 2010). Violence often represents one of the symptoms of psychiatric diseases and constitutes one of major challenges of our time because it is difficult to treat. In fact, it evokes feelings of fear, provokes hostility and punitive responses which can produce an escalation of violence (Greenwood, 2005).

## Method

We analyzed the parallel histories of two adolescent girls (Table I), who presented stressful family socioeconomic factors (poverty, severe deprivation, single parenting, etc.) in childhood, Attention-Deficit/Hyperactivity Disorder (ADHD) at school age, wide range of aggressive and self-dangerous behaviour with an extreme mood instability and impulsivity in adolescence, which required long and frequent psychiatric hospitalizations with the diagnosis of Borderline Personality Disorder (BPD), according to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM), Italian Version of 2007 (Ministero del Lavoro, della Salute e delle Politiche Sociali, 2008) or DSM IV TR (American Psychiatric Association, 2000).

Table I The parallel histories of two adolescent girls

Birth and early childhood	Irina born premature at 7 months in Eastern Europe in 1988. She was abandoned at birth in an orphanage, where she lived up to age 5 in maladaptive conditions. In fact, she was mute and aggressive so as to be diagnosed with mental retardation. Then she was adopted by two Italian parents without children who brought her to our country.	Sabrina born in South America in 1986. She was abandoned by her father when she was 3 years old and lived in South America in her extended family constituted by mother, sister (1-year older), maternal grandparents and a maternal uncle with his family. She emigrated with the whole family to Italy in 1996, due to the economic collapse of her family.
Family	Problematic family environment: mother with alcohol abuse and father too busy in his job. Both mother and father were not able to assume a parental role they delegated to health service professionals.	Extended family with a long history of social exclusion, economic difficulties and without a clear national identity (her maternal grandfather was Italian). Her mother, who has never been able to separate from family of her origin, manifested affective instability and was never able to assume a parental role which she delegated to other members of her family.
Scholastic career before psychiatric hospitalizations	Irina learned the Italian language in a very short time, although she was not able to speak her mother tongue. She completed primary school normally, with good academic performance. During primary school, Attention-Deficit/Hyperactivity Disorder (ADHD) was diagnosed.	Sabrina completed primary school in her country with good academic performance. During primary school, Attention-Deficit/Hyperactivity Disorder (ADHD) was diagnosed. She completed middle school in Italy normally, showing notable artistic abilities. She began attending an accounting high school (the same school as her sister) and completed the second year.

<p>The first psychiatric hospitalizations</p>	<p>At 13 years old, Irina was hospitalized for the first time in a psychiatric ward in Modena due to her dangerous and violent behaviour against herself (attempt to throw herself out of a window) and others, associated with impulsiveness and mood instability. She was soon discharged home, but after 3 months she was hospitalized again in the same ward because she attempted again to take her life. She was diagnosed with Bipolar Disorder and discharged home with lithium therapy. She completed middle school and enrolled in high school. Irina interrupted high school early, because she showed worsening psychiatric symptoms: impulsivity, affectivity instability and disruptive behaviour, aggressiveness against herself and others, frequent running away from home. She was again admitted to the same psychiatric ward in Modena and then was moved to the child psychiatric ward of another hospital (Stella Maris in Pisa). At discharge, she was sent to a rehabilitative community for adolescents with a complex therapy (clozapine and two mood stabilizer drugs: valproic acid and lithium).</p>	<p>At 17 years old, Sabrina was first hospitalized in a psychiatric ward due to her dangerous behaviour: she walked along the train rails after running away from home. This altered behaviour was concomitant to her mother's decision to leave the extended family to live with her boyfriend. At the moment of admittance to our ward, the patient appeared mute and communicated only by means of writing. At our question concerning her symptoms, she compiled a neat handwritten list of the primary symptoms of schizophrenia as indicated by Scheineder, a famous psychiatrist. Successively, she confessed to having learned them on the Internet. She was discharged after one week with valproic acid therapy and posted to a community for adolescents, individualized by Social Service, who had assumed the parental rights. Previously, the patient had complained of mistreatment by her maternal uncle, who lived with her.</p> <p>After few days, in community, she was again sent to hospital because she threatened to open the gas inside the community. She began a new psychiatric hospitalization in our ward which lasted four months. At discharge, she was sent to another community for teen-agers, individualized by Social Service.</p>
<p>The first rehabilitative community</p>	<p>She was expelled from the rehabilitative community after 9 months due to her disruptive behaviour (frequent running away and alcohol intoxication). After returning home, while she was travelling by car with her mother, she jumped out of the moving car, without reporting any damage. She was again admitted to the same psychiatric ward in Modena (March of 2005)</p>	<p>In community, after an initial enthusiastic approach, she showed growing difficulties in maintaining normal relationships with others. After 3 months, she manifested violent behaviour against people and objects and threw herself out of a window. She, fortunately, did not report any physical damage and was again hospitalized in our ward.</p>
<p>The first long institutional treatment</p>	<p>Irina began a long psychiatric history, characterized by frequent hospital admissions in order to contain her behaviour, which was getting more violent and dangerous. During hospitalizations, she manifested disruptive behaviour characterized by assaulting others or swallowing little objects. She needed frequent gastric endoscopies, repeated physical restraints and various sedative therapies. In March of 2006, after 1 year of frequent and long psychiatric hospitalizations, the patient was sent to another rehabilitative community. Meantime various pharmacological switches were tried without remarkable results.</p>	<p>In hospital, Sabrina began a long therapeutic treatment also involving her extended family. Meantime, she confessed to having invented the complaints against her maternal uncle. She was discharged home after 4 months with an intensive out-patient therapeutic program. The patient and her family were followed with weekly sessions by the same therapist who assisted her at hospital, supported by a colleague of the Child Mental Health Service. Therapy with olanzapine 20 mg/die was prescribed.</p> <p>After one year of this therapeutic program, she finished the third year of high school.</p> <p>Some months later, she presented again violent behaviour against herself and other people concomitant of the therapist change in order to begin a treatment in out-patient Mental Health Service. She was expelled from home by her family, interrupted school and was re-hospitalized in our ward. During this new long hospitalization, she manifested oppositional and violent behaviour, with frequent threats to her life (she tried to strangle herself daily).</p> <p>Moreover, she presented affective instability, histrionic symptoms, frequent attempts of running away, sexual promiscuity, conflicting and ambivalent relationship with her family. During this hospitalization, she set fire to the ward twice.</p> <p>Finally, in May 2007, we were able to discharge and posted her to a psychiatric community with a therapy of valproic acid and quetiapine. The first therapist continued to follow her also after discharge.</p>

The second rehabilitative community	<p>In the second community, a rehabilitative program was tried for a period of one year, but it was interrupted due to the severe self-damaging behaviour (almost daily she threw herself down the stairs) which required a huge number of hospitalizations in the psychiatric ward close to the community. In August 2007, she was again hospitalized in the same psychiatric ward in Modena.</p>	<p>During the stay in community, despite her disruptive behaviour which required frequent but short admissions to our ward, she completed the fourth year of high school. After 2 years, in November of 2009, she was expelled from the community due to one of her numerous violent assaults against the same operators. So, she was re-hospitalized in our ward. Her family accepted to take her home and to support her in a therapeutic program. She was discharged home in January 2010 with lithium (0.7 mEq/l), valproic acid (70 mcg/ml) and quetiapine RP (900 mg/die), and was successively followed by the same therapist.</p>
The second long term institutional treatment	<p>She remained hospitalized about one year because she manifested so many compulsive behaviour as swallowing of little objects (especially cigarette lighters) or aggressive behaviour against others to be restrained almost every day. Afterwards, due to administrative reasons, she was moved to our psychiatric ward. Here, a new therapeutic and rehabilitate program was tried.</p> <p>First aim of our work was to avoid the almost daily application of restraints due to her dangerous behaviour, especially swallowing and assault. We tried to counteract her behavioural regression by means of her involvement in activities of daily life or in gratifying situations. So, we maintained daily meeting in doctor office, frequent exit permits out of hospital accompanied by a nurse, recreational activity, etc. Moreover, we involved her parents in the program, by meeting them every week in her presence. We identified a rehabilitative structure near the parents' house able to manage the patient and also well-accepted by the patient and her parents. We scheduled meetings every month in order to debate the program with the professionals of out-patient care and community. Moreover, a therapy with two stabilizers (lithium 0,6 mEq/L and valproic acid 70 mcg/ml) and an atypical antipsychotic drug (quetiapine RP 900 mg/die) was prescribed.</p> <p>Despite the overwhelming efforts by our whole staff, Irina swallowed many objects and needed to undergo many dangerous endoscopies to remove these objects. Moreover, she was frequently aggressive with staff or other patients and required the application of a lot of restraints. Two times she ran away from our ward, coming back quickly.</p> <p>After six months of this intensive program aimed at increasing her capacity to be autonomous from institution, Irina accepted partial separation from our hospital ward. She began to go to the rehabilitative structure, initially few hours a day and progressively some days a week. Meantime, after clarification of her conflicting and ambivalent relationship with her parents, she accepted a real separation from her family. Finally, her parents were able to clearly communicate to her not wanting to take her home due to her dangerous behaviour. They assured they would support her in the rehabilitative program.</p> <p>Irina reduced but did not interrupt assaults and swallowing. Despite this behaviour, the patient was slowly but progressively introduced into an outpatient rehabilitative centre, in order to accept a partial and not distressing separation from hospital.</p>	<p>In June 2010, she passed the final exam and received her high school diploma. In this circumstance, she was hospitalized and needed our support to face the exam. At discharge, she was sent to the out-patient Mental Health Service and, for about 2 months, she remained at home with her family and regularly attended the Day Hospital of the Mental Health Service. Meantime, her maternal uncle with his family had emigrated to Canada and the patient's family remained in such as poor economic condition to need economic support from the local Social Service.</p> <p>Sabrina again presented aggressive and disruptive behaviour so dangerous as to be frequently admitted to our ward. Finally, due to a dangerous attempt to kill herself (she injected herself more than 10 ampoules of epinephrine in the Day Hospital of out-patient service) and violent behaviour against her family, she was admitted to our ward for a long hospitalization, in December 2010.</p>
The third community treatment	<p>In May of 2010, after 2 years of this long in- and out-hospital treatment, Irina was discharged to the community. Here, initially, she lived weekdays, returning temporarily to her parent's house weekends. Then, from September of 2010, she lived in the community full-time.</p> <p>The ward psychiatrist and head-nurse continued to meet the patient at the community in the presence of the out-patient physician and nurses, in order to avoid the patient experiencing feelings of abandonment, which have strongly conditioned her life.</p>	<p>In April 2011, after an exhausting hospitalization due to an endless number of aggressive behaviours, sexual promiscuity and other oppositional behaviours, we were able to identify a rehabilitative community suitable to her. So we sent the patient to the community for a progressive adaptation to the habits of the community.</p>

At the moment	Irina lives in the same community from the beginning of the third community stay. The same therapy prescribed at the last discharge from hospital has been maintained: two stabilizers (lithium 0,6 mEq/L and valproic acid 70 mcg/ml) and an atypical antipsychotic drug (quetiapine RP 900 mg/die). She has rarely been hospitalized and her aggressive behaviours are less frequent and dangerous. Finally, she stopped swallowing objects, behaviour that required more than 50 endoscopies in "the past".	Sabrina lives in the same community where she was sent at the last discharge from hospital, but needs to be hospitalized frequently. A complex therapy with an antipsychotic depot (fluphenazine), valproic acid and an atypical antipsychotic drug (quetiapine RP 800 mg/die) has been maintained. The same therapist who assisted her in the ward and a psychiatrist of out-patient Mental Health Service are following her in the community with regular meetings every week. She has not stopped presenting aggressive behaviour, although she is able to maintain more appropriate relationships with others.
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## Results

The two young girls, due to their disruptive and dangerous life-style, need institutional containment but at the price of strong dependence on institutions, demonstrated by the difficulties in discharging the patients from hospital. After long psychiatric inpatient care and despite the support of therapeutic communities, they require complex pharmacologic therapy, frequent but brief hospitalizations, intensive rehabilitative programs staffed by many professionals aimed at giving patients the capacity for autonomy and for controlling dangerous behaviour.

## Discussion and conclusions

The parallelism of these clinical histories consists of many similarities:

- occurrence of early traumatic events: abandonment by parents and emigration to another country;
- familial context characterized by confused and ambivalent relationship without parental role,
- brilliant cognitive capacity although poor education,
- violent behaviour against themselves and others,
- impulsivity, identity disturbance, affective instability and histrionic symptoms,
- strong institutional dependence.

The clinical histories of these two adolescents confirm the literature observations that child deprivation, emotional neglect or abuse may lead to perpetration of perverse lifestyle characterized by violence and self-destructiveness and may affect mental health development. (Matthies et al., 2011; Miller et al., 2008). In particular, many studies have emphasized links between childhood trauma and subsequent development of borderline personality. The complexity of these cases, characterized by the persistence of a childhood disease, developed into a chronic pathology of *stably unstable* mood till late adolescence, suggests to us pathogenic relationships among BPD, ADHD and Bipolar Disorders (BD), as observed by other authors (Rydén et al., 2009; Zapolski et al., 2010; Zepf, 2009). In fact, an early onset of affective disorders can condition the development of personality structure. Symptoms, like affective instability, impulsive aggression or chronic suicidality, are common to both borderline personality disorder and bipolar disorders (Godberg & Garno, 2009). Most studies report a frequent comorbidity of ADHD with BD, especially in pre-pubertal patients affected by manic symptoms. In these cases, many symptoms of both disorders, like increased motor activity, talkativeness, distractibility and irritable mood, are similar, although most authors suggests that ADHD and BD are independent disorders. If they are present in comorbidity, the clinical course of illness appears worse due to an attenuated response to pharmacotherapy (Taman et al., 2008).

The clinical course of these two cases may reflect early developmental failures of parental containment due to neglect or abandonment in childhood. This early trauma can induce pervasive fears of future abandonment and favour unstable self-identity and inappropriate relationships with others. Aggressiveness, especially self-aggressiveness, may represent the only modality to both attract others' attention and to make others feel guilty in order to avoid being abandoned. Our patients, due to the perpetuating of their infantile but dangerous game, needed to be hospitalized early. The psychiatric institution, where they continued their dangerous behaviour, represented for them an environment able to contain aggressiveness but meantime to permit them to avoid too intimate relationships, responding so to their pathological needs. This can be a psychological explanation of the institutional dependence developed early by these two girls. As all addictive behaviours, institutional dependence can produce an escalation of altered behaviour as observed in these two cases. At this regard, we suggest that, in order to overcome this unavoidable condition, a stable relationship with therapists could help patients to be more autonomous. This condition may be the necessary prerequisite to support out-patient care, as suggested by these clinical histories: our two patients accepted to live outside hospital only when the same professionals, who had assisted them in ward, continued to treat them also in community. In our opinion, therapists may represent a sort of

“mediators” between the institution and the real world and allow patient to shift his/her dependence on institution to the therapists’ figure. Nevertheless, a multi-professional staff should support therapists in rehabilitative programs, which, as suggested by our clinical histories, should begin in hospital ward and develop in community by means of the cooperation of out-patient care staff.

Finally, we highlight the difficulty in treating such impulsive and repetitive dangerous adolescent cases, which scarcely respond to pharmacological therapy and need long-term treatments with the risk of strong dependence on institutions. In our opinion, an emphatic therapeutic approach and long-term rehabilitative in and out hospital programs based on creative and constructive responses to the patient’s needs may be more effective in reducing violence than a coercive or punitive approach.

We conclude with the reminder that early preventive programs before altered behaviour become crystallized may be the most effective therapeutic interventions, as indicated by some authors (Webster-Stratton & Taylor, 2001).

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# Therapeutic practise in the prevention of aggressive and violent behaviour in adolescents living in childcare institution: Concepts and functional correlates based on the experiences of professional staff

## Paper

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**Keywords:** Violence, aggression, childcare institution, milieu therapy, intervention, preventive

## Background

About 22 – 23% of staff working in services for the mentally disabled, in child care services and institutions in Norway experience client related incidents of violence and aggression at least once every week (1). Violence against staff members may inflict both physical and psychological injuries (1, 2). Both the proportion of violence and subsequently the long term consequences on the person exposed to violent behavior, make this an issue of great challenge for the health care work environment in general. The aim of our research was to focus on environmental therapeutic practice in the prevention of violence. We hope to contribute by articulating practice as it is conducted in the prevention of violence, and by developing concepts and functional correlations based on this practice.

## Method

We conducted a qualitative study in 2010 – 2011. The informants were recruited through their leaders. We contacted the leaders of five state run childcare institutions in Norway. The institutions are facilities of care for adolescents admitted both voluntarily and involuntarily. One criterion for inclusion in the study was that the staff member had a good report from his or her superiors and co-workers as someone who was adept in the prevention of violent behavior in aggressive adolescents. We conducted six semi-structured individual interviews and one focus group interview with the staff. The average working experience in child care institution amongst our informants was 10 years. The interviews were recorded and shortly after transcribed verbatim. We conducted the individual interviews first, and the informants experience on working with violent youth, their views on their role in the relationship with the youth, and their attitudes towards these youths which emerged in these interviews were subsequently presented as themes/issues for discussion in the focus group. The transcribed material was analyzed using a three stage structure analysis (3).

## Findings

Based on the analysis, we have developed three concepts that represent the major findings: Environmental sensitivity, Counseling on choice and Situation validation. Findings will be reported based on these devised concepts.

## Environmental sensitivity

«Environmental sensitivity» is a consideration of the employee's sensitivity to his/her working environment. The informants emphasized that they are keenly aware of the tone/quality of interactions amongst staff members themselves, the youths, and interactions between staff and youths. Environmental sensitivity helps staff to be ahead of any negative developments in the unit, and enables them to take the necessary precautions before a major conflict develops. When interactions and interrelations change, one can literally feel it as a change in atmosphere. Related to psychiatric care, metaphors as «ward atmosphere» or «ward climate» have been used by others to describe this phenomenon (4). Conflicts between two persons or one uneasy, scared or angry youth is all it takes to influence the whole group. Minor signals as a gaze, facial expression or seemingly innocent comments, is all it takes for the skilled employee to become more attentive of the situation. Our informants describe how they by being consciously present, are able to

intervene at an early stage, thus preventing the escalation of frustration and aggression. One allegation set by several informants was that the atmosphere in the institution is mainly determined by the adults. The informants emphasized that staff have a particular responsibility to «set the mood» in a positive manner.

## Counseling on choice

With the goal of helping the youth to finding socially acceptable way out of the situation, “counseling on choice” refers to the staff member’s contribution towards highlighting alternatives to aggression and violent behavior. “Counseling on choice” is the part of the job our informants describe as the most challenging. It is probably challenging because counseling is used in situations that are characterized by open conflict. It is particularly challenging both because the staff often are somewhat intimidated, and because it is often difficult to turn the situation when it gets to this stage. All the informants agree that options given to the youth need to be within the limits set by the institution. The rules of the institution ought to be firm, and clear, with some room for flexibility within the limits. Loyalty towards structural aspects is equivalent to being true to each other as staff. Being «nice» by easing limits can be the same as putting your coworker in a hopeless situation the next time the adolescent challenges the very same rule with someone else at work. In that manner being true to the rules is important in preventing violence and aggression in the future. The informants claim they try to strengthen the youth’s self-esteem, and they are concerned with helping the adolescent preserve dignity. Even in situations that are escalated, they need to keep faith in youth’s ability to cope with their anger before it develops into violent behavior. One of them states: «When the adolescent stands there, in front of me, screaming into my face, I tell myself: you can still turn this around, you can still make it! – In this situation, he ((the youth)) is not able to figure out how to solve this. My job is to help him figure out how.» Dialog is emphasized as a means to prevent violent behavior. As long as there is dialog, it is possible to resolve an escalated situation.

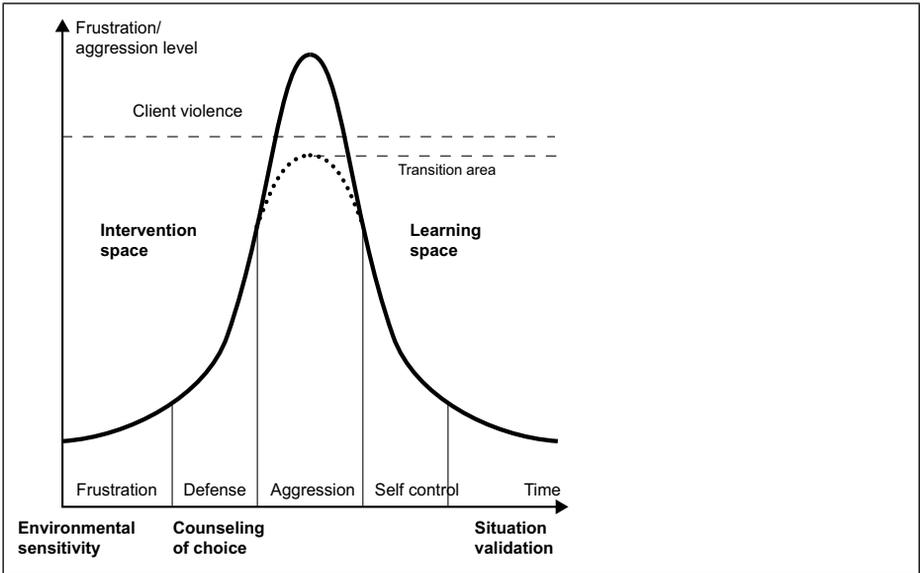
## Situation validation

«Situation validation» refers to how the staff counsels an adolescent after an episode of open conflict, or when a situation has escalated to such an extent that the youth becomes threatening or violent. These occasions are exploited as valuable opportunities for the staff to help the adolescent to develop alternative strategies for tackling conflicts that have escalated into volatile situations. Sometimes these counseling are formal, but more often they are conducted spontaneously in a daily life situation of positive character. The informants stated that a retrospective conversation about the episode helps the adolescent to be more sensitive to their own pattern of response to stress, and consequently change that pattern. By talking about what triggered the conflict, the youth is offered a possibility to learn how to deal with anger and to respond in a more socially acceptable manner in the future. The informants aim to find something positive to focus on. They give feedback on attempts to cope with the situation, or in the least give credit if the youth recognizes having acted stupidly. «There is always something in a situation you can turn into something positive» one of the informants stated. «The important thing is to recognize the opportunity of learning something from what happened». By claiming this part of their job as important in helping the adolescent control his/her anger for the future, they imply the need for a more methodical and structural approach to this counseling. The present structure leaves the decision to counsel after the event at the discretion of staff. They feel this ought to be a regular part of the follow – up after an incident with violent behavior.

## Discussion and conclusion

Aggression builds up from a phase of frustration, with diffuse signals, to a defensive phase, with reactions like withdrawal, challenging unit rules or trying to get the adult into a «tug of war». The aggression phase comes next, with violent behavior as e.g. biting, hitting, kicking, throwing or breaking of objects. The aggression phase fades into self-control, and the aggression diminishes (Myles and Simpson, 1998). To visualize how our informants use «environmental sensitivity», «counseling on choice» and «situation validation» as therapeutic approaches in respectively frustration-, defensive- and self-control phase, we have further developed Myles and Simpson’s understanding on activation-levels in aggression, placed in a graphical illustration (5).

*(Fig1 Graphic illustration showing different phases of aggressive behavior in relation to the implementation of the three therapeutic intervention practices).*



Violence rarely appears without warning (6). The challenge is to recognize frustration and aggression building up at an early stage. In what we choose to call an early frustration phase, awareness and sensitivity must target on how people interact in the environment. This awareness is essential to enable the staff to intervene at an earliest possible stage to prevent a possible escalating situation. When the adolescents reach the defensive phase, the staff aims to create a transition in the activation of aggression, helping the youth directly into the self-control phase (dotted line – *transition area*, fig. 1). In the self-control phase, they work to prevent future episodes of aggression and violence, by teaching the youth to cope with their anger in an expedient manner.

The ability to be sensitively aware of the environment contributes to early intervention skills. By acting at an early stage, the therapist can use humor and diversion to influence on the unit atmosphere. Contribution from the staff members can both escalate and de-escalate aggression (7). Research in psychiatric care indicates that the atmosphere itself might affect the aggression level of the patients (8).

It is all about being sensitive, to see and recognize minor amendments in the atmosphere, and not least to act on what you sense. In sensitivity lies an opportunity to prevent violence. An evaluation of effect on staff education in sensitive awareness in an institution for the intellectually disabled, showed significant reduction in episodes of violence from patients (9).

The possibilities for intervention decreases as the situation escalate. In other words the *intervention space* (fig 1) narrows. The use of humor and disruption are not necessarily advisable at this stage. At this stage the adolescent should be met by negotiation. Conciliatory communication skills are of an essence. It is often helpful if the staff member is able to present the youth with alternative outlets, preventing frustration and/or violence. The intervention space (fig 1) is shared by both the staff member and the adolescent. The Staff member acts by illustrating options; the youth has the choice to use alternative strategies rather than acting out his frustration violently.

The relation between adolescent and staff will always be somewhat unbalanced in favor of the staff. Disempowerment is an important contributing factor to clients' aggression and violence (10). The use of "control and restraint" will often lead to a more coercive approach, which will increase the feeling of powerlessness in the youth thus increasing aggression and frustration. Powerlessness is a form of deficiency linked to factors such as lack of predictability, overview of the situation, control, influence, not being seen or heard, and last but not least, the lack of alternative strategies (5).

A way of empowering the youth is to give him the possibility to influence the situation. A paternalistic approach implies an attitude in the staff that they always know best, regardless of what the youth may think. Empowerment is the antithesis to paternalism (11). The balance between autonomy and coercion becomes more apparent in institutions where the adolescents are admitted involuntarily. When staff meets the youths with empowerment techniques, they contribute to replace autonomy and personal power.

When integrity and autonomy are threatened, for instance through an authoritarian culture with rigid rules and use of coercive intervention, the need to regain control over the situation will arise. Powerlessness is a natural consequence when dignity and identity are threatened. Aggression and violence can be an antidote to powerlessness (5). This implies that rigid rules and the use of force and power increase the risk of violent behavior. Acting appreciatively towards the youth, lays the necessary foundation for assistance. The better the quality of the relationship between the member of staff and the youth, the better is the chance of a successful intervention. To be appreciative implies the staff is attentive, empathetic, accepting and affirmative (12, 13).

The staff intervenes after situations of frustration and aggression. They often conduct one or more counseling sessions afterwards. They do this both when situations have escalated into episodes of violence and episodes that were successfully de-escalated. Understanding grows through reflection. The will and the ability to take a look at oneself in retrospect, is necessary for personal development. When working with youths who have suffered repeated failures, recognition of what they do well is vital. If staff does not address situations of conflict, the youth will often react with depression or even denial of the incident. The result is that recurrence of aggressive behavior will be more probable (6). Our informants experienced that youth have often trivialized their violent behavior, if for some reason counseling was not conducted.

Through this study we have described and conceptualized therapeutic practice in the prevention of violence. Description of effective preventive practices is of importance to highlight the issue owing to the severe and comprehensive challenges violence causes in social- and healthcare practices today.

## Acknowledgements

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# Symptoms of traumatisation related to personality features in children

## Poster

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**Keywords:** Symptoms of traumatization, personality features, early adolescence, cumulative trauma

## Abstract

This poster presents the results of canonical correlational analysis between two groups of data that represent the symptoms of traumatisation and a group of data that represent the child personality features. The sample of children whose data are analyzed included 100 children, 11.5 to 14.5 years old, who experienced cumulated trauma (abuse or being witness of abuse). Commenting relations between traumatisation and personality features, it is important to stress that decreasing of control and coordination or integration is reflected in symptoms of traumatisation which are highly related to personality features and produce the decreasing of psychoticism, unintegration, depression and introvertness in the personality of a child. The quality of that decreasing of control masks the phenomena of re experiencing, reactions of avoidance and hyper arousal.

## Educational goals

1. understanding of the trauma consequences at the personality trait' s level is useful for treatment planning
2. understanding the difference between one trauma and cumulative trauma effects in children

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# Chapter 15 – Specific populations: elderly

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## Elder abuse in Iran: Prevalence and associated factors

### Poster

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### Abstract

#### Background

Elder abuse, a very complex issue with diverse definition and names, has been very slow to capture the public eye and public policy makers. While it is not a new phenomenon, the speed of population aging worldwide is likely to lead to increase in its incidence. Elder abuse has devastating consequences for older people such as poor quality of life, psychosocial distress and loss of prosperity and security. It is also associated with increased mortality and morbidity. There is no reliable information resulted from well designed study regarding elder abuse in Iran.

#### Objectives

A cross sectional study to determine prevalence and associated factors of elder abuse in rural and urban districts of Markazi province, Iran. A detailed questionnaire was used to collect data.

#### Results

In total, 1110 people were interviewed. 43% male and 57% female with mean age of 74.7%. 6.3% were abused; there were significant associations with physical impairment and movement impairment. No associations were observed with elder education, occupation, living area and age.

#### Conclusion

Data indicates that elder abuse is happening in both rural and urban areas in families with different socio-economic status. This study shows elder abuse prevalence in Iran is roughly similar to a systematic review on 49 studies conducted in 2008. However, as most cases of elder abuse is not detected easily, the actual elder people at risk of abuse should be much higher.

#### Educational goals

1. To determine socioeconomic affecting attitude regarding aged people
2. To detect cultural influences on elder abuse and neglect

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# The epidemiology of physically and verbally aggressive behaviors of nursing home residents directed at staff

## Poster

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## Abstract

While considerable media attention has focused on elder abuse of nursing home residents by staff, there have been virtually no studies of high methodological quality examining the opposite phenomenon: aggressive and assaultive behaviors directed at staff by nursing home residents. Insofar as dementia and dementia related behavioral problems (e.g., agitation associated with daily care assistance) are often the impetus for nursing home placement, we hypothesized that resident to staff aggression (RSA) is a prevalent phenomenon.

Accordingly, we conducted the largest systematic study (n=1342 nursing home residents) of RSA using validated instruments in five large nursing homes as part of an NIH funded study of violence in long term care facilities. Certified nursing assistants were interviewed using a modified and validated version of the Cohen Mansfield Agitation Index; the staff member assigned primarily to the index nursing home resident was asked if any specific physical, verbal, or sexual behaviors were directed at them by the resident in the previous two weeks.

Staff reported that 216 (16.1%) of subjects had directed physically or verbally aggressive behaviors at them within the previous two weeks. The most common verbally aggressive behaviors were screaming or cursing (8.9% and 6.2% of dyads, respectively), while the most common physically aggressive behaviors were hitting, kicking, and scratching (3.8%, 2.5%, and 2.1% respectively). The majority of events (76.8%) occurred within patients' rooms, and usually in the morning while delivering care. A more detailed analysis of contextual and clinical/demographic characteristics of the events and participants is underway.

RSA in nursing homes is highly prevalent. Insofar as RSA may negatively affect quality of care, resident and staff safety, and job satisfaction and turnover, further studies are needed to understand how and why it occurs, and to develop interventions to mitigate its potential impact. To highlight the frequency of resident to staff aggression in long term care

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# Elder abuse and neglect syndrome in seniors with psychiatric morbidity

## Poster

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## Abstract

Elder Abuse and Neglect syndrome (EAN) comprises such forms of behaviour leading to worsening quality of life of seniors. This behaviour comprises any form of physical violence, psychic violence, economical abuse, sexual abuse or any other kind of behaviour altering autonomy of seniors or leading to any limitation in their freedom (mechanical or pharmacological restraints). The risk of developing this syndrome is higher in seniors requiring more help of caregivers. We may hypothesize seniors with psychiatric morbidity are at higher risk of developing EAN. We conducted a cross sectional study estimating the prevalence of elder abuse and neglect syndrome in seniors hospitalized in any of inpatient psychogeriatric wards in Mental Hospital in Kromeriz, Czech republic. We studied data from patients' history and medical records and we used descriptive statistics. The results of our study were compared to results observed in research mapping EAN in senior patients with somatic morbidity. It seems that Elder Abuse and Neglect syndrome in seniors with psychiatric morbidity is more frequent condition than expected, especially when compared with senior population without psychiatric morbidity.

## Educational goals

1. Our study describes Elder Abuse and Neglect Syndrome in seniors with psychiatric morbidity as not so rare condition, which should be paid more attention in routine clinical practice.

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# Diagnostic analysis of mental health care for the elderly under violent situations

## Poster

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## Abstract

### Background

Brazil is undergoing a population aging process where elderly people have been the focus of specific public policies. In such a scenario, violence against aged people, defined by OMS/INPEA as single or repeated acts, or the lack of appropriate actions in any relationship, which causes damages or omissions, has become a problem that affects the health of that age group.

### Study aim

We present a multi-centric study aimed to investigate how mental health care for the aged people that are victim of violence has been offered in five Brazilian capital cities: Manaus (northern region), Recife (north-eastern region), Rio de Janeiro (south-eastern region), Curitiba (southern region) and Brasilia (mid-western region).

### Method and materials

The survey focused on public healthcare network services in such Brazilian cities, which are part of the country's Unified Health Care System. We investigated the consistence of practices developed in such services with public policies regulating the mental health care and policies targeted to aged people victim of violence. We employed method triangulation that considered secondary data of socioeconomic and demographic situation of such cities, the application of questionnaires about the characteristics of services and qualification of available health care, and individual and group interviews with mental health care professionals and managers. Aiming to evaluate the guidelines for mental health care, indicators were developed to allow a comparison among the cities under study.

### Results

From the results obtained, we noted that the adequacy of mental health care services to the most common needs of the elderly, such as easy access, wheelchair, the right to a companion, assistance priority, and specific diagnosis resources are poorly observed in all such major cities. The discrepancy in records of assistance to aged people among hospital and extra-hospital institutions, accounting for 22.3% and 0.4% of total patients, respectively, the lack of information about assistance to aged people victim of violence in both service levels, the professionals' incipient perception of violence as a health care intervention object, and the near absence of actions to prevent that problem stand out. In Curitiba (southern region) the best performance of evaluation indicators was recorded, while Brasilia (Midwest) and Manaus (North) are the cities where the guidelines recommended by policies are hardly complied with.

### Conclusions

It is then concluded that substantial public investment is highly necessary a more in the following areas: (1) improved information quality, especially with respect to episodes of aged people victim of violence and assisted by the mental health care network; (2) adequacy of physical structure of services to make it more easily accessible and adjust it to the specificities of that group; (3) capacity building/training of professionals to properly address the aged people's health care specificities as far as violence is concerned; and (4) adoption of preventive actions and attention to most frequent aged people's disorders to improve their life quality and reduce the demands for hospitalization in psychiatric and general hospitals.

## **Educational goals**

1. Reflections about practices;
2. Strategies for knowledge production;
3. Improve assistance by the mental health care network for elderly.

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# Questionable behavior of seniors with dementia in the home with special regime in Czech Republic

## Poster

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## Abstract

In this poster the authors are focus on behavior of seniors with dementia and on the models for explanation of unsuitable behavior (the theory of unsaturated needs, the behavior strengthened by reactions of surroundings, the influence of environment elements). Various forms of unsuitable behavior of seniors with dementia (verbal non aggressive behavior, verbal aggressive behavior, physically non aggressive and physically aggressive behavior) are described. Attention will be also put on non aggressive behavior in homes with special regime that is: wandering, vagrancy through the institution, dependent behavior, unsuitable touching and night restlessness. The authors also express their concern about the reasons of verbal and physical aggressive behavior of clients with dementia namely aggression as a form of goal achievement, aggression as emotional reaction, aggression as false conception of reality, aggression as a character feature and aggression as an answer.

According to Venglarova (2007), among preventive acquisition, obstructing the unsuitable manifestation of clients with dementia, goes quality staff education focused on specific work with this target group, reduce and decrease of deficits (communication problems, perception impairment, social isolation), suitable nursing care, social environment and relationships including spending of leisure time, space layout, prevention of caring persons overload.

The last part of the poster describes pharmacological and non pharmacological influence possibilities on seniors with dementia behavior in homes with special regime, the experiences with supervision in elderly homes and the problems of staff in the homes with special regime.

## Educational goal

1. To demonstrate how specific work with seniors may aid in reducing deficits (communication problems, perception impairment, social isolation), through suitable nursing care, social environment and relationships including spending of leisure time, space layout.

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# Chapter 16 – Specific populations: forensic

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## Litigious Paranoia in the forensic context

### Paper

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### Abstract

While not frequently the focus of psychiatric and psychological literature, the condition known as Litigious Paranoia (Stauber, 2009) or Querulous Paranoia (Mullen & Lester, 2006) is mentioned regularly in the legal literature, though not necessarily as a diagnostic category, but rather as a description of behaviour. Such descriptions are especially prominent in the written opinions of the judiciary (Stauber, 2006). The condition is defined variously as, for example, “a medical condition in which a person obsessively engages in persistent, unnecessary litigation” (Stauber, 2009), a form of paranoia in which the person seeks legal proof or justification for systematized delusions (Mosby’s Medical Dictionary, 2009) or a pattern of behaviour involving the unusually persistent pursuit of personal grievance in a manner seriously damaging to the individual’s economic, social, and personal interests, and disruptive to the functioning of the courts and/or other agencies attempting to resolve the claims” (Mullen & Lester, 2006). It is largely reported to be treatment-refractory, and the behavioural correlates usually include unsupported allegations, harassment, threatening, and rarely, but usually unpredictably, outbursts of serious and sometimes fatal violence. There is nosological uncertainty underlying the differences in definitions. Is the condition delusional (Mosby’s Medical Dictionary, 2009), or sometimes delusional (Mullen & Lester, 2006)? Alternatively, is it non delusional behaviour resulting from a core cognitive component, an idealised value whose overriding importance becomes the defining feature of an individual’s identity (Veale, 2001)? Should the litigious paranoia be managed by helping the individual resolve the issues that can be resolved, and, following that, close the case “sympathetically but firmly,” (Mullen & Lester, 2006)? Is there a danger that restricting the perception of legal recourse would make some of these individuals directly violent (Blaney, 1999), perhaps even lead them to murder someone perceived as interfering with their ability to attain their goal (Veale, 2001)? Given the lack of efficacious treatment, how can the potential risk of violence posed by these individuals be managed? Answering these questions will have a profound impact on care, treatment, and risk management of the patients who come to the attention of the forensic mental health system. We propose to address these issues by highlighting the commonalities and differences shared by 4 patients with this condition that have been assessed and treated in our forensic psychiatric ward over the past several years. We will describe the particular difficulties these patients experience in progressing towards community reintegration, and the challenges they present to their clinical caregivers. We will also summarize the strategies that may be helpful in managing such individuals.

### Educational goals:

At the end of the session the participants will be

1. acquainted with the concept of litigious paranoia, and the most recent research about it
2. be able to identify mechanisms contributing to the condition
3. learn about the strategies used to manage risk associated with the condition, and strategies for community reintegration.

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# Predicting aggression in psychiatrically disturbed prisoners

## *Paper*

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## **Abstract**

### **Introduction**

There is a relation between psychotic illness and aggression. The exact nature of this relation is unsure and varies between populations. Prisoners with psychotic disturbances are more often involved in violent crimes and show significantly more aggression in prison than regular prisoners. Yet in the free world they are treatment and institution avoiding and therefore seldom subject of research. This article describes the relation between psychotic symptoms and aggression in this hard to grasp population.

### **Methods**

In the course of two years 180 prisoners, committed to a psychiatric prison ward for crisis intervention, were followed and regularly screened for psychiatric symptoms. Aggressive acts were registered. Logistic regression was used to establish relationships between illness and aggressive behavior.

### **Results**

A relationship between hostility, grandiosity, paranoia and aggression was found. In males excitation and disorientation was related to the occurrence of physical violence. In females anxiety was related to aggression in general. Though these relations were significant, they only explained a small part of the variation and are not likely to be the only cause.

### **Conclusion**

As in other populations, there exists a relationship between symptoms and the occurrence of aggressive behavior in psychiatrically disturbed prisoners. It doesn't explain the extent of violence displayed by this group though. Quite possibly this group is prone to aggression because of some undefined characteristic that is now buried under a mask of insanity.

### **Educational goals**

1. To enhance knowledge about the role of psychiatric symptoms in aggressive behaviour.

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# Aggression in Prisons: A forgotten field of research?

## Paper

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## Summary

**Background:** Penitentiaries are well equipped for restricting aggressive behaviour. Whether this means that they are safer than other closed facilities has, however, barely been studied.

**Purpose:** This article discusses how aggression is measured and what is known, internationally and in the Netherlands, about the number of aggressive incidents within the prison system.

**Method:** This article is a review of the scientific literature on aggression in the prison system. We reviewed the number of aggressive incidents and the research methods used. Figures from different sources were extrapolated to the number of aggressive incidents for each 1000 detention places annually.

**Results:** Differences in definitions, measuring instruments and measuring methods give results that can vary by a factor ten, even within the same penitentiary. The variations are even larger among the different institutions; results vary from 5 to 15997 incidents for each 1000 detention places annually. It therefore seems apparent that there is barely any structured and systematic registration of aggression by the prison system.

**Conclusion:** Aggression in detention is an underreported, and therefore probably also an underestimated, phenomenon. This is a missed opportunity, because the behaviour of prisoners during detention could lead to reducing recidivism at a later stage. Also, such registration of aggression could contribute to enhancing safety in penitentiaries and to improving the care for detainees and prison staff.

## Introduction

Aggression is fairly common in closed facilities. The most common occurrence is that supervisors and counsellors are the victim of aggressive behaviour by their clients. This can cause injury and pain, but also depression, post-traumatic stress and burnouts. The absenteeism due to illness under those who directly counsel and supervise people in (closed) psychiatric facilities, care facilities for the mentally retarded or geriatric facilities, then, is, partly due to this factor, relatively high. This means that aggressive behaviour has a significant impact, not only physically and mentally, but also financially [1].

Penitentiaries are perhaps the most closed facility of all, where people are being punished, restricted and held against their will. This fact has a powerful impact on the culture of such facilities, which is often typified by violence and the threat of violence [2]. The famous Stanford Prison Experiment, conducted in 1973, placed ordinary, mentally healthy people in the role of either prison guard or detainee. Within several days the guards became tyrants, the detainees had severe stress reactions and their mental condition and behaviour deteriorated. The experiment illustrates the overwhelming power and influence the penitentiary setting may have on both detainees and staff [3].

In the past ten years, research has been done in (closed) psychiatric facilities into the causes of aggression and a set of instruments has been developed within that sector to classify aggressive behaviour. In the prison system, such a research tradition seems, at present, to be lacking. This is remarkable because precisely in penitentiaries the target group, the PIWs (penitentiary staff) and the facilities could have characteristics that have been shown, in studies, to increase the risk. Detainees by definition have past aggressive or criminal behaviour, often in combination with an antisocial personality style and a lack of empathy [4]. As demonstrated earlier, the role of the guard can be an invitation for dominant and in extreme cases even cruel behaviour. And, as stated in the above, no facilities are more closed than penitentiaries. These are all factors that can contribute to the development of rage and aggressive behaviour [5].

The prison system spends a large part of its budget in keeping order and safety in the facilities. The major part of that money is spent on supervisory and security staff. But investments are also made in the physical environment. Windows and doors are made of special (virtually) unbreakable materials, cameras are in place and most spaces can be locked off from one another automatically. The prison system has gained a great deal of experience in restricting and dealing with unacceptable and defiant behaviour. These investments may have led to effective interventions and it may be relatively safe in penitentiaries. But,

as stated earlier, relatively little is known on the safety, or lack thereof, in a penitentiary [6]. This article addresses how aggression in penitentiaries is measured and what is known, both internationally and in the Netherlands, on the number and seriousness of aggressive incidents in the prison system.

## Method

Using search engines, we searched for articles and reports on aggressive behaviour of detainees, victimization of penitentiary staff or detainees, and traumatic experiences resulting from aggression among detainees or penitentiary staff. More specifically, (combinations of) the following search terms were used: prison, prisoner, detention, aggression, violence, victimisation, bullying, warden, staff, behavior, behaviour trauma, and recidivism. We selected articles and reports on these subjects that were less than 10 years old.

We collected quantitative data on aggression by detainees towards detainees and by detainees towards the penitentiary staff. Therefore, we looked for figures on the number of aggressive incidents and figures on perpetrators and victims, so that comparisons could be made from different perspectives. We were unable to find any foreign (government) reports on aggression in penitentiaries by the use of the English search terms. So we approached European Ministries of Justice by e-mail to ask if any such reports were available, and if so, where we could find these.

Firstly, we listed for each source which measuring method and random sample were used to get a perspective on the general applicability of the data. We then viewed which percentage of the detainees had to deal with aggression within the walls of the penitentiary, either as a perpetrator or a victim. The percentage of penitentiary staff that was a victim of aggressive behaviour was also included. Wherever possible, the collected data were then converted into the number of incidents for each 1000 detention places annually, to give an estimate of the absolute number of incidents. When necessary, we requested additional information to conduct this conversion. Data on the number of detention places were found on the website of the Ministry of Justice (DJI, 2009). No official data on the number of penitentiary staff were found, but figures on this could be found in policy documents of the Ministry of Justice on cutbacks in the prison system. It was especially difficult to find information on the capacity of penitentiaries and the number of penitentiary staff in international publications, especially because there was often no explicit information on which facilities were involved in a study. Therefore, so as to illustrate comparisons of the data from various sources and to give a rough estimate of the extent to which aggressive behaviour occurs in penitentiaries, we have mainly used the situation in the Netherlands.

## Results

A search of pubmed yielded 22 recent scientific articles with data on the occurrence of aggression in the prison system. Nine of these articles were from the United States, 6 from the Netherlands, 5 from Great Britain and 2 from Switzerland. An enquiry at European Ministries of Justice yielded a response from the Dutch Service for Judicial Facilities, which provided a table of the number of registered aggressive incidents in Dutch penitentiaries. Oftentimes, we received no response and when we did get a response it was often apparent that there was no systematic registration of aggression. For example, a Swedish official wrote that serious incidents are registered separately. He could, for example, report that no murders had been committed in a Swedish penitentiary since 1970. But to estimate the number of aggressive incidents, hundreds of reports would have to be delved through. The German Ministry of Justice responded by stating that these types of statistics on the prison system were registered by region in Germany. Each region has its own method of registration. We received other reactions with more or less the same message. The conclusion that data collected by the government are often not used for research and often not published seems, then, to be justified.

Aggression was approached from various perspectives: from that of the perpetrator, the victim or the aggressive incident itself. In 6 publications the subject of research was the aggressive behaviour of adult detained men, in 3 publications it concerned the aggressive behaviour of young adults, in 2 publications aggression by men and women, in 2 publications the behaviour of men that had been convicted to death, 1 publication addressed aggression of psychiatrically disturbed detainees and 1 publication described the aggressiveness of detainees who had committed sexual offences. Three publications addressed the victims of violence by detainees among penitentiary staff. Eight articles described the percentage of detainees that became aggressive. Five articles described the total of the physical and/or mental aggressive incidents by detainees, the definition of aggression ranging from bullying to serious assault. Five studies did research on how many detainees became a victim of (sexual) violence in prison. And 2 articles addressed the percentage of penitentiary staff that became the victim of aggression [8]. A table with all the data in figures, as well as the complete list of literature can be requested from the authors.

The manner in which aggression was measured varied greatly in the different studies. Data on aggressive behaviour was scored, in 10 cases, based on reports on disciplinary measures (including 1 review). In some studies a structured measuring instrument was used. This was either the Direct and Indirect Prisoner behaviour Checklist (DIPC) or the Staff Observation Aggression Scale Revised (SOAS-R). In 3 other studies, questionnaires were used that had been filled out by penitentiary staff (please note that these 3 publications all addressed the same database). In the remaining 2 studies, data on aggression were collected by questionnaires that were distributed among detainees. In 9 of the 22 publications, the purpose of the research was to better 'predict' aggression within the prison system and, apart from listing disciplinary measures, an instrument for risk assessment was also used. The results in the different studies were presented either in percentages, absolute numbers, numbers per bed, annual numbers or numbers for an x number of detainees, which made comparing the studies difficult.

*Table 1 Number of aggressive incidents for each detention place annually*

Source	Measuring method	Type of aggression	Converted per 1000 detention places annually
Cornell, 1999	Daily reports	Aggression physical	4800 per 1000
		Aggression verbal	10400 per 1000
Bottoms, 1999	Disciplinary measures	Towards staff	56 per 1000
		Towards co-detainees	36 per 1000
		Fighting	94 per 1000
		Assault co-detainee	87 per 1000
		Assault penitentiary staff	31 per 1000
		Grievous bodily assault	5.4 per 1000
		Murder	0.1 per 1000
		Male-male rape	0.1 per 1000
Gesch, 2002	Disciplinary measures	Disciplinary incidents	5920 per 1000
Nijman, Geurkink, 2004	SOAS-R	Destructive acts	3381 per 1000
Wolff, 2006	Survey	Sexual victimization	43 per 1000
		Sexual victimization	212 per 1000
DJI, 2006	Disciplinary measures	Aggression against penitentiary staff	208 per 1000
		Aggression between detainees	130 per 1000
DJI, 2006	Disciplinary measures	Aggression against penitentiary staff	140 per 1000
		Aggression between detainees	134 per 1000
DJI, 2007	Disciplinary measures	Aggression against penitentiary staff	134 per 1000
		Aggression between detainees	105 per 1000
Borgers, 2007	Monitor Aggression	Sexual attention by detainees	117 per 1000
		Intimidation detainee at least once	354 per 1000
		Physical violence by detainees	171 per 1000
		Sexual attention by detainees	120 per 1000
		Intimidation detainees at least once	318 per 1000
		Physical violence by detainees	158 per 1000
Kunst, 2008	BASAM	Violence detainee at least once	470 per 1000
van Kesteren, 2008	Monitor Aggression	Intimidation detainee at least once	628 per 1000
		Violence detainee at least once	278 per 1000
van Beek & Smit, in preparation	Disciplinary measures	Aggression	1379 per 1000
		Aggression against penitentiary staff	1151 per 1000
		Aggression between detainees	227 per 1000
van Beek & Smit, in preparation	SOAS-R	Destructive acts	15997 per 1000

The publications describing the results in percentages show that 0.3% to 48% of the detainees appear to be guilty of aggressive behaviour during detention, depending on the definition. The number of detainees that says they are a victim of physical aggression during detention varies between 7.3% and 20.7%. The number of penitentiary staff that say they have had to deal with physical violence in the past year is between 21.7% and 48%. A complete table of these data can also be provided on request: Bogaerts, S., Hartogh, d. V., & Knaap, v. d. (2007). *Onderlinge agressie en geweld van PI Wersleden in een penitentiaire inrichting*. Den Haag: WODC.

For some publications, the results could be converted into more or less comparable numbers. Additional information was often required to do so, such as the period of measurement and the number of detainees in the facility. That information was not available for each publication. Table 1 gives the articles in which this information was available. It is noticeable that the number of reported incidents varies strongly between 0.1 for every 1000 detainees for murder and rape to 10,400 for every 1000 detainees for verbal aggression. The highest number found was in the facility where the researchers themselves work (van Beek & Smit, in preparation), a clinic for psychiatric crisis intervention in the prison system, the so-called FOBA (forensic observation and treatment ward), that shows a remarkable peak with 15,997 incidents for every 1000 detainees.

Data from different sources give different results. To illustrate this, we compared figures from different sources within the penitentiary of Amsterdam. Figures collected by the DJI (Custodial Institutions Agency, the headquarters of the prison system) give the most conservative estimate of the number of incidents. These figures are based on the reports on disciplinary measures and are also called injunctions within the prison system. There will always be a report on the more serious types of aggression, because a detainee cannot be punished without such an injunction. The Amsterdam penitentiary contains a ward for psychiatric crisis intervention (previously FOBA, now called Penitentiary Psychiatric Centre, PPC in short). Research into aggression in this ward, using the aggression measuring instrument, the SOAS-R, showed figures that were ten times higher than the figures that the DJI collected for the entire facility. This can be explained because the SOAS-R also registers the more subtle forms of aggression (name-calling, threats etc.). But a study employing self-reporting questionnaires also showed that the number of experiences with physical violence by detainees, reported by the penitentiary staff, was already twice as high as the total number of injunctions concerning physical aggression. This would mean that not all the physical violence of detainees versus penitentiary staff is reported or punished. A complete list of these data can be provided by the author on request. These data were collected in the same facility and illustrates that research methods have a substantial impact on the results, and that it is therefore reasonable to assume that certain methods of registration only show the tip of the iceberg.

In fact, the figures show, reasonably consistently, that penitentiary staff are more often the victim of aggression than detainees, although in this respect as well it might be the case that aggression between detainees is less often observed or reported. Registration of disciplinary measures in response to fighting between or aggression among detainees shows that at least 130 aggressive incidents for every thousand detainees occur annually. Research employing self-reporting questionnaires abroad shows that at least 7.3% of the detainees was the victim of psychical violence by co-detainees. The number of detainees that state that they are the perpetrator or the victim of bullying is much higher. If such figures were representative of the situation in the Netherlands, that would mean 90 to 440 aggressive incidents for every 1000 detainees. As far as we know, no such research has been conducted or published in the Netherlands.

### Discussion

This study of the literature shows that not much has been published on aggression in the prison system. This is remarkable, because the prison system has the duty to reduce recidivism. Victimization of detainees by other detainees would have an adverse effect on their rehabilitation and would promote future aggressive behaviour [8]. Also, aggressive behaviour is the best predictor of aggressive behaviour in future. Identifying detainees that exhibit violent behaviour in detention could help in indicating treatment. The most research in this area seems to be conducted in the United States. There are only a handful of European publications on this subject. It is therefore to be highly recommended that research into the behaviour of detainees within a facility is placed higher on the agenda.

Without a systematic registration of aggression, good research is impossible. There is barely any such registration within the prison system. The only studies we could find that used an aggression registration instrument were conducted in the FOBA. It yielded significantly higher numbers than other ways of collecting data in the FOBA. In non-penitentiary facilities, too, it is a well-known phenomenon that registering aggression with an instrument intended for that purpose yields not only higher numbers, but also more detailed information to take preventive measures. In most publications described in this article, however, much more indirect methods to measure aggression were used (i.e. questionnaires in which the

respondents had to estimate the number of incidents in a certain period of time). It is therefore likely that there is a much greater occurrence of aggression in penitentiaries than is presently assumed.

The data that are available show that violence is much more common in the prison system than in society. That means that the chances that a penitentiary staff member is the victim of physical violence in a given year is much higher than in free society, but here, too, we may assume that there are more violent incidents in society than are officially registered and reported. In 2007, more than a third of the penitentiary staff was seriously considering changing jobs due to experiences with aggression. Approximately one in five penitentiary staff members reported post-traumatic stress complaints. Absenteeism due to illness and absence of penitentiary workers is high in all countries. In the Netherlands, one fourth of the penitentiary staff states to have not performed as well during the last 12 months as a result of aggression and violence, and almost one in ten staff members studied was sometimes absent due to aggression in the workplace [9]. Although these numbers are lower than in, for example, the United States, it still means that the Dutch penitentiary staff members are unable to work one month in every year [10]. Seen like this, aggression in penitentiaries is a huge problem. If there were more attention for this, and more research conducted, this could prevent victims among detainees and staff members. Not only the safety within the facility would improve, but research into the causes and prevention of aggression in detention could also contribute to reducing recidivism and, thus, to a safer society.

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# Role perceptions of nurses working within forensic psychiatric wards in Turkey

## Poster

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## Abstract

### Objective

The aim of this study is to determine the views of nurses about their perceptions to their roles while they are working in forensic psychiatric wards.

### Method

This study was conducted with qualitative descriptive method using the focus groups. The study population was 16 nurses from forensic psychiatric wards.

### Results

In content analysis, it was determined that there were four binary themes; custodian versus care, abuse versus therapeutic efficacy, transference versus counter-transference and fear versus confidence. Forensic psychiatric nurses work on a daily basis with mentally ill people who are involuntary admitted to ward between the context of treatment and security in a very dynamic area. Knowledge of the context of nursing care and responsibilities in forensic psychiatric wards will be useful to build up a basis for improvement in advanced level of this kind of nursing care.

### Educational goals

1. To provide deeper understanding of role perceptions of nurses working within forensic psychiatric wards as a neglected area in Turkey
2. To bring the attention the need to improve of a special kind of nursing care in forensic psychiatric wards

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# Developing an intensive care unit at the UK's national high secure healthcare service for women

## Poster

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## Abstract

### Introduction

The poster presentation will identify the journey that the service has taken in the development of a bespoke service to meet the needs of a small group of women with complex needs and difficulties including frequently occurring assaultive behaviour. It will include the background to the development, the rationale for its inception and the steps taken along the way. It will identify the patient and staff experiences as well as details of the impact on the service as a whole. Lessons learnt for the service and other similar areas will be included.

### Background

Previously there were four high secure hospital services for women within the United Kingdom, three in England and one in Scotland. The decision was made to close two of the English ones to create a national service for England and Wales with fewer patients (50) but a greater opportunity to provide a specialist service. Rampton hospital developed this national service in 2007 with the Scottish and Northern Irish patients following on with the Scottish high secure closure in 2010.

Rampton hospital opened a purpose built unit of four wards was opened in 2007 with care pathways for personality disorders, mental illnesses and learning disabilities. After a short period it became evident that a small but significant number of patients were posing significant risks and management concerns which also negatively impacted on the rest of the population. The decision was made in 2008 to divide one of the wards into two separate wards with 6 beds for learning disability and 6 for an enhanced needs unit.

Over the past three years the unit has developed to the point where it is now identified as an intensive care unit. These changes and developments from the original model for the service have been based on lessons learned from working with this particular group of patients as well as utilising knowledge gained from national and international research and practice to ensure that the most effective evidence based care is provided for the patient population whilst minimising the risk of harm to themselves and others.

Current service provision: The intensive care unit has now established a practice model that meets the originally identified needs of the service as well as effective care and treatment for the women. There is a strong emphasis on relational security with a higher staff to patient ratio than the rest of the unit as well as a tightly structured and managed environment. The ward has been the first area in the hospital to introduce the use of individualised long term segregation in line with the MHA code of practice. The patients have a structured plan of time in their room, time out in the general ward area, socialisation and therapy opportunities with careful risk assessment throughout. The ward has utilised mechanical restraint on three occasions in order to manage life threatening self harm as well as ensuring care packages have broad multi-disciplinary team involvement. All of the changes have led to a significant reduction in assaults on staff and peers, increased opportunities for staff support and development as well as clear signs of improvement in patient presentations where previous approaches had not succeeded.

The poster presentation will show the service journey and relevant experiences, the changing figures for violence and aggression, self injury, staff support and training and individual patient and staff experience.

## **Educational goals**

To demonstrate:

1. Management strategies for women who present as persistently violent and aggressive in a forensic high secure in-patient setting.
2. New approaches to working with patients who exhibit extreme self injury concurrently with violence to others.

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# Dimensions of psychopathy: The homogeneity of CAPP domains in the United Kingdom

## Paper

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## Abstract

Psychopathy is a complex disorder that can be construed as a higher order construct underpinned by distinct symptom domains. The Comprehensive Assessment of Psychopathic Personality (CAPP) is a theoretical model of psychopathy that entails six symptom domains i.e., attachment, behavioural, cognitive, dominance, emotion, self. The model has been developed not only, to facilitate the measurement of change, but also, to aid risk formulation and risk management. As part of the validation process of the CAPP model it is necessary to determine the unidimensionality — or homogeneity — of the individual domains prior to considering the nature of the higher order composite i.e., psychopathy.

The theoretical assumption that the domains are unidimensional requires to be tested empirically. Confirmatory Factor Analysis (CFA) provides that best procedure for determining the unidimensionality of domains. Indicators of the domain being tested are specified to correlate with the domain of interest and not to correlate with other domains, and the extent to which that specification is consistent with data is evaluated using model fit indices.

We will present data from a large scale UK study; data from three forensic psychiatric hospitals and three prisons will be presented. Using CFA It will be shown that broadly speaking the domains of interest are homogeneous in nature; using Item Response Theory analysis we will describe which symptoms are particularly diagnostic of the domains of psychopathy.

The theoretical and clinical implications of the findings will be discussed in the light of recent arguments that progress in the study of personality disorders will be best served through the study of unidimensional, homogenous constructs.

## Educational goals

1. Introducing a new model of psychopathy.
2. Outlining clinical relevance for risk management.

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# Violence and Autism Spectrum Disorders (ASD)

## Seminar

*Floor van Dijk, Erica van Barneveld, Rose Schmitz, Laurette Goedhard & Henk Nijman  
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## Abstract

Patients with ASD seem to have a relatively high likelihood of displaying ‘antisocial’ and aggressive behaviour, which may be caused by incorrect evaluation of social situations, reduced empathic abilities (e.g., see Hansman – Wijnands & Hummelen, 2006), or from the difficulties these patients have in coping with unexpected situations and interactions. Apart from that, some patients with autism or PDDnos are plagued by severe obsessional thoughts, which can be of a violent nature.

In this seminar, such specific triggers for violence in patients with ASD are addressed from four different angles, in four separate lectures, which each start off with a case study in which a ASD patient engaged in severe violent behaviour.

The first lecture starts with a case-report in which a man was convicted for assaulting a bus driver. During his forensic treatment at the forensic psychiatric department Altrecht Aventurijn in Den Dolder, the Netherlands, PDDnos was diagnosed and it became clear that the patient had suffered from aggressive fantasies for a long time, which eventually led to his violent behaviour. A set of interventions helped him to manage his obsessional thoughts and to reduce the risk of repeated violence. This case study will be accompanied by a review of the literature in which the prevalence, diagnostic features and treatment options for patients with ASD symptoms are addressed.

In the second lecture of the seminar, a case study of another violent ASD patient will be addressed. More specifically, the backgrounds of a male patient who had been convicted for causing shaken baby syndrome to his own child are described. Extensive diagnostic evaluation at Altrecht Aventurijn led to the diagnosis of autism, and a detailed assessment of the causes of his violent conduct.

In the third contribution to the seminar, the focus will be on what is known on the effectiveness of pharmacological management strategies for patients who suffer from ASD symptoms, in combination with intellectual disabilities. Again, this contribution will start with a case description of a patient suffering from such comorbid symptoms, in combination with severe behavioural problems. What is known from the literature about the management of aggression with (antipsychotic) medication in patients with these symptoms will be reviewed during this lecture.

Finally, in the fourth lecture, the case of an adolescent patient with a comorbid condition of ASD and a panic disorder is presented. How this patient was treated for his panic disorder will be described, which also made the patient more susceptible for treatment of, and psycho-education about, his ASD symptoms. In this lecture, the specific needs of young patients with ASD are addressed in terms of the specific ward environment and treatment approaches they need.

## Educational goals

1. To discuss specific triggers for becoming aggressive in patients with ASD
2. To learn more about specific treatment options and approaches when working with (aggressive) ASD-patients

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# Enduring personality disorder by impact of negative events in childhood and adolescence

## Poster

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**Keywords:** Psychological abuse; emotional privation; traumatization; aggressiveness; enduring behavioral disorder; problems with adaptation and self-realization

## Abstract

The paper deals with partial results of research, realized within the grant project GACR No. 406/09/0367 "Development, validation and standardization of instrument diagnosing antisocial behavior." As results of negative events during childhood and adolescence, especially psychological abuse and privation, in practice we can observe generally lower level of adaptability in individuals who were exposed to these stressful situations. They show a general problem of self actualization through acceptable societal means. These adjustment problems may have different forms of behavioral disorders and may often develop into various forms of antisocial behavior. The most important include impulsivity and aggression, addictive behavior, delinquency and crime. The prognosis for change is unfortunately not positive. The findings basically indicate the symptoms of enduring personality disorder as a result of trauma during childhood and adolescence. As one possibility of solution, but with uncertain prospects, is long-term psychotherapy. This should not be focused only on the correction of antisocial behavior, but should strive to compensate the original underlying cause.

## Methods

For this research we used our own version of the personality questionnaire, using the foreign experience with the diagnostic methods RSTI (Risk Sophistication Treatment Inventory) and HARE PCL (Hare Psychopathy Checklist). To determine statistically significant differences in the factors investigated we used Fisher's LSD test at the significance level of  $\alpha=0,05$  (for multiple comparison). The research investigated a juvenile population of delinquents and a control group (N = 544; age 15-26 years).

Specifically, we investigated and compared the following issues with each other: negative experiences in childhood and adolescence, especially psychological abuse (trauma) and psychological deprivation; symptoms of personality disorders; difficulties in relationships; troubles with working application; self evaluation of assumptions needed for socially acceptable self-realization

## Results

The investigation found statistically significant differences between the delinquent youths and the control group. Fundamental causes of their socially unacceptable behavior negative experiences during childhood and adolescence are include psychological abusing and deprivation. Statistically significant differences were found in some cases also between the groups of delinquent youths. Among the control group and delinquent youths we observed significant differences in all investigated factors. In the case of the unemployed differences can be observed in evaluating their working potential, but without the impact of the above factor.

Furthermore, the low self evaluation of persons in institutional care and the prisoners demonstrate greatly reduced assumptions regarding their social realization and other social perspectives. Higher tendency to dependent behavior was also observed as expected in the group dependent on psychoactive substances. In all groups of offenders typical tendencies to parasitic lifestyle were found. Statistically significant differences were found between offenders with regard to their ability to apply social interactions which in comparison to the control group and the unemployed are negative. Unfortunately, in terms of a perspective in the sense of desired forms of social self-realization these were insufficient. For all groups of delinquent youths there is a substantial risk of danger but – statistically – the situation is more favorable for youths in institutional care. Here the important factor is the "efficiency" of following institutional care which is often discussed among experts.

From the final correlation analysis, we clearly observed a correlation between trauma and its consequences, which were the subject of our empirical validation. We note that our research shows a relationship between negative events in childhood and adolescence, and the development of symptoms of personality disorders, and overall lower social adaptive skills of self-realization.

## Conclusions

The research demonstrates statistically significant negative consequences of negative events in childhood and adolescence. These lie in the generally lower ability to adopt socially acceptable ways later in life. These problems may even develop to the typical symptoms of specific personality disorders. In these persons the development can not be attributed to brain damage or disease. These disturbances can be characterized as a permanent change in perception and relationship to the person's surroundings, to himself and his own assessment, and in the poorer skills for self actualization in society. The means of self-realization often consist in forms of antisocial behavior.

The prognosis of change is unfortunately not positive. The findings basically indicate the symptoms of enduring personality disorder as a result of trauma during childhood and adolescence. One possibility of solution – albeit with uncertain prospects – is long-term psychotherapy. This should not be focused only on the correction of antisocial behavior, but to compensate the original underlying cause. This is a very difficult goal. The prediction of the level of individuals' possibilities should be determined by a diagnostic instrument with good discriminatory properties such as the one assessed during this research.

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# Aggressive behaviour in forensic psychiatric hospital in Finland: Analysis of violence incident reports

## Poster

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## Abstract

### Background and objective

In Finland, there are two state run hospitals for individuals who have committed severe criminal offences, but were found not guilty for reason of insanity, i.e. a psychotic disorder. Additionally, these hospitals admit patients with psychotic disorders whose treatment is "particularly difficult or dangerous, or not appropriate in a local community hospital". There are also persons who are undergoing a mental examination in the state run hospitals. The aim of this paper was to explore the frequency and provocation of physical violent incidents and to investigate the risk for violence between different patient groups in forensic psychiatric hospital in Finland.

### Material and methods

Three years' (2007–2009) violent incident reports were analysed retrospectively. The narrative descriptions of the incidents were analyzed by a content analysis. Frequencies and percentages were calculated and a risk for violent behaviour was analyzed with Poisson regression analysis. Data management and analysis was performed using SPSS for Windows 17.0.

### Results

During the three years (2007–2009) period staff filled 1002 reports of violence. In 840 (83.8 %) incidents the violence was physical. Physical violence was performed by 90 individuals. By the means of content analysis six main categories were found to describe the provocation of violence. Three of them (the patient was helped in everyday functions; violence with no external provocation and other verbal communication) seemed to be psychotic (61 %) and three of them (the patient was demanded to do something; the patient was denied something and other external provocation) seemed to be a reaction for something (36 %). Psychotic incidents consisted of situations where violence could not be expected beforehand. Only 3 % of the incidents could not be categorized. The risk for violent behaviour was biggest for difficult to treat –patients (RR = 11.96; CI 95 % 9.43 – 15.18) compared to criminal patients (RR = 1). This result was significant in  $p < 0.001$  level. The persons undergoing a mental examination were behaving aggressively very rarely (RR = 0.12; CI 95 % 0.11 – 0.13; ns).

### Conclusions

Over half of the institutional violent incidents seems to be difficult to foresee in forensic psychiatry because there was no external reason for violent behaviour. Institutional violence is most commonly performed by difficult to treat patients, which patient group has not committed a crime. We should take this result into a consideration when organizing health care resources and practices.

### Educational goals

1. To describe the frequency and provocation of physical violent incidents in forensic psychiatric hospital in Finland.
2. To compare the risk for violence between different patient groups in forensic psychiatric hospital in Finland.

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# Promoting Safer and Therapeutic Services (PSTS) for dealing with violence in a forensic learning disability in patient unit

## Poster

Saliha Nazir

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## Abstract

### Study aims

- To find out the number of PSTS Incidents in the unit during 1 year (2009-2010).
- To identify the reasons for the PSTS incidents.
- To ascertain if the trust & NICE (National Institute of Clinical Excellence) guidelines are being followed.

### Methodology

Retrospective collection of data from the PSTS monitoring forms which were collected from the PSTS team. We looked at PSTS over 1 year from 2009-2010.

### Results

#### Quantitative data

Total number of restraints 29, of which 22 restraints were following physical assaults. 18 of the assaults were horizontal restraints (supine or prone) and 6 cases involved rapid tranquilization.

#### Qualitative Data

The Antecedents leading to PSTS incidents were: Staff did not comply with patient requests: Patients did not comply with staff requests: the mental state of patients.

The behaviour leading to PSTS incidents was: Verbal abuse, Physical violence, Property damage and other.

The total number of verbal aggression incidents during the period was 443 and the total number of physical aggression incidents during the period was 104.

### Educational goals

1. Understanding the antecedents to violence in a forensic learning disability unit
2. Empowering staff and patients to reduce the number of incidents in the form of advance directives and de-escalation strategies

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# Baseline Screening of Substance Misuse using the AUDIT and DAST-10 within a Population of Mentally Disordered Offenders at a Regional Secure Unit in South West London (UK)

## Poster

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## Abstract

### Background

The association between criminality and substance misuse is well established (Haggard-Grann et al, 2006). People who present with mental health problems & substance misuse have increase risks of violent behaviour (Fazel et al, 2009) whilst many offenders experience mental illness in its own right (Swanson et al, 2000). Substance misuse is a common finding amongst mentally disordered offenders (Scott et al, 2004) with one inquiry identifying 36% of homicides by people with a dual diagnosis (University of Manchester, 2006). Detection of substance misuse plays an important role in the treatment of this population (Landsberg & Smiley, 2001). The Alcohol Use Disorders Identification Test (Saunders et al, 2001) and the Drug Abuse Screening Test (Skinner, 1982) have both been validated in screening for substance misuse in psychiatric populations.

### Aims

To obtain a baseline screening of problematic substance misuse amongst mentally disordered offenders within a regional secure unit.

### Results

43% of patients within the unit agreed to be interviewed using both screening tools. 32 patients were screened using the AUDIT producing a mean score of 3.3 with only 12.5% obtaining a positive screen. 32 patients were screened using the DAST producing a mean score of 2.9 with 62.5% obtaining a positive screen. On the basis of the both the screening procedure and clinical presentation, 41% of participants agreed to be referred for further assessment by the substance misuse support service.

### Conclusion

The level of positive screening of the DAST tool with its focus on current drug use within the last 12 months illustrates the prevalence of illicit drug use amongst mentally disordered offenders. Such use is likely to have occurred during unescorted leaves (via consumption or drug dealing within the unit at a later stage) and to have been responsible for subsequent absconding behaviour. The low positive screen for alcohol is reflective of the relatively low numbers of patients who express a preference for alcohol as their drug of misuse compared to illicit drugs ( especially cannabis). The vast majority of participants also answered negatively to the first 3 questions about daily and monthly frequency of alcohol in the last 12 months, which predisposes to low scoring when using the AUDIT.

### Educational goals

1. To illustrate use of screening tools for substance misuse.
2. To demonstrate the prevalence of substance misuse within forensic populations.

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# People with an Autism Spectrum Disorders (ASD) who have undergone psychiatric forensic examination

## Poster

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## Abstract

Cases involving individuals with ASD are often high profile cases in the media. However, both internationally and in Norway, the rates of individuals with ASD who are involved in offending behaviour is uncertain. There is reason to have concerns on whether persons with ASD are adequately identified in the criminal system, an on how a diagnosis within the autism spectrum influences the treatment in the legal and criminal justice system.

From the national register of forensic reports, all reports from 2000 until 2010 with diagnosis ASD were included. The study was approved by the ethical committee. Variable list was prepared in consensus meetings between the authors.

The aims of the study were to:

- present an overview of the target population.
- find similarities and differences in the population.
- explore care and treatment history.
- report the conclusions of the forensic examinations.

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# Effects of risk assessment and shared care planning on violent behaviour and patient QoL in outpatient forensic psychiatry: A cluster RCT

## Paper

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## Abstract

Forensic psychiatric treatment aims to prevent future violent or criminal behaviour by systematically assessing a patient's criminogenic needs through risk assessment. Protective factors and a good therapeutic alliance are thought to limit the identified risks. To be effective this information has to be translated into risk management and treatment interventions. Risk assessment instruments help in assessing risks and protective factors, but research on them has been limited to prediction. It remains unclear whether using risk assessment instruments in forensic psychiatric care actually helps to prevent violent or criminal behaviour (Douglas & Kropp, 2002). We addressed this question in our cluster RCT called Risk Assessment and Care Evaluation study (RACE-study) (trial number 1042 at [www.trialregister.nl](http://www.trialregister.nl)). Our setting of outpatient forensic psychiatry asks for an approach in which dynamic factors and short term risk for violence and consequent treatment interventions are central. The often involuntary nature of treatment makes client motivation and treatment compliance crucial issues. Therefore, our method of periodic monitoring of violence risk and treatment needs included shared decision making (SDM) to increase client involvement. SDM has been shown to increase client satisfaction and treatment adherence in longer lasting treatment relations in mental healthcare (Joosten, DeFuentes-Merillas, de Weert, Sensky, van der Staak & de Jong, 2008). We assessed clients' risk and protective factors on the START (Short Term Assessment of Risk and Treatability; Webster, Nicholls, Martin, Desmarais & Brink, 2006) and then used the identified key items in a treatment discussion structured on SDM principles. In our pilot, this method proved both feasible in practice and predictive of violent and risk enhancing behaviour in subsequent months (van den Brink, Hooijschuur, van Os & Wiersma, 2010). By addressing both risk and protective factors and fostering a positive therapeutic alliance, through SDM, we expect that our approach has a preventative effect on recidivism. To our knowledge we are the first to test this crucial assumption of a preventive effect of risk assessment on recidivism.

## Educational goals

Participants will learn:

1. Whether risk assessment and shared care planning can actually prevent new violent or criminal behaviour.
2. Whether risk assessment and shared care planning improves patient quality of life in outpatient forensic psychiatry.

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# Neurocognitive deficits and academic skills in Finnish male prisoners

## Paper

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**Keywords:** Male offender, executive functions, offence categories, academic skills, neurocognitive deficits, male offender

## Introduction

Good academic skills are of major importance for success in society. Several studies have shown that poor academic achievement in domains such as reading, spelling, and mathematics are considered risk factors for adjustment problems, and antisocial and criminal behavior (Bennett, Brown, Boyle, Racine, & Offord, 2003; Murphy et al., 2000; Kirk & Reid, 2001). In recent years, several studies have examined the prevalence of dyslexia among offenders and found it to be much higher than the 4–10 % acknowledged as the prevalence in the general population (Alm & Anderson, 1997; Dalteg et al., 1997; Snowling, Adams, Bowyer-Crane & Tobin, 2000). As many as two thirds of offenders have been found to suffer from some reading and spelling disorders (Alm & Anderson, 1997; Lindgren et al., 2002; Svensson, Lundberg, & Jacobson, 2003).

The variability in the reported prevalence of dyslexia and related disorders among offenders is wide, and may in part result from different definitions or different measures of learning disability. The majority of studies concerning learning disabilities in adults utilize a framework of dyslexia that manifests primarily as a difficulty in reading and spelling, with a core deficit in phonological processing (e.g. Snowling, 2001; Vellutino, 2004).

In some studies, offenders have been found to be impaired in areas of intelligence and executive functions (Marceau, Meghani, & Reddon, 2008). This global cognitive impairment, taken in conjunction with sociodemographic differences among offenders compared to the normal adult population, poses a challenge in interpreting the etiology of academic difficulties among offenders. The current study aims to determine the deficits in reading, spelling, and mathematics in male offenders and their relation to neurocognitive deficits. Taken into account the broad assessment battery, we prefer to use the terms *academic skills or academic difficulties* to describe reading and spelling deficits, rather than dyslexia or learning disorders. In addition to these language-related problems, the concern has been expanded in this study to include mathematical difficulties as well. Dyslexic individuals have been found to have not only phonological processing deficits, but also broader deficits in neurocognitive functions (Brosnan et al., 2002; Baker & Ireland, 2007). On the other hand, in some studies, 30 % of ADHD adults have been diagnosed with learning disabilities (Barkley, 1998; Spencer et al., 1999).

Correlates between arithmetic difficulties and neurocognitive deficits among offenders have been much less studied. Greiffenstein and Baker (2002) found that arithmetic deficiency in a normal adult sample related to low nonverbal intelligence, visuoconstructional problems and difficulties in switching mental set as measured by the Wisconsin Card Sorting Test. Clearly, there is a need for more research concerning different types of academic skills and comorbid neurocognitive deficits among offenders, since this can assist in suggesting more relevant interventions and rehabilitation programs.

In our previous study (Tuominen et al., 2009), we reported a high incidence of neurocognitive deficits in Finnish male offenders. The current study aims to determine the nature of the academic skills deficits in male offenders and their relation to neurocognitive deficits. The research questions in the present study were as follows: What is the frequency of reading, spelling, and mathematical disabilities among Finnish male offenders? What are the interrelations between academic skills and neurocognitive deficits?

## Methods

Seventy-eight offenders (aged 19–61) participated in this study at the Prison of South Western Finland (current name: Turku Prison). The mean age of the entire group was 32.2 years (SD=9.1, range: 19–61).

The participants were also taking part in an on-going Finnish study of prisoners' health (The Health, Working Capacity, and Health Care Needs of the Clients of Criminal Sanctions Field), which is supported by the Finnish criminal sanctions agency. The offenders were all serving a prison sentence at the time of the study, and they were randomly selected from the prison population. The study sample included neither prisoners on remand nor fine default prisoners. The prisoners were willing to co-operate, although the process of assessment was rather demanding.

According to the demographic data, 91.8 % of the participants had completed 9 years of compulsory school, and 49.3 % of the participants had also completed some form of post-compulsory vocational training; thus 50.7% had no further education. According to the national statistics for the Finnish population, 18.6 % of the total adult population have completed no more than the compulsory 9-year schooling. (Statistics Finland, 2008)]. 20.5 % of the participating subjects had been sentenced for theft, 19.2 % for homicide or other violent crimes or for drunken driving, 8.9 % for drug offences, and 3.8 % for robbery. The term 'principal offense' refers to the offense for which the longest sentence had been imposed.

## Procedure

### Assessment of reading and writing disabilities

Finnish standardized tests were used to measure reading, spelling, and mathematical difficulties in offenders. *The screening test for reading, reading comprehension and spelling for young and adults* (Holopainen, Kairaluoma, Nevala, Ahonen, & Aro, 2004) was used to assess academic skills. The screening test consists of two tests of reading, one test of reading comprehension, and two tests of spelling skills. The scoring system allows the formation of three categories of performance level according to the lowest 4, 8, or 12 % of the distribution of the test norms. In this study, performance levels are called 'severe difficulties', 'medium difficulties' and 'minor difficulties'. In the lowest 4 % of the distribution, the level of difficulties is so high that special education or support would definitely be needed. At the 8% level, support or special interventions are necessary. For the 12% level, support is recommended. *The Test for Arithmetic (KTLT; Räsänen & Leino, 2005)* was used to assess mathematical difficulties. Test for Reading and Spelling and the KTLT were standardized using Finnish normative data.

### Neuropsychological tests

The neuropsychological tests were chosen to assess different domains of cognitive functioning, including general intelligence, verbal and visual comprehension, spatial perception, visuoconstructional and spatial abilities, motor dexterity, processing speed, and memory. Tests of inattentiveness, vigilance, impulsivity, response inhibition, and set shifting were also included. No ADHD diagnoses, however, were made.

*The Wechsler Adult Intelligence Scale-III (WAIS-III; Wechsler, 1992; 2005)* was used to measure general intelligence and verbal and nonverbal intelligence. *The Rey-Osterrieth Complex Figure Test (ROCFT)* (Meyers & Meyers, 1995; Rey & Osterrieth, 1993) is a test of both visuographic copying and visuographic memory. *The Purdue Pegboard* (Tiffin & Asher, 1948) is a measure of motor dexterity. *The Wechsler Adult Memory Scale – Revised (WMS-R; Wechsler, 1987)* and its delayed logical memory subtest were used to assess episodic memory. *The Continuous Performance Task (CPT II; Conners, 2005)* was used to assess attention and inhibition. *The Wisconsin Card Sorting Test, Computer version 4 (WCST: CV4)* (Heaton et al., 1993) is a measure of executive functions, originally designed to study set shifting.

## Results

The total WAIS-III IQ score for the whole sample was 91.80 (SD = 10.84, min = 71, max = 114). 58.1 % of the participants had average or above-average intellectual functioning, whereas 12.2% of the participants scored under 77.5 (1.5 SD). A Verbal Comprehension Index of 85.6 (VCI) was the lowest score. The Verbal IQ of the participants was significantly lower than the Performance IQ ( $t(73) = -5.3, p < .001$ ).

22.7 % of the offenders had severe problems in Reading and 25.3 % of the participants had equally severe problems in Spelling. When looking at the poorest 8 % (moderate level) of the population norms, 36.0 % of the participants had problems in Reading, 28.6 % in Reading Comprehension, and 33.3 % in Spelling. In the lowest 12% of the distribution (minor problem level) the share of poor performance varies between 35.1 % and 44.0 %. Of the participants, 30.1 % displayed from medium to severe problems in two of the three academic skills: Reading, Reading Comprehension, and Spelling, while 12.7% had from medium to severe level problems in all of these skills. In the Mathematics test, 15.1 % had at least medium level problems. Of those, 72.7 % had from medium to severe problems in at least one other area of academic skills.

On the basis of a Cluster Analysis of the neurocognitive performance, eighty-nine percent of the whole sample was classified into two separate clusters. The first subgroup ( $N = 26$ ) had no neurocognitive or intellectual deficits. The second subgroup ( $N = 38$ ) had neurocognitive deficits in working memory, spatial perception, and visuoconstructional ability. This group also had the lowest general intellectual functioning, as well as problems in Reading, Reading Comprehension, Spelling and Mathematics. After controlling the measured IQ, the differences still remained significant in Reading Comprehension ( $p < .001$ ), in Spelling ( $p < .05$ ) and in the Wordchains part of the Reading test ( $p < .05$ ).

In order to evaluate further the relationship between neurocognitive performance and academic difficulties, we used the 8 % limit to form four different groups with and without difficulties in Reading, Reading Comprehension, Spelling and Mathematics. These two groups differed significantly on most of the neurocognitive functions ( $p$  at least  $< .05$ ). The group with Reading problems ( $N = 23$ ) performed more poorly in motor dexterity, inattentiveness, attention shift, and visual memory than the group with no Reading problems ( $N = 46$ ). The group with problems in Reading Comprehension ( $N = 19$ ) had lower scores in motor dexterity, verbal memory, visual memory, and inattentiveness ( $p$  at least  $< .05$ ) than the group without problems in Reading Comprehension ( $N = 51$ ). Between the groups with and without Spelling problems, no significant differences in neurocognitive performances emerged. The group with poor Mathematical abilities ( $N = 10$ ) differed from the groups without Mathematical problems ( $N = 59$ ) on the tests of Working Memory ( $p < .001$ ) and Verbal Comprehension ( $p < .01$ ). All those with severe difficulties in Mathematics were placed into the subgroup of neurocognitive deficits. No differences were found in academic functioning between groups of prisoners in different criminal categories.

## Discussion

The aim of the present study was to examine the frequency of academic disabilities (reading, spelling and mathematics) among male offenders, and the relationship between academic skills and neurocognitive deficits.

The results showed a high incidence of reading, writing, spelling and mathematical disorders in male offenders. One third of our sample had from medium to severe problems in two different academic skills, while 12.7 % had equally marked difficulties in three academic skills. This level of difficulties would unquestionably require special education or support even in the prison setting. A high occurrence of reading and spelling problems among offenders has also been found in other studies (Rasmussen, Almvik, & Levander, 2001; Svensson, Lunberg, & Jacobson, 2003), but much higher figures have also been reported.

There may be experiential factors that could partly explain the low attainments at least in academic skills. We are aware that the educational background and sociodemographic factors of the present offender sample differed from the normal adult population, whose performances form the basis for the norms of the academic and neuropsychological tests used in our study.

Consistently with some earlier studies (e.g. Syngelaki, Moore, Savage, Fairchild, & Van Goozen, 2009), a reduced general intelligence of the participants was also found in the present study. Fifty-eight percent of the participants had average or above average intellectual functioning, whereas 12.2 % of the participants had under 77.5 IQ Total. The IQ differentiated also those with and without academic disorders. In agreement with the previous study by Reid & Kirk (2001), the subjects with academic disabilities in the present study were found to have many neurocognitive deficits. The strong link between academic difficulties and deficits in neurocognitive functioning points to comorbidity of these disorders in male offenders.

No differences were found in academic functioning between groups of prisoners in different criminal categories. A link between dyslexia and executive functions, especially in violent offenders, has been reported earlier (Baker & Ireland, 2007; Ireland & Rogers, 2004), but our study supports the view that there is a high comorbidity of deficits in academic skills and a wide range of neurocognitive deficits regardless of offense type. The current results should, however, be interpreted bearing in mind that the sub-samples were relatively small, and only the principal offense was used to divide offenders into different offense categories.

Given the extent of academic and neurocognitive deficits in these Finnish male offenders, it follows that a broad neuropsychological assessment should be carried out to elucidate our understanding about academic disorders and other cognitive deficits in prisoners, this enabling better focused and more effective rehabilitation.

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# Chapter 17 – Specific populations: intellectually disabled

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## KAOS and Assessment of Risk and Manageability of Intellectually Disabled Individuals who Offend - Sexually (ARMIDILO-S): An integrated risk-based treatment program

### **Workshop**

*Douglas Boer, Siv Anita Tsakem, Emmanuel Revis  
University of Waikato, Hamilton, New Zealand*

### **Abstract**

Over the past four years, the National Unit for Mandatory Care (NUMC) in Norway has been developing a treatment program for use both inside and outside of the institution with intellectually disabled (ID) offenders. The KAOS program is a cognitive behavioral, principle-driven, and modular skills training therapy program inspired by treatments such as Dialectical Behavioral Therapy (DBT) and Aggression Replacement Therapy (ART). The target group includes ID persons and patients with autism spectrum disorders with sexual or general violence. The program involves the patient's family, the central and local institutions, and the local health service to enhance ecological validity and the generalization of treatment gains.

The Assessment of Risk and Manageability of Intellectually Disabled Individuals who Offend - Sexually (the ARMIDILO-S; Boer, et al, various dates) has been developed and validated for ID offenders. During the last two years, the KAOS program has been integrated with the ARMIDILO-S to comprise an innovative risk-based treatment model.

The presentation will present how the KAOS program attempts to gap the bridge between risk assessment and treatment, and provide practical examples of how this is done in a clinical setting.

### **Educational goals**

1. To update knowledge about risk assessment for intellectual disabled persons.
2. To update knowledge about ARMIDILO as an risk assessment-instrument.
3. To offer new ideas concerning the integration of risk assessment and treatment.

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# Violence and victimization in adults with severe mental illness: Part 1 – An application of integrated data analysis

## Paper

*Richard Van Dorn, Sarah Desmarais, Jay Singh*  
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## Abstract

Background. Among the challenges faced by adults with severe mental illness (SMI), perhaps none is as complex and destructive as violence. Those with SMI are seen as unpredictable and dangerous. Highly publicized cases of violence perpetrated by adults with SMI have focused attention on public safety. As a result, the victimization experiences of adults with SMI have largely been ignored despite evidence that they are more likely to be victims than perpetrators of violence. Indeed, three times as many publications exist on the link between mental illness and violence as on mental illness and victimization. In sum, an empirical gap exists regarding the nexus of mental illness, violence and victimization. Project Overview. Across three papers, we will describe a systematic, large-scale investigation of violence and victimization among adults with SMI. Data were drawn from the baseline assessments of subjects who participated in one of five studies: (a) Mental Disorder and Violence Risk Study (b) Schizophrenia Care & Assessment Program; (c) Clinical Antipsychotic Trials of Intervention Effectiveness study; (d) Mandated Treatment Study; and (e) Psychiatric Advance Directive study. The first presentation will provide an overview of the project and describe our use of integrated data analysis (IDA) to pool raw data from these five studies to create a large, heterogeneous sample of adults with SMI (N=4,460). The second presentation will examine the prevalence and co-occurrence of violence and victimization in the pooled data. The third presentation will explore the underlying dimensions of psychiatric symptoms and their association with violence and victimization. Across presentations, the focus will be on the implications for research, policy and practice. Summary of Presentation 1. Presentation 1 will begin with an overview of the project and an introduction to the theoretical and methodological underpinnings of IDA, including factor analysis, item response theory, and differential item functioning (DIF). We will then describe the common measurement model created by following a 4-step procedure: (a) dimensionality, (b) calibration, (c) DIF, and (d) scoring to link items across studies. For example, our application of this 4-step procedure identified both “weak” and “strong” factorial invariance for positive psychotic symptoms and violence, indicating that these latent constructs can be treated as common measures in the pooled data. Presentation 1 will conclude with a discussion of the conceptual and practical challenges of IDA (e.g., linking strategies).

## Implications

Existing research is hampered by significant methodological limitations, including small, non-representative samples that lack statistical power; limited assessments of types and frequency of violence and victimization; and failure to account for the co-occurrence of violence and victimization during the same period. Our application of IDA offers several advantages, such as increased statistical power; statistical accommodation of measurement heterogeneity across samples; and consideration of between-study differences (e.g., timeframes). This project represents the first application of IDA, a cutting-edge methodology, to the population of adults with SMI and to examine violence and victimization.

## Educational goals

1. To explain and demonstrate the benefits of using a pooled data approach to examine violent outcomes among adults with severe mental illness.
2. To illustrate the four steps used to create a common measurement model across the pooled data.

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# Violence and victimization in adults with severe mental illness: Part 2 – Prevalence and co-occurrence of violent outcomes

## Paper

*Sarah Desmarais, Richard Van Dorn, Jay Singh  
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## Abstract

**Background.** Among the challenges faced by adults with severe mental illness (SMI), perhaps none is as complex and destructive as violence. Highly publicized cases of violence perpetrated by adults with SMI have focused attention on public safety. As a result, the victimization experiences of adults with SMI have largely been ignored despite evidence that they are more likely to be victims than perpetrators of violence. Indeed, three times as many publications exist on the link between mental illness and violence as on mental illness and victimization. In sum, an empirical gap exists regarding the nexus of mental illness, violence and victimization.

**Project Overview.** Across three papers, we will describe a systematic, large-scale investigation of violence and victimization among adults with SMI. Data were drawn from the baseline assessments of subjects who participated in one of five studies: (a) Mental Disorder and Violence Risk Study (b) Schizophrenia Care & Assessment Program; (c) Clinical Antipsychotic Trials of Intervention Effectiveness study; (d) Mandated Treatment Study; and (e) Psychiatric Advance Directive study. The first presentation will provide an overview of the project and describe our use of integrated data analysis (IDA) to pool raw data from these five studies to create a large, heterogeneous sample of adults with SMI (N=4,460). The second presentation will examine the prevalence and co-occurrence of violence and victimization in the pooled data. The third presentation will explore the underlying dimensions of psychiatric symptoms and their association with violence and victimization. Across presentations, the focus will be on the implications for research, policy and practice.

**Summary of Presentation 2.** Presentation 2 will comprise two phases. First, we will test the hypothesis that the prevalence of victimization is greater than the prevalence of violence perpetration among adults with SMI. Specifically, we will assess: point and period prevalence of violence and victimization; severity of violence and victimization; and location of violence and victimization. Second, we will test the hypothesis that violence and victimization are statistically associated with one another. Specifically, we will: examine the magnitude of the statistical association between violence and victimization; identify the unique and shared variance attributable to violence and victimization; and determine whether prior violence and/or victimization contribute to prevalence estimates. Preliminary analyses offer support for both hypotheses: for example, occurrence of one violent outcome was associated with a 5-fold increase in the likelihood of the other.

## Implications

Only a handful of studies have assessed violence perpetration and victimization among the same participants; however, an understanding of their co-occurrence may have significant implications. Support of our hypotheses will provide evidence for a transactional model of violence; that is, that violence is a risk factor for victimization and that victimization is a risk factor for violence. Furthermore, their co-occurrence suggests an underlying vulnerability that, when targeted, could reduce the likelihood of both violence and victimization.

## Educational goals

1. To compare and contrast the prevalence of violence and victimization among adults with severe mental illness.
2. To illustrate the overlap between violence and victimization among adults with severe mental illness.

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# Violence and victimization in adults with severe mental illness: Part 3 – Dimensions of psychiatric symptoms and their associations with violent outcomes

## Paper

Jay Singh, Sarah Desmarais, Richard Van Dorn  
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## Abstract

Background. Among the challenges faced by adults with severe mental illness (SMI), perhaps none is as complex and destructive as violence. Those with SMI are seen as unpredictable and dangerous. Highly publicized cases of violence perpetrated by adults with SMI have focused attention on public safety. As a result, the victimization experiences of adults with SMI have largely been ignored despite evidence that they are more likely to be victims than perpetrators of violence. Indeed, three times as many publications exist on the link between mental illness and violence as on mental illness and victimization. In sum, an empirical gap exists regarding the nexus of mental illness, violence and victimization.

## Project Overview

Across three papers, we will describe a systematic, large-scale investigation of violence and victimization among adults with SMI. Data were drawn from the baseline assessments of subjects who participated in one of five studies: (a) Mental Disorder and Violence Risk Study (b) Schizophrenia Care & Assessment Program; (c) Clinical Antipsychotic Trials of Intervention Effectiveness study; (d) Mandated Treatment Study; and (e) Psychiatric Advance Directive study. The first presentation will provide an overview of the project and describe our use of integrated data analysis (IDA) to pool raw data from these five studies to create a large, heterogeneous sample of adults with SMI (N=4,460). The second presentation will examine the prevalence and co-occurrence of violence and victimization in the pooled data. The third presentation will explore the underlying dimensions of psychiatric symptoms and their association with violence and victimization. Across presentations, the focus will be on the implications for research, policy and practice.

Summary of Presentation 3. There is agreement that a 2-dimensional model of psychiatric symptoms (i.e., positive and negative symptoms) is an oversimplification; however, there is little consensus regarding the ideal model. Many models that often vary in terms of both the dimensions and composition have been proposed. Possible explanations for these discrepancies include small samples, differing sample characteristics and methodological differences. The pooled data will allow us to overcome these limitations.

In Presentation 3, we will explore the factor structure of psychiatric symptoms and identify a model that is generalizable across diagnostic and demographic groups. Our exploratory factor analysis identified 4 factors with eigenvalues greater than 1.00: affect (4.26), comprised of somatic complaints, anxiety, guilt feelings, depressive mood, and hostility; negative symptoms (2.37), comprised of emotional withdrawal, mannerisms/posturing, motor retardation, blunted affect, and disorientation; positive symptoms (1.70), comprised of grandiosity, suspiciousness, hallucinations, and unusual thought content; and activation (1.23), comprised of conceptual disorganization, tension, uncooperativeness, and excitement. Indices revealed good model fit: CFI=.972, TLI=.946, and RMSEA=.041. We will then discuss the factors that are common and unique correlates of violence and victimization.

## Implications

The identification of a generalizable factor structure would have several implications. In particular, there is a need to establish structural invariance and consistent definitions for results to be comparable across studies. Furthermore, dimensions may differ despite consistency in total scores, providing a more nuanced understanding of associations between psychiatric functioning, violence and victimization.

## **Educational goals**

1. To identify the underlying dimensions of psychiatric symptoms among adults with severe mental illness.
2. To distinguish which dimensions of psychiatric symptoms are more and less strongly associated with violent outcomes among adults with severe mental illness.

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# Limiting the use of physical restraint in disability services in Victoria, Australia

## Paper

Brent Hayward  
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## Abstract

People with intellectual disabilities often demonstrate challenging behaviours, some of which pose a risk to themselves, others or property. The management of these behaviours is dependant upon the level of risk posed, the resources available, an understanding of the function of the behaviour and the philosophy of the organisation relating to the application of least restrictive care and positive behaviour support.

Historically, people with disabilities who display challenging behaviours have been subject to high levels of restrictive interventions including chemical restraint, mechanical restraint, seclusion and physical restraint. The employment of such practices is not well supported by research evidence and many people with disabilities are subject to restrictions for many years without evaluation of the efficacy of their "treatment".

This presentation focuses on the reduction in the use of physical restraint of people with disabilities in the State of Victoria, Australia through both legislative and clinical directives. Physical restraint is defined as "...the use, for the primary purpose of behavioural control of a person with a disability, of physical force to prevent, restrict or subdue movement of that person's body or part of their body...". A number of themes will be presented including a review of the use of physical restraint in disability services internationally, injury and death associated with physical restraint and how the use of restraint is contradictory to contemporary practice frameworks for the support and care of people with disabilities. An overview of the alternatives to physical restraint is offered, as well as brief review of the Victorian process for review of physical restraint use is presented.

It is proposed that physical restraint is often inappropriately used in the context of a poor assessment and understanding of the contributing variables to challenging behaviour in a manner which is overwhelmingly reliant upon a reactive approach to behaviour. The ecological factors contributing to challenging behaviour in clinical settings needs to be acknowledged before more appropriate ways of supporting people with disabilities and challenging behaviour can be implemented.

## Educational goals

1. Become cognisant of injury and death associated with physical restraint in this population.
2. Understand how the use of restraint is contradictory to contemporary practice frameworks for the support and care of people with disabilities.
3. Become familiar with the alternatives to physical restraint.
4. Understand how poor assessment and understanding of the contributing variables to challenging behaviour leads to the frequent use of physical restraint.

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# Understanding the nature of aggression in Autistic disorder: a case example using a framework of cognitive deficits, positive behaviour support and quality of life to reduce restrictive treatment

## Paper

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## Abstract

An interest in autism spectrum disorders, both clinically and academically, has accelerated in recent decades. This interest primarily originates from outside the field of clinical psychiatry where a variety of research methodologies have contributed to a greater understanding of the disorders.

It has been proposed that 70% of persons with autism spectrum disorder have a comorbid intellectual disability, and taken together, these two factors present a greater risk for the development of challenging behaviour, including aggression. Internationally, psychiatric services deliver disproportionate services to people disabilities, including autism spectrum disorders. As such, knowledge of the disorders varies widely, with child and adolescent psychiatric services generally being more familiar with the disorders than adult services. In Australia, there are very limited specialist psychiatric services for people with intellectual disabilities.

This presentation concerns the case of a young adult with Autistic disorder and a mild intellectual disability who began to refuse to attend to his personal hygiene. This occurred with an increase in aggressive behaviours and subsequent proposals to forcefully intervene by community psychiatric services.

Using a variety of frameworks including positive behaviour support, quality of life and reorientating the thinking of clinicians and support staff to considering aggressive behaviour as an end result of cognitive deficits associated with Autistic disorder, meaningful changes in the approach to the care and support of this young man was implemented and a reduction in aggression was observed.

Clinical psychiatry can benefit from a more critical understanding of the cognitive deficits associated with autism spectrum disorders and how these potentially contribute to aggression. Alternatives to the paradigm of pure clinical intervention should be considered in cases of aggression in people with disabilities.

## Educational goals

1. Become familiar with the concepts of positive behaviour support and quality of life in the provision of support and clinical services to people with disabilities.
2. Examine and apply the principles of cognitive deficits associated with Autistic disorder in examining challenging behaviour.

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# The use of risperidone in young people with intellectual disability and/or autism spectrum disorder and challenging behaviour plus a review of the adverse effects of treatment

## Paper

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## Abstract

Challenging behaviour occurs frequently in children and adolescents with disabilities; those with more severe levels of intellectual disability and those with autism spectrum disorders (ASD) show the highest rates and most severe forms.

People with disabilities, including children, have been subject to chemical restraint (treatment with medications for behavioural control) for decades. These medications have primarily consisted of antipsychotics but include neuroleptics from all classes. In the last two decades, the use of the atypical antipsychotic Risperidone has become common in the management of challenging behaviour in young people with ASD.

Risperidone is commonly viewed as a 'safer' form of chemical restraint compared with older, 'typical' antipsychotics however there is evidence that adverse effects of this drug do occur in this population and the accurate identification of these may be hampered by the presence of stereotyped or repetitive behaviours, physical disability and communication difficulties.

This presentation offers data on the use of chemical restraint in the state of Victoria, Australia for children and adolescents with disabilities, including ASD aged 6 to 18 years. A particular focus on the use of Risperidone will highlight the demographic features as well as the characteristics of the prescription of Risperidone in this population and will be compared with the literature.

Secondly, a summary of the adverse effects of Risperidone in young people with ASD obtained from a literature review will be offered indicating the contributions from both case study and research sources.

The frequent use of Risperidone in this population, often at doses exceeding recommended guidelines places this population at greater risk of adverse effects. Not only do these adverse effects have physiological consequences, their identification is often dependant upon the report of parents and carers elicited by medical and nursing staff at cross-sectional assessment. The ongoing use of Risperidone as chemical restraint is speculated to be an artefact of the medicalisation of challenging behaviour. An approach in psychiatric services which considers behaviour support as well as the conservative prescription of Risperidone and its routine monitoring is required.

## Educational goals

1. To review data on the use of chemical restraint in young people with disabilities in Victoria, Australia.
2. To examine the reports of adverse effects of Risperidone in young people with autism spectrum disorder.
3. To become familiar with existing guidelines for the monitoring of the use of Risperidone in this population.

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# Attitude and staff interventions towards aggression of clients with intellectual disability

## Paper

Maartje Knotter

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## Abstract

This study examined the relation between the attitude towards aggression and behavioral interventions of direct support staff. Using multilevel analysis (Goldstein, 1995) we examined the relation between the attitude towards aggression and staff characteristics and behavior at the individual level (differences between care workers in a team) and at the contextual level (differences between teams). Both verbal and physical aggression as perceived by individual staff and teams were part of the analyses besides characteristics of individual staff and contextual factors (characteristics from the teams and clients with ID). The study sample comprised N=121 supporting staff (20 teams), working in an institutional setting for clients with intellectual disabilities in the Netherlands. Personal characteristics as gender, age, educational level, working experience and function were measured as well as the frequency of verbal and physical aggression. A total of 30 activities for the management of aggression were measured. Three factors were distinguished: providing personal space and behavioral boundary-setting (13 items, Cronbach's alpha .93), restricting freedom (4 items, Cronbach's alpha .72) and applying coercive measures (4 items, Cronbach's alpha .66). The attitudes were measured using The Attitudes Towards Aggression Scale (ATAS Jansen et al., 2005). Eighteen items reflect the five components of the attitude towards aggression with two factors: A positive/ communication factor with a Cronbach's alpha of .58 and a negative/ hostility factor with a Cronbach's alpha from .82. Results show that a negative attitude towards aggression of the direct support team proved to be a substantially more powerful predictor of applying coercive measures than the negative attitude of direct support professionals within teams. Another important finding of this first study is that the direct support context (characteristics of the team or residential setting) accounted for a large percentage of the variance in using coercive measures (66%). For providing personal space, behavioral boundary-setting and restricting freedom the effect of the direct support context was three times larger than the effect of individual support staff characteristics (i.e., years of work experience, education, position, gender, and age).

## Educational goals

1. Training and coaching direct care staff working with clients with ID and challenging behaviors even as improving the knowledge about the influence of the culture and working environment relevant for management and policymakers.

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# “Discovering the real story within”: A case study of the diagnostic correction of alleged intellectual disability to Post Traumatic Stress Disorder with the aid of Facilitated Communication

## Paper

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**Keywords:** Posttraumatic Stress Disorder, intellectual disability, mental retardation, Facilitated Communication, diagnostic process, diagnostic overshadowing, PTSS-10

## Background

### Intellectual disability

The ICD-10 describes the following classifications for mental retardation: F70 Mild Mental Retardation, F71 Moderate Mental Retardation, F72 Severe Mental Retardation, F73 Profound Mental Retardation, F78 Other Mental Retardation, F79 Unspecified Mental Retardation. (ICD-10 Guide for Mental Retardation, 2007). There are many discussions about this classification and alternative classifications the International Classification of Functioning, Disability and Health (ICF) exist. It is not easy or maybe impossible to make a reliable diagnosis for persons with intellectual disability. Some of them have impairments in receptive and expressive language, some have difficulties in locomotion, many are distracted by perceptual problems, many are afraid of test situations, and others have such minimal self confidence that they are unable to engage in a diagnostic situation. In the following article the preferred term “intellectual disability” is used throughout.

### Intellectual disability and sexual or physical abuse

Epidemiological data demonstrate that persons with an intellectual disability are often victims of sexual and physical abuse. Austrian studies showed that 64% of the females with intellectual disabilities (Zemp, Pircher, 1996) and 50% of male persons (Zemp, Pircher, Schoibl, 1997) experienced sexual violence at least once. Others studies report higher numbers: More than 90% of persons (both male and female) with developmental disabilities will experience physical or sexual abuse at some point in their lives. 49% will experience ten or more abuse incidents. Only three percent of sexual abuse cases involving people with developmental disabilities will ever be reported (Valenti-Hein, D., Schwartz, L. 1995). An important issue in institutions is the helplessness when dealing with such situations. 74 women in the Austrian study (Zemp, Pircher, 1996) have been confronted with sexual violence, of which only 54 told it to somebody, in only 10 cases a conversation was held with the delinquent of the sexual violence, and only 4 cases were taken to court.

### Post Traumatic Stress Disorder

The ICD-10, F 43.1 criteria for Post Traumatic Stress Disorder are described (ICD-10 Guide for Mental Retardation, 2007) in the following manner: PTSD “arises as a delayed or protracted response to a stressful event or situation (of either brief or long duration) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone”. So called “man-made-disasters” account for a substantial amount of the problem following a traumatic situation much more than “God-made-disasters” like tsunamis or earthquakes. The appearance of PTSD depends on the type of trauma: 50% of victims of a rape develop a PTSD, 20% of people with war experience, and 15% after an accident. 50-90% of people living in Europe are confronted with one or more traumatic events during their life (Kessler R.C. et al, 1995).

### Intellectual disability and traumatic experiences

Today little is known few about intellectual disability and traumatic experiences. Valerie Sinason (2000) describes examples from her clinical work in which mental handicap was induced by sexual abuse. Sometimes the mental handicap acts as a protective agent against remembering of the sexual abuse or violence. In a project of the National Child Traumatic Stress Network (NCTSN, 2004, p.5) the influence of abuse and neglect to brain development is described. “The more prolonged the abuse or the neglect, the more likely it is that permanent brain damage will occur. Not only are people with developmental

disabilities more likely to be exposed to trauma, but exposure to trauma makes developmental delays more likely”.

People with intellectual disability are in the high risk class for “normal” traumatic experiences, such as violence, sexual abuse, accidents, war and more. But we know that there are many additional factors for somebody with an intellectual disability that can be traumatizing: The handicap itself, long hospitalisations caused by surgical operations, the loss of primary trust persons, wilful neglect, dependency, multiple changes of the living environment often without pre-information, and displacement etc. Later on realising that they can never live a normal life, are unable to marry or cannot have a simple relationship, cannot have children, cannot have a normal job and earn enough money they are confronted with emotional pain and distress. Some reveal that they would prefer to die than rather to live with these restrictions. Hollins and Sinason (2000) suggest that the components applying to the experience of disability should be added to the definition of a trauma.

This single case study will consider a 47 year old man, without the capacity to express himself verbally and unable to move and react as other people. As professionals deemed him to be a disabled person and for many years he now lives in a group with mental retarded people. Communication is only possible by Facilitated Communication.

## Method and instruments

### Facilitated Communication

Rosemary Crossley – the developer of facilitated communication commenced work with Anne McDonald – a young wife with cerebral palsy – in 1977 and was able to communicate with her via Facilitated Communication (FC). FC is a method for supporting a wide range of possibilities such as choosing a T-Shirt, selecting something to eat or writing a letter. FC can mean pointing to a picture, for example showing activities, or symbols, for instance a toilet. It may also involve writing with a keyboard or on a writing board with pre-defined fields such as “yes”, “no”, or “leave me alone”. FC is not only a method for people with autism and Down syndrome, but for all people with communication impairments.

Some psychologists believe there is a high incidence of dyspraxia or executing voluntary movement among individuals who utilise FC and that a facilitator’s manual support may alleviate such communication difficulties. In FC the facilitator exerts resistance against the movement forward and thus induces a high level of muscle tension in the person utilising FC.

FC-users report that it is important to have the facilitator by their side to help them feel better and to facilitate rhythmical movements. A very popular German man with autism, Dietmar Zöllner, explains that “facilitation makes it possible to do what is already in my head” (Zöllner 2010, p. 136). Another problem for Zöllner is that he is distracted by noise and visual stimuli. Additionally, he needs “the contact impulse to get a good spatial orientation of his own body” (p.137).

The Wohnheim Tilia has been working for many years with the FC for ten people unable to speak and FC has helped them to express themselves for example by telling us the reasons for aggressive behaviour. Today we have reduced the aggressive behaviour with the aid of FC and also many other things changed for the FC-user. The social relationships with other people have changed: some of them can write emails to members of their family, they can decide many things. They report that they feel like human people now and not as idiots.

### Narrative Exposure Therapy (NET)

Narrative Exposure Therapy (Neuner, Schauer, Elbert, Roth, 2002) is a standardized short-term approach for treatment of adult survivors of war and torture. NET is based on cognitive-behavioural therapy and testimony therapy. The history of the person’s complete life is chronologically re-constructed with help of the therapist, from birth to the present, while focusing on the detailed report of the traumatic event. This story is recorded by the therapist and corrected during every session by iteration. At the end of the therapy, the participant receives his own history in written form. The NET focuses on a complete chronological history and not only on fragments and incomplete memories. The context dependent memory (what happened? when?) is linked with the scenic memory and the bodily reactions. During these sessions, traumatic experiences are described with emotions, cognitions, physiological activities and behavioral reactions. The person concerned is guided to re-experience very slowly the situation again, to re-experience all emotions associated with the traumatic event and has to connect these with the context. The intention is to interconnect all the emotion in the past and not in the present, with the aim of protecting the participant from the feeling, that the horror pictures in the mind are here and now and that danger is present.

The results of NET are excellent, although it is a short-term intervention, taking only a few hours and even though the studies were made in special surroundings, like refugee camps, and communication was mediated with the support of translators.

KID-NET was developed as a child-friendly exposure treatment for children. The child's lifeline is represented by a rope. Positive life experiences are marked by flowers along the lifeline, traumatic and negative experiences by stones (Schauer et al. 2004). The KID-NET is a standardized method with many visual adjuvants and it is based on telling stories. Storytelling is familiar to all cultures in the world – and also to people with intellectual disabilities. (KID-)NET could be a possible and valid approach for people with intellectual disabilities, but it is more time consuming for people with mental handicap.

### PTSS-10

PTSS-10 is a short screening instrument for Post Traumatic Stress Disorders. Professor A. Maerker (1998) translated the original version by Weisaeth (1989) and Schüffel and Schade (unpublished) modified this version. The PTSS-10 takes only a few minutes to complete, but to date no norm data exist. The 10 items refer to actual problems in the past 7 days. For example: "In the last days... I had nightmares over a inculpatory event". The items use a Likert format ranging from 0 to 6 points. The overall score means gives rise to the following interpretational scheme regarding suspicion of the existence of PTSD: No suspicion of PTSD (0-23 points); Suspicion (24-35 points); Strong suspicion ( $\geq 36$  points).

### Case vignette

Mr. M. was born in 1963. His childhood was nearly normal, he was just a little slow and he had concentration problems. His urinary incontinence persisted until the age of 7 and he lacked friends. He graduated from ordinary school without severe difficulties, learned two professions, was able to converse and ambulate. At the age of 20 he slowly lost his intellectual abilities. At the age of 22 he was placed in a mental hospital for the first time, on grounds of aggressive behaviour against others. The psychiatrist had great difficulties to conduct a good examination as Mr. M. could not talk and also not move. So the psychiatrist's first suspected diagnosis was schizophrenia and for many years Mr. M. received antipsychotic medication. At the age of 28 he could only move very slowly and he seemed to be very confused, so he received a second suspected diagnosis of pre-senile dementia. As a consequence of this he had to live in a home for aged persons for several years. A computer tomography in 1991 showed no atrophy or other findings that would explain his condition. In 1997 an electroencephalography found his brain activity to be marginally slower than normal.

Now he has been living in the "Wohnheim Tilia" for nearly 10 years, an institution for adult people with mental or psychological handicap in Switzerland. He is classified as a severe intellectual disabled man. In this period he only twice showed a seriously aggressive behaviour, first beating somebody with a spade and hurting his father with a wooden chair.

Mr. M. could only vocalize a few words, for example "cigarettes, coffee, Kathrina...". His assistance team sometimes had problems with his social behaviour. He never tried to initiate social contact, had no relationships with the assistance team or the people living with him. Sometimes he pinches others, hustles or beats other persons but not in a dangerous way. The team had supervision to offer new ideas of how to work with him. The supervisor – a psychologist with a very good expert knowledge – told them that Mr. M. possibly suffers from a sociopathic personality disorder, because he is not able to build social relationships and he only talks if he needs something important. Problems with his father could be accrued from rivalry between them.

In 2008 he learned to communicate via FC. It was possible for him to communicate with three persons in his support group by using FC. Mr. M. reported that he had been raped by a man living in this institution. Via FC he told us that it is important for him that the perpetrator receives punishment.

To date I (the first author) only knew his name but never conducted FC with him before. I received the task to offer him FC to help him prepare his testimony for the police. I needed several hours to practice FC with him due to his very high muscle tension. It was very difficult for him to make the necessary FC movements and even now I need to apply a lot of strength when writing with him. Later he told us, that he was raped over a period of several months and he was also threatened with death by the perpetrator. In the meantime the perpetrator has acknowledged his delinquency and the legal process is underway. The perpetrator had to leave our institution in order to protect other people living in our institution.

Mr. M. demanded to talk to somebody over the things that happened to him, but denied therapy with the psychiatrist. He wished to talk with me over this issue. In May 2009 I started working with not knowing

that other problems may exist. Already having a solid base I used the PTSS-10. He got the score 46 indicating a strong suspicion of PTSD.

For many years I have been interested in trauma therapy but there is almost no experience on people with intellectual disability. I started working with him by using the NET (Narrative Exposition Therapy) a method based on narrating the story of the life, beginning with the persons birth. NET is interculturally successful and I am convinced that all people – including people with intellectual disabilities – learn to listen to stories and that they can tell us their stories.

For two years Mr. M. has been coming to me for therapy once a week one for one and a half hour. Communicating via takes more time than a normal therapy. He told me that he survived sexual assault from the age of two or three. When he was older he was orally and anally raped for many years several times a week. He was also subjected to massive physical violence. At the beginning he was beaten with the hand, later with the fist, an finally a big wooden club. Almost every week he contemplated dying. At the age of 5 the perpetrator began to beat him until he was bleeding, rubbing him in his own blood, and then nearly retching him to death. In his childhood and youth M. never had a friend or somebody to talk to, nobody in the family, no teacher – nobody. He also had no one helping him – although he could talk to other people at that time.

On the basis of Mr. M.'s report it is inferred that no intellectual disability exists, but rather a Posttraumatic Stress Disorder. In May 2011 we made a reassessed him using the PTSS-10 and he had the score 31, that means a suspicion of PTSD. Although suffering from a PTSD he is making big steps forward and his spoken language is slowly returning. He has also made big progress in body control – today he only needs a little help when dressing for example when tying his shoelaces. Today his sense of humour has returned and for the first time in his life he has developed hope and self-assurance. Regarding questions on his handicap he answers that he is not handicapped, but suffers from PTSD.

Obviously, Mr. M. is not at the end of his developmental journey, but he is now well underway.. For decades he had no future and was waiting to die while being raped, expecting to be murdered, or to die as a result of the dementia he was made to believe the was suffering from. Today his perspectives are much better and he is even reflecting on his future.

## Discussion

Correctly diagnosing people with intellectual disability is a big challenge for professionals. However, little is known on how these people react to such experiences. To date there are no therapy and/or methods to help them.

There is a paucity of research concerning this subject and today we know that the symptoms of PTSD for people with intellectual disabilities are the same than for people without handicap. We can register nightmares, stomach-ache, inability to concentrate, dizziness, eating disorders, self-injuries, aggressive behaviour, “challenging behaviour”, urinary incontinence, faecal smearing, anxiety, depression, hyper vigilance and more. Problematical is the fact that these symptoms occur in intellectual handicapped persons without PTSD. This is referred to as the problem of “over-shadowing”, whereby the phenomena seem to be an integral part of the handicap itself. Obviously, one symptom is not a reliable indicator for an sexual or physical abuse – one must consider the whole range of symptoms and behaviour (Sinason, 2002). In addition abuse must always be considered as a possible differential diagnosis in persons with a learning disability who presents with psychiatric symptoms (Cooke, Sinason, 1998).

Frequently when persons with intellectual disability tell others of being sexually abused they are confronted with disbelief and the reaction that such a report is “a silly idea that can not be true”.

## Conclusions

Our concern is on improving communication with people with intellectual disability in a methodologically sound manner. FC is not a perfect communication method but is – according to our experience – at the moment the only method allowing us to induce real dialogue. Even without the introduction of new methods some necessary adjustments can be made to enhance the speech capacity of persons with intellectual disability such as slowing down the speech speed or using visual assistance to reinforce verbal messages. It is also very important to help persons with intellectual disability improve the verbal speech by giving them examples and explanations in order to enlarge their vocabulary especially regarding their vocabulary for feelings and also for sexuality. As persons with intellectual disability often can not describe parts of the body or sexual behaviour we must enable them to talk to us and to tell their stories.

The example of Mr. M. – which as a single case study is obviously not generalisable – suggests that professionals should be aware of the possibility that sexual or physical abuse may have occurred in persons with intellectual disability. Institutions for persons with intellectual disability should concentrate on developing concepts of sexuality, how to avoid, detect and react to sexual violence or sexual abuse, and should thus offer further education to persons employed in such institutions. More psychologically trained therapist for people with learning disabilities are required. The publication "Suggestions for Therapy" (Avrin, Charlton, Tallant, 1998, published in NCTSN, 2004) offers a good orientation for such therapists.

Finally, further research is necessary and more people courageous enough to conduct psychotherapy with persons with intellectual disability – they need our help.

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# The evaluation of the implementation of a resource specialized in severe behavior problems in persons with Intellectual Disabilities

## Poster

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## Abstract

Severe behavior problems (SBPs) are one of the principal causes for mental health referrals, hospital admissions, and the use of medications and control measures among persons with intellectual disabilities (ID) (L'Abbé & Morin, 2001; Tassé, Sabourin, Garcin & Lecavalier, 2010). Delivering services to persons with ID who having SBPs is one of the top intervention priorities in public service agencies in Quebec (Canada), but also one of the biggest challenges for those services. This communication present a brief summary of a research project on one resource provides transitional residential service specialized in the assessment and stabilization of SBPs in adolescents and adults who are diagnosed with an ID. The purpose of the resource is to foster, among people who need intensive treatment due to their SBPs, a return to their normal living environment or a reference to a living environment that best suits their needs. The mandates of the research project are to evaluate the implementation and effectiveness of the resource. This communication covers the first part of the study concerning the assessment of the implementation. This evaluation takes into account the physical environment, the organizational structure and the clinical process. The results show that the implementation has been slowed by significant contingencies and this communication presents those challenges and our suggestions regarding the implementation of this type of programming, and regarding the continuing need to generalize this type of residential setting and pursue the assessment of the effectiveness of this type of service.

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# Alternative care and support for sexually abused young persons with intellectual disability in South Africa

## Poster

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## Abstract

Frequent media reports covering incidents of sexual abuse involving young persons with intellectual disabilities in the most rural parts of the country are hard to ignore even though such people rarely avail themselves for care and support at the local centers dealing specifically with such a problem. Research on reasons behind such attitudes often does not recognize that people may prefer other methods which are more cost-effective and, more importantly, compatible with their belief systems and values. According to Halbert, Barg, Weathers and Associates (2007), one's beliefs and values provide the underlying rationale or drive for individuals to behave and think in a certain way, and influence their perceptions. In this way, people in the rural areas could be driven by traditional beliefs and values in their choice of care and support and in what they consider as effective. This paper aims to discuss alternative care and support measures followed by rural people in South Africa to deal with sexual abuse of children. Semali and Kincheloe (1999:01) defined such knowledge as the dynamic way in which residents of an area have come to understand themselves in relation to their natural environment and how they organise that knowledge, cultural beliefs and history to enhance their lives. Information was collected by means of in-depth interviews with informants such as: traditional healers, senior citizens and some teachers at the local rural schools in South Africa. Data for this research is relevant for making recommendations about traditional/local aspects that should be incorporated into the current care and support strategies for sexually abused young persons, especially those with intellectual disability.

## Educational goal

To identify and sensitise the public about alternative ways of caring and supporting intellectually disabled young persons with a history of sexual abuse.

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# Specific diagnostics for intellectually disabled people in forensic psychiatry in the Netherlands

## **Paper**

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## **Abstract**

In 2009 we started a project in cooperation with the forensic psychiatric ward and a specialized team in diagnostics and treatment of intellectual disabled people. Together we develop a program in which we provide specialize diagnostics, treatment and rehabilitation facilities for psychiatric patients with an intellectual disability (IQ: 55-85). The patients all are convicted for a crime. Addiction is often a co-morbid problem.

A correct diagnose is essential in order to create an environment for a good treatment and rehabilitation. Beside psychiatric diagnostics and research of intellectual capacities we specially focus on the social emotional development. In this workshop we show how good diagnostics on social emotional development, contribute to a successful treatment and rehabilitation.

## **Educational goals**

1. The participant is able to give a overview how to diagnose social emotional development;
2. The participant is able to use these development for treatment and rehabilitation with there own field;
3. The participant is able to look in a critical way how to develop the program within the near future.

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# Problem behaviors in young children with Intellectual Disabilities or Autism Spectrum Disorders: needs and challenges of persons who in public service agencies

## Poster

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## Abstract

Young children with ID or ASD are at higher risk than typically-developing children of presenting problem behaviors (BPs) (Baker et al., 2002; Emerson & Einfeld, 2010; Matson et al., 2008). The importance of early screening, assessment, intervention for BPs and the importance of research on this topic are increasingly reported (Blair, Fox & Lentini, 2010; Dosen & Day, 2001; Horner et al., 2002; Reeve & Carr, 2010). However, to date, the BPs have received little research attention in early childhood in the field of ID and ASD (Emerson et al., 2005; Emerson & Einfeld, 2010; Horner et al., 2002; Matson et al., Wilkins & Macken, 2009). Those problems have a lot of consequences for the child, his family, school, services and other persons in the child's environment. The aim of this communication is to present a summary of the results of two studies on BPs and early childhood realized in public service agencies for persons with ID or ASD in Quebec, Canada. These two studies focus on the perception of therapists, professionals and managers on the needs and challenges according delivered services to children who having BPs and severe BPs. The first study focuses on the perception of those actors according the expression and impacts of BPs in children, their families and on their integration and on their perceptions of their roles with those children. The second study details the evaluation and intervention practices of these actors with children with BPs and their perceptions about the needs and challenges in regard of those practices.

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# Intellectually disabled (ID) sexual offenders are caught between care providers and the legal system: Experience from a multidisciplinary community based program in Northern Ontario, Canada

## Poster

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## Abstract

### Aim

To share our conclusions about the care provided by mental health providers and legal staff to 26 ID persons referred to our outreach program because of Inappropriate Sexual Interactions (ISI). Empirical information gathered with the use of an inventory designed by us indicates that the legal and the mental health systems operate with conflicting paradigms being both detrimental for the patient.

### Methods

A retrospective/concurrent evaluation of the management of 26 ID patients was completed using a semi-quantitative inventory developed by our team describing care providers values in regard to sexual offenders, and correlated with the outcome of the related legal actions. Patients were living in the community in rural and urban areas in Northern Ontario. We introduce the concept of Inappropriate Sexual Interactions (ISI) to encompass any sexual behavior resulting in police and/or court interventions.

### Results

Although ISI were by and large not severe ID patients were viewed in negative terms by care providers (CP) and also resulted in the great majority being charged and put in the national register of sexual offenders. Over 90% was perceived as a risk to society and in need to have restrictions in their normal activities for "security reasons". For 60-80% of them the views of specialists was not questioned and no alternative opinions were sought; CP were biased against the person and lacked appropriate awareness of legal issues, and when sexual education for the patient was recommended it was not implemented. Legally, from the 26 individuals 18 were charged as sex offender (69%) and 10 (38%) went into the national registry.

Our team had to work against the mainstream culture to advocate for the patients, to provide direct support, and to create a therapeutic interaction between CP and patients. A major void was identified in terms of education of patients, CP and legal workers.

### Conclusions.

ID sex offenders living in the community in Northeastern Ontario face a biased and punitive reality that is not in line with the severity of the alleged offences. We introduce the concept of ISI to describe a heterogeneous range of situations involving ID patients that result in police intervention. The concept of violence was used in stereotypic ways and divorced from the complexity of the situations at hand. We see the need to address the problems related to violence in group and family homes in small communities operating with inadequate resources.

### Educational goals

1. To illustrate the conflicts that may arise when two or more systems are involved in the care of psychiatric patients. (i.e. mental health, justice, medical, educational, etc)
2. To look at violence in psychiatric patients from a bio-psychosocial and systemic perspective rather than in stereotypic ways divorced from the complexity of the situations at hand.

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# Violence against persons with severe mental illness: an in-depth view

## Workshop

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**Keywords:** Qualitative research, case study methodology, victimology, severe mental illness, stigma

Preliminary note: Work in progress, please do not cite without permission of the authors.

## Background

Recent studies show that persons with severe mental illness (SMI) are more at risk than others to become the victim of violence (Choe et al., 2008). When addressing violence within (clinical) psychiatry, both practice and treatment has traditionally focused on violence caused by persons with severe mental illness. The victimization of these persons however, has been underestimated in western countries for many years. Little research into this phenomenon has been conducted. From the available literature, it appears that the nature of the illness poses persons with SMI at risk because of symptoms such as impaired reality testing, disorganized thought processes, impulsivity and poor planning and problem solving capacities (Teplin et al., 2005). To obtain an in-depth understanding of the negative impact victimization may have on the lives of persons with SMI, we started a qualitative multiple case study into the meanings victims attach to victimization: what are the consequences for their self image and social functioning?

## Research goals

The specific research goals are:

1. To obtain a detailed, in-depth insight into the nature, settings, backgrounds, causes, and social contexts of the victimization of persons with SMI in the Netherlands.
2. To explore the mutual relationships between victimization, (self-)stigmatization and (anticipated) discrimination in the lives of persons with SMI
3. To investigate the meanings the persons involved (primarily the victim, but also significant others) place on the events and processes prior to, during and subsequent to the victimization, and on the impact these events and processes have on the lives of the victims
4. Using these findings to generate a taxonomy of (violent) crimes against persons with SMI, which will contribute to an explanatory model of this social phenomenon.

## Methods

In this research project we use a (multiple) case study method. The methodology of qualitative case studies is useful for understanding a phenomenon in-depth and for the development of theory related to complex social processes. We will conduct a series of 30 case studies. Taken together, these cases will reflect the wide variety of social situations in which (violent) crimes against persons with SMI occur. 'Violence' can include psychological violence (e.g. bullying, harassment), emotional violence (e.g. constant criticism, humiliation), sexual violence and physical violence. One case consists of in-depth interviews with the victim and three significant others regarding the process prior to, during and following the event: mental health worker, police, family/housemate, and, if possible: the perpetrator.

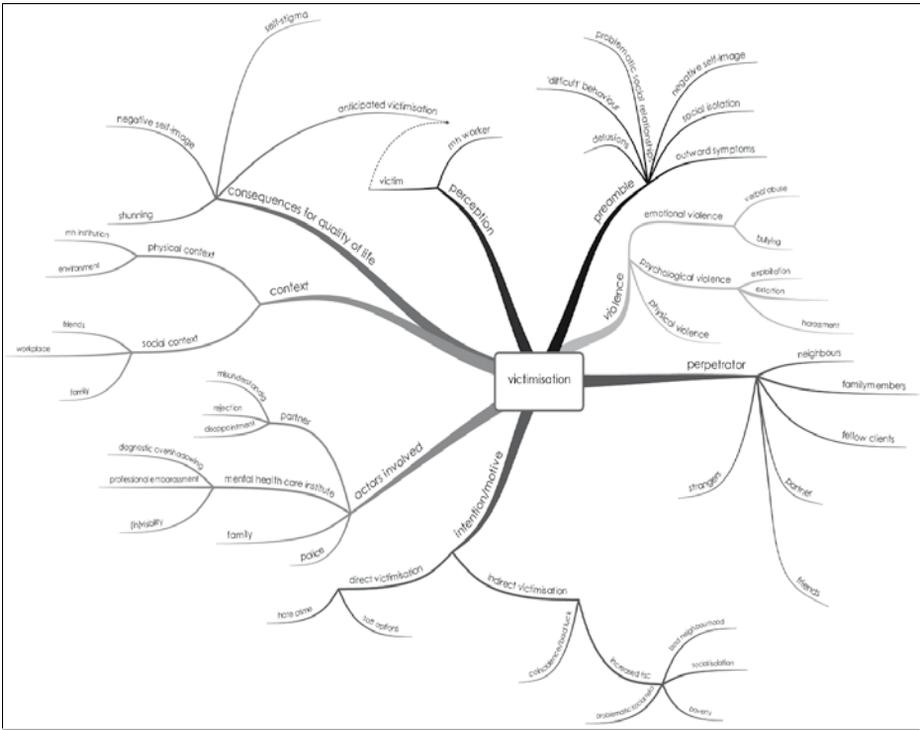
Recruitment takes place in several ways: both at mental health institutions and at patient or self help organizations. We have been able to recruit our respondents from a variety of settings in different parts of the Netherlands, both urban (e.g. Amsterdam and Rotterdam) and rural (e.g. Assen and Castricum).

Recruitment was conducted in an indirect way: the research team asked MH team leaders (e.g. ACT or FACT teams) to identify patients who have been victimized. Next these team leaders asked these patients if they would consent to an interview on this subject. If so, the researcher contacted this patient to make an appointment for conducting an in-depth interview with this patient and for gathering additional data from significant others (provided the informed consent by the patient involved). Both victims and social informants were offered a €15 voucher as an acknowledgement after the interview was completed.

All subjects included in this study provided written, informed consent and the appropriate hospital institutional ethics committees approved the study. We obtained approval for the research from the regional Medical Ethics Approval Committee for Mental Health Care Institutions (METIGG) and from the participating MH institutions' scientific committees.

The interviews were recorded and transcribed *verbatim*. The transcriptions were processed using the software program MaxQDA, a professional tool for qualitative data analysis. Individual text segments were coded, using an ever expanding code system. Inter-observer reliability was tested on several occasions, through independent reading and coding interview transcripts by two or three researchers. Data collection and data analysis are conducted in a cyclical, iterative process, following the principles of grounded theory (Miles & Huberman, 1994). This process has resulted in a preliminary 'code tree' that is being adapted and expanded as data collection progresses.

Figure 1 Code Tree



Results

At the time of writing – this paper was submitted July 15, 2011 and the research will be conducted until January, 2012 – we were able to recruit and interview 13 victims. Six more victims have been identified, but have not been interviewed yet (one male, five female). We have interviewed six men and seven women, amongst whom a transgender individual (in the process of male to female transition). We have included several SMI diagnoses: psychotic disorders; borderline personality disorder; post-traumatic stress disorder; dual diagnosis (psychiatric disorder and substance abuse disorder) and attention deficit disorder. Victims have been recruited from various regions in the country, both urban and rural. In terms of violence, we have registered psychological violence such as name-calling and harassment (case 2, 3, 5, 7, 12, 13), emotional violence in intimate relationships such as humiliation and extreme jealousy (case 6, 8, 9, 11), sexual violence (case 9, 10, 11) and physical violence (case 6, 9, 11, 12). In some cases, victims have been subjected to various types of violence, such as both emotional violence and physical violence (case 1, 6, 9, 10, 11), or have witnessed severe physical violence without being personally attacked (case 6, 12). In three cases, we have not been able to interview a social informant (significant other). In two of these cases, we were able to interview a mental health worker who had known the victim for a long period of time and could provide the necessary information. Up until now, we have not been able to interview the perpetrator in any of the 13 cases. In some

cases, no perpetrator could be identified (case 1, 2, 4, 5, 7, 8, 12, 13). In other cases, a perpetrator could be identified but the victim would not consent to an interview (case 3, 6, 10). In case 9 and 11, the perpetrator was deceased. Table 1 presents an overview of currently completed cases: types of violence, perpetrator(s) and context.

Table 1 Overview of 13 complete cases

case	type of violence	perpetrator(s)	context
1	threatening; extortion; intimidation; exploitation	fellow clients at mental health care institution	mental health care institution
2	bullying; discrimination	fellow clients at mental health care institution; class mates	mental health care institution; school
3	exploitation; violation of rights	friends	mental health care institution; home
4	theft	fellow clients at mental health care institution	mental health care institution
5	verbal abuse; harassment	neighbours; passers-by	living environment
6	family aggression; witness of fire arm violence	ex-spouse; colleague at work	living environment; workplace
7	verbal abuse	passer-by	living environment
8	harshness	police officers	home
9	physical violence; threats; mental abuse	ex-spouse; mother	home
10	rape; exploitation	ex-spouse	home
11	sexual and mental abuse; family aggression; bullying	father; (ex-) spouse; colleague at work	home; workplace
12	(witness of) physical violence	fellow homeless persons	street
13	threats; verbal abuse	neighbours; passers-by	living environment

## Discussion

Although, as mentioned above, the research is still being conducted at the time of writing, there are already some remarkable and interesting preliminary results, which we look forward to discussing with the workshop participants.

First, the *perception* of victimisation seems to be a key issue. We see this clearly in case 13. The victim (E.) is a 45 year old male, who has been treated in mental health care institutions for about 25 years. He has been diagnosed with narcissistic/histrionic/borderline personality disorder. He has been living on his own for two years now. Ever since he started living in his apartment, he has been receiving anonymous threatening letters. In these letters, the author claims that E. is causing nuisance: he is playing music loudly, his dog is barking all the time, and he fails at cleaning up after the dog when letting him out. E. is greatly disturbed by these letters. He is convinced that the neighbours are harassing him because of him being a psychiatric patient. After interviewing E. (and observing him not picking up his dog's waste while taking him for a walk in the park) and two significant others, we came to a different conclusion. E. is probably not being criticised because of the fact that he is a psychiatric patient. He is addressed as a member of society and as a dog owner.

This finding illustrates the problems that may occur when people with SMI live independently in society (as a consequence of deinstitutionalization of mental health care), but have difficulties understanding (unwritten) social norms and informal codes. Pursuing 'normal' social participation for persons with SMI is of great value in terms of preventing stigma and discrimination and enhancing quality of life. Lodging persons with SMI in 'normal' dwellings (as opposed to assisted-living housing) facilitates this process, but may also cause the opposite effect: (former) psychiatric patients shunning social activities because they feel misunderstood.

A second interesting preliminary result, related to the perception of victimisation, is that we come across indications of *anticipated victimisation*. Case 5 provides an example, the victim (W.) being a transgender (male to female) person in her mid-thirties. She has been diagnosed with schizophrenia and obsessive-compulsive disorder. Being in the process of gender transition for some years now (including hormone therapy and laser hair treatment, she considers herself a woman. The outside world considers her appearances as odd, however, and she is often laughed at and bullied by people living in her neighbourhood. Her stepfather explains how she anticipates victimisation:

"If she boards a bus for example, she thinks in anticipation see, everybody is looking at me. They have an opinion on me and they are going to voice it'. So, to her, people in the street or on the bus are seeking to make fun of her and she hears it literally, hears them calling queer, queer'. I do not hear it, but she does. And that is her firm belief."

Thirdly, we have been confronted with challenging *methodological questions*. As mentioned above, we recruit respondents in an indirect way. This means that we are depending on mental health workers to provide us with victims. This may take up considerable time, not only because mental health workers are often busy, but also because in all mental health institutions a scientific committee is charged with the screening and assessing of research requests. Mental health workers are not allowed to recruit clients to take part in scientific research without the scientific committee's consent. In at least three mental health care institutions, the scientific committee denied permission to recruit respondents because of the potential harmful effect of the research and the research methodology for their clients. As a consequence, *selection bias* effects may have occurred, resulting in the recruiting of respondents that the mental health care institution considered fitting the research inclusion criteria. Another methodological difficulty occurred when interviewing persons diagnosed with psychotic disorders. Sometimes their memory is affected during a psychotic episode, resulting in having difficulties remembering and reconstructing violent events. Also, persons with psychosis might *think* that they have been victimised, whereas this might be a consequence of a (paranoid) delusion. Hence, another example of how the perception of victimisation is a key factor in our research. Case 3 can be an example of this situation. The victim (D.) is a middle-aged woman who is diagnosed with schizophrenia. She has a long history of treatment in mental health care institutions, but she is living on her own now. She claims that she is being harassed by her neighbour, who sneaks into her home without her consenting to it. He then moves objects and leaves traces (e.g. cigarette butts), but she has never been able to seize him. After having interviewed the victim, we talked to her psychiatrist and her sister. They both told us that the victim has never been bothered by the neighbour. Rather, whenever she experiences a psychotic episode, she complains about the neighbour 'breaking into' her home. Her sister told us that she worries about D.'s safety, because of her impaired ability of judging social relationships. Like any other human being, D. longs for company. She has a friend who, according to her sister, only wants to take advantage of D.'s money. Once she had a boy friend who, after an episode of alluring and rejecting, sexually intimidated D. by appearing stark-naked at her front door.

Fourthly and finally, in our research, we aim at not only looking for circumstances, conditions and contexts that can be considered as risk factors for victimisation of persons with SMI, but also to think about interventions or *protective measures* that help prevent victimisation of persons with SMI. These interventions should be aimed at empowering and enhancing social skills in persons with SMI to ameliorate adequate perception of victimisation. Also, there should be programmes contributing to the prevention of anticipated victimisation and its precursors: anticipated discrimination and stigma. Finally, interventions should not only address persons with SMI, but also mental health institutions and mental health workers, providing them with tools to identify and prevent (secondary) victimisation.

## Acknowledgement

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# Intellectual disability and violence: conclusions from a trilogy of projects

## Paper

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**Keywords:** Intellectual disability, violence, tolerance, multi-method, challenging behaviour

## Introduction and background

Violence had been identified as being continuously under-reported in the UK during the zero tolerance campaign (NHS, 1999), with a concerted effort to increase vigilance in reporting (NHS SMS 2003) leading to evidence that incidents in the NHS are between two and three times higher in intellectual disability and mental health settings (NAO, 2003; NHS SMS, 2009). Prevalence studies of violent behaviours by people with intellectual disabilities vary widely in their findings. A study conducted into the experiences of violence in intellectual disability services, reported that 81% of staff had experienced violence from service users within the previous 12 months, with 20% of staff reporting having experienced over 15 violent incidents during that period (Keily and Pankhurst, 1998). A more recent study conducted by the Royal College of Psychiatrists concluded 86% of nurses working within learning disability short-stay homes had experienced violent or threatening behaviour (Cole, 2005). A further study of staff members working in learning disability in-patient units, reported that 79% had experienced violence from service users (Chaplin, McGeorge & Lelliott, 2006). It appears the issue is not restricted to the UK, a study of five psychiatric settings in Australia, for example, reporting 752 serious incidents, 632 involving staff and only 173 being reported (Owen et al, 1998). A Brazilian study into violence in healthcare discovered that higher rates for all types of violence, except for sexual harassment rates, were experienced by staff working in psychiatric services where 47.4% of all workers were affected (Palacios et al, 2003). Also a Swedish study into caregivers experience of violence whilst working with adult persons with learning disabilities, reported a prevalence rate of 61% (Strand et al, 2004). This paper discusses a series of studies undertaken between 2007 and 2011 exploring different dimensions of the relationship between intellectual disability and violence.

## Method

Three inter-related objectives framed the paper are discussed:

1. To examine the relationship between intellectual disability and violence
2. To conclude three inter-related studies exploring different aspects of the relationship between intellectual disability and violence
3. To discuss the implications of 3 projects for education and practice

There were three components to the study, each one building on the work achieved in the earlier research, in order to assemble different dimensions of the relationship between intellectual disability and violence. The overall aim was to examine the phenomenon of violence in relation to intellectual disability from a number of different perspectives, in order that potentially contrasting angles of the same issue be comprehensively examined.

- The research commenced with a whole population survey (n = 411) of staff members from one UK NHS Trust providing services for people with intellectual disabilities. The goal was to establish the extent of, and reasons for, the under-reporting of violent incidents perpetrated by people with an intellectual disability. The findings confirmed the work of others<sup>7</sup>, that there was a discrepancy between actual incidents experienced and those reported.
- The second study sought to explore the findings further. A qualitative study involving semi-structured interviews with 22 professionals providing care directly for people with an intellectual disability. The sample of professionals came from nursing (12), clinical psychology (3), speech & language therapy (2), occupational therapy (2), physiotherapy (1), psychiatry (1) and social work (1). This was a fairly representative sample with nurses providing most service user direct care whilst other professionals tended to provide more sessional-based therapeutic care. The same service was targeted as was used in the initial study, since the purpose was to explore in greater depth the professional experience of violence in the context of intellectual disability. The study was supported by a university grant.

- The service user perspective constituted the basis of the third and final study, whereby 25 interviews were conducted with people with an intellectual disability with a background of violence and aggression. Participants in this final study were recruited from a range of services; statutory and independent sector organisations, and varying in the degree of security provided. The research interviews were also supported by material acquired by participant clinical records (e.g. medical notes, professional reports and minutes). This provided greater depth of data and facilitated the implementation of a theoretical principle (the violent ‘career’, following Goffman, 1961) as a means of analysing the emergence of violence in the lives of participants. This final study of the trilogy was also supported by a university grant.

## Findings

The initial survey identified a hierarchy of reasons for the under-reporting of violence within the intellectual disability service, the most significant being that the incident was considered too ‘minor’ to report. Three-quarters of staff regarded some incidents in this way. Incidents, furthermore, were sometimes considered a waste of time or staff felt they had too little time to complete the requisite documentation. Importantly, however, staff did not feel unsupported by colleagues or line managers, were aware of pertinent policies, protocols and procedures and did not fear any repercussions from reporting (Skellern and Lovell, 2008). Further analysis of the data revealed a more complicated relationship between factors such as years of experience, clinical environment and the particular position of authority within the organisation. Assessment & treatment services experienced much higher incidents of violence than the other environments (community, residential, respite and medium secure), which reflects the nature of the service, particularly the crisis intervention dimension of its role (Lovell, Skellern and Mason, 2011).

The analysis of interviews in the subsequent studies, relating primarily to interviews with professionals and service users, utilized Braun & Clarke (2006)’s approach to thematic analysis. Analysis of the professional data examined themes underpinning non-reporting and attitudes towards violence in relation to intellectual disability. One of the most significant themes related to the interpretation and conceptualization of violence by professionals, specifically the way in which intellectual disability has been considered over recent years in the context of challenging behaviour. A second theme concerned the nature and degree of the intellectual disability, a factor which emerges of considerable importance in determining whether or not decisions to report are made. The severity of the actual violence experienced, tolerance variability between professionals and the overall acceptability of a degree of violence by professionals constituted the remaining themes.

The themes produced from the analysis of the service user interviews began by confirming the importance of family background and early experiences in contributing to later difficulties, such as violent behaviour, in the lives of people with intellectual disabilities (see, for example, Lindsay et al., 2009). A second theme surrounded a reluctance to discuss some of the behaviours engaged in or crimes committed; a denial that contradicted the documented evidence and sometimes related to a real lack of understanding of the consequences of their actions. This theme was associated with two supplementary themes around rhetorical talk, carefully rehearsed but poorly understood explanations, and difficulties with taking responsibility. The final theme concerned the role of substance misuse in the lives of people with intellectual disabilities and a propensity for violence.

## Discussion and conclusion

The implications for practice suggested a need for a shared definition of violence, consistency with regard to policies and protocols, and a shared strategy across disciplines. It is clear that professionals, particularly those working most closely with service users, have an already complex relationship, which is complicated further by violence. The situation appears to be exacerbated by a difference in understanding of violence by the different professionals’ participating in the study. The majority of professionals’ emphasized the therapeutic relationship but had limited experience of violence, whereas others’, primarily nurses, developed the most intense relationships with service users and appeared sometimes to wear their violence as a badge of honour. Violence, in the context of intellectual disability, is poorly articulated and conceptualized; there is also confusion as to what should be reported and even more confusion as to what should be tolerated. The service user perspective is important with the role of social background, in particular, supporting professional reluctance to report and going some way to explain, perhaps, the amount of violence tolerated.

This paper discusses the different dimensions of the relationship between intellectual disability and violence from the discrete perspectives of the survey, interviews with professionals and interviews with

service users. It also seeks to explain how the data acquired from the three studies inter-relate and draws a conclusion to the trilogy.

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# Chapter 18 – Strategies for reducing coercive measures

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## Developments in closed setting housing facilities for psychiatric patients in the Netherlands since 2004

### Paper

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### Abstract

#### Objective

In 2004 a survey was conducted of housing conditions in Dutch institutions for psychiatric care, with special attention being directed towards containment facilities and time-out rooms. The survey was commissioned by the Dutch Department of Health. The aim of the survey was to present an inventory of the current state of affairs as a means of encouraging efforts for improvement.

More recently, in 2009, at the instigation of the Dutch Health Inspectorate, TNO conducted a themed survey to collect details of the spatial set-up of closed psychiatric wards, with special attention being again directed towards containment facilities and time-out rooms. Both surveys have included tallies of clinical capacity per age group, type of care as well as numbers of containment facilities and time-out rooms for the institutions and wards included in the survey.

A comparative study of the two surveys will be conducted to collect data on:

- developments in actual Dutch closed ward capacity and in numbers of containment facilities and time-out rooms over the 2004 to 2009 period;
- changes in (preferences and trends for) spatial set-up of closed wards, containment facilities and time-out rooms over that same period.

The results of the study indicate to what extent policies and innovations implemented by the Dutch government and / or by Dutch psychiatric institutions, have been effective in addressing housing conditions in these institutions.

### Methods

Where the 2009 survey limited itself to closed wards, the 2004 survey included both closed setting and open setting housing facilities. Data collection methods have been similar for both surveys, though the 2004 survey noted less detail per category surveyed. Though the two surveys had different objectives, they contain a sufficient number of comparable survey items to permit trend analysis on topics such as actual capacity, privacy, available floor space per patient, patient safety and security measures. In the survey of 2009, the closed housing facilities of approximately 6.000 patients were physical inspected. Also inspected were 491 containment rooms, 199 time-out rooms and 56 other spatial facilities used for seclusion purposes.

### Results

The comparative study shows that, for all age groups and types of care, actual capacity relative to population size has increased from 2004. The number of containment rooms, on the other hand has dropped by more than 12%. This development is probably informed at least partly by Dutch government policy aimed at encouraging alternatives to containment. The fact that the drop in numbers of containment rooms is

accompanied by an increase in the number of alternative facilities for isolation and seclusion, seems to support this conclusion.

As regards privacy, the survey should show that the number of single rooms, the number of single rooms with en suite bathrooms and available floor space per person for patient rooms have all increased from 2004. Likewise for available floor space for communal facilities such as living rooms, ward kitchens and activity rooms. Average numbers of patients per ward have dropped. New concepts like individual apartments for patients in closed settings have been introduced. In containment facilities, standards of safety and security have improved slightly from 2004. Judging by the comparative data, the patient experience has gained prominence as a design issue for these types of facilities. Modern containment facilities, for instance, more often feature secure outdoor areas and nature views.

## **Educational goals**

1. Housing is one of the means of production employed by psychiatric institutions to provide patient care. Over recent years awareness has grown among institutions of the importance of privacy and patient comfort, reflecting the growing prevalence of the view that quality housing facilities in psychiatric care should be conducive to patient well-being and thereby help reduce conflict and aggression.
2. It is hoped that the results of the study will provide a basis for further improvements in humane housing conditions for psychiatric patients.

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# The Use of Security Officers in the Prevention of Aggression

## **Paper**

*Bob Bowen, Jennifer Vanderberg  
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## **Abstract**

**Abstract:** Historically, security officers wore police uniforms and often were either police embedded in the hospital or former police officers hired as security, with the purpose of intervening when clinical staff were unable to prevent or de-escalate aggressive incidents. Today, security officers are seen as an integral part of the prevention and de-escalation efforts through their respectful presence within the hospital setting. Using this approach, several civil and forensic psychiatric hospitals have been able to lower the frequency of restraint use to less than one event per hundred patients per year. A model of corporate change will be presented that provides for transdisciplinary rather than simple interdisciplinary efforts at increasing safety for all stakeholders in hospital settings.

## **Educational goals**

At the end of the session, participants will have:

1. Developed an understanding of the use of security staff to prevent and de-escalate potentially aggressive situations.
2. Demonstrated an awareness of the term ‘transdisciplinary.’

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# Relationship of equals, difference of roles: Non-coercive team leadership

## **Workshop**

*Bob Bowen*

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## **Abstract**

Conceptualizing coercion free environments is much easier than actually implementing them. The prevalence of horizontal violence between staff indicates that coercion is present in relationships, and data indicates that supervisors are frequently the perpetrators of horizontal violence. Teaching supervisors how to use the tenets of Positive Behaviour Support to teach, maintain, and change the work behaviours of staff using the non-coercive tools of PBS will improve teamwork.

Teamwork is characterized as “relationships in action.” When team leaders can invite cooperation instead of gaining compliance, service providers are able to transfer this approach in their relationships with service recipients. Using an activity that measures the presence of stress, coercion and intimidation in teamwork situations, participants will experience teamwork using a model of non-coercive team leadership.

## **Educational goals**

At the completion of this workshop, participants will:

1. Experience the emotions present when teams are unable to meet goals.
2. Identify the components of non-coercive team leadership.
3. Experience the emotions present when teams are able to meet goals.
4. Develop a plan to replicate the activity used to model non-coercive leadership in their organizations.

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# Registration of seclusion, restraint and coerced medication in two psychiatric intensive care units and one emergency psychiatric ward in Belgium, with preliminary results of changing data by using a new seclusion policy

## Poster

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## Abstract

Since the Cochrane Review about seclusion and restraint (Sailas EES and Fenton M, 2000), more research has been done on the process and factors involved prior to and during the use of coercive measures, on adverse effects and outcome. One example is a qualitative study of the perception of patients, concluding that restraint is experienced as the most traumatic coercive measure (Merlevede C, 2003, UC Sint-Jozef Kortenberg, not published).

Inspired by those and other more recent findings 2 Psychiatric Intensive Care Units (PICU's) and 1 Emergency Psychiatric Ward (EPW) in Belgium pooled their data about their use of coercive measures during the last 3 years, and one of the participating psychiatric hospitals (UPC KULeuven, campus Kortenberg) developed a new seclusion policy. These retrospectively collected data and this new seclusion policy will be presented. Data presentation includes the number of coercive measures relative to the number of admitted patients, as well as indications, preventive measures and circumstances. There exist a lot of differences between use of seclusion and restraint between the EPW on the one hand and the 2 PICU's with relatively similar results on the other hand. Of the admitted patients only 4,5% was secluded at the EPW and respectively 47% and 25% at the 2 PICU's. Because intoxication is with more than 50% the main reason for seclusion and because of the ward policy, each seclusion started with restraint at the EPW. In the PICU's 25% and 32% of the seclusions started with restraint. In the PICU's less than 10% of the seclusions was due to intoxication; other reasons for seclusion were aggressive, disorganized or other dangerous risk behavior due to psychotic, affective or psycho-organic problems.

Based on high seclusion rates across wards, the findings about patient perception and the literature about the use of seclusion, the UPC KULeuven, campus Kortenberg, developed a new seclusion policy. The following core principles were used: 1) seclusion means intensive care, supported by an interdisciplinary team; 2) duration is as short as possible; 3) based on the principle of proportionality, preference should be given to the least restrictive measure, what means seclusion without restraint; 4) because seclusion is a difficult balance between protecting the patient with least restrictive measures on the one hand and ensuring safety for the staff on the other hand, it is determined that the seclusion room can only be entered by at least 2 team members.

Preliminary results show a reduction in the use of restraint since the development of this new seclusion policy at the UPC Kortenberg. Further registration is needed to confirm these first data. As important as quantitative research, is further research on qualitative aspects. There exists interest in Belgium by other psychiatric hospitals and psychiatric wards in general hospitals in this new seclusion policy. Meetings are organized to exchange experiences.

## Educational goals

1. To know there exist differences in used coerced measures in different clinical contexts.
2. To know a less restrictive and traumatic experienced method of seclusion as an alternative for restraint, with special attention to the core principles of this method and to intervention as a base for further qualitative research.

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# Seclusion and restraint usage in seven English Psychiatric Intensive Care Units (PICUs).

## Poster

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## Abstract

### Aims

To describe seclusion and restraint use within the care of 332 patients admitted consecutively to seven English psychiatric intensive care units (PICUs).

### Background

PICUs provide care for patients who may demonstrate agitation and aggression. Such behaviour has traditionally been managed using interventions such as seclusion and / or physical restraint. Little published data exists about this use within different PICUs. This paper attempts to provide such evidence as a base for clinical governance.

### Method

Using prospective multi-centre patient case note analysis, anonymised data were collected prospectively from case records of 332 patients admitted consecutively to seven English PICUs as described by Brown et al (2008). Frequency and duration of seclusion and physical restraint episodes were measured. Seclusion was defined as 'forcible confinement of a patient alone in a room for the protection of others from serious harm' (DOH, 1999). Physical restraint was defined as 'an episode of formal three person restraint (or whatever the standard procedure in your Trust / Organisation) which has been formally recorded'. Data were collected by staff working within the units and recorded upon a semi-structured collection sheet. Mental state was measured at admission and at two weeks, using the extended version BPRS (Lukoff et al, 1986).

Within statistical analysis, groups were compared using T-tests for normally distributed continuous data and Chi squared and non-parametric tests for categorical and skewed continuous data. Pre selected variables (age, gender, ethnicity, recent behaviour prior to admission, behaviour in the PICU, admission and two week total BPRS scores) were tested for association with the use of seclusion and physical restraint in univariate analysis. Variables that were significant at 5% level were then entered into a logistic regression model by forward stepwise procedure.

### Results

Within the four units that utilised seclusion in the study period, it was used upon 16% of patients who had been admitted. The mean number of seclusion episodes amongst patients who were secluded was 1.5, (median 1, range 1-6 episodes). The mean length of a seclusion episode was 101 mins (median 80 mins, range 20 – 600 mins).

All seven units used control and restraint and 28% of patients were formally restrained at some point during their admission. Formal physical restraint was used five times as often as seclusion albeit sometimes as part of the process of getting a patient into seclusion rather than as a discrete intervention. 51% of patients who were restrained were restrained once, 23% were restrained twice and 26% more than twice. The mean number of episodes among those patients who were restrained was 2.4 (median 1, range 1 - 30 episodes). The mean length of each episode was 7.2 mins (median 5 mins, range 3 - 150 mins).

There was no significant difference in mean duration of restraint or proportion of patients who were restrained between units that used seclusion and those that did not. Use of seclusion was significantly associated with patient violence and property damage in PICU. Restraint usage was also significantly associated with these factors but also with higher two week BPRS scores and a younger patient age.

## Conclusions

It appears that PICUs manage disturbed behaviour differently, either dependent upon facilities or local policies. In attempting to reduce use of seclusion and restraint, a multi-faceted approach must be taken both locally and nationally. PICU clinicians and service users should be integral within this.

## Educational goals

1. Cognitive: This paper demonstrates that there is lack of uniformity in management of disturbed behaviour between different English PICU services. This is despite national guidance. It has however highlighted that within PICUs there are some factors that are significantly associated with use of physical interventions.
2. Psychomotor: This evidence base gives services a baseline for comparative monitoring. It will hopefully spur individual services and clinicians to examine use of these traumatic interventions in a different fashion when considering how use can be reduced within their own services.

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# The development and application of the Forensic Early Signs of Aggression Inventory in forensic care

## Paper

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FPC Dr. S. Van Mesdag, Arnhem, The Netherlands*

## Abstract

### Introduction

Inpatient aggression is a main topic in forensic psychiatric care. The Early Recognition Method aims at helping patients to recognize their own early warning signs of aggression, which they describe in the so called Early Detection Plan. A major obstacle in current clinical practice is that there hardly are instruments or tools available to support patients and nurses to collaboratively assess relevant early warning signs of aggression in a structured way. For this purpose, the Forensic Early Signs of Aggression Inventory was developed. Using the FESAI the nurse and patient together explore which items of the FESAI represent the patient's early warning signs of aggression, after which nurse and patient elaborate on these early warning signs in the EDP.

The following research questions were addressed: (1) What is the specific nature and prevalence of early warning signs of aggression – as measured with the FESAI - in two samples of forensic patients? And; (2) Do patients with different diagnoses and different types of offending behaviour in their history, display different profiles of early warning signs?

### Methods

Both qualitative and quantitative research strategies were used to develop the FESAI. A total of 3768 "early sign" phrases which were described in 167 early detection plans of two forensic hospitals were studied in order to construct a list of early warning signs of aggression. The first draft of the inventory was constructed by merging and categorizing these early warning signs. Following this, forensic nursing professionals assessed the face validity of the FESAI and inter-rater agreement was tested. In a follow up study, EDPs of 171 patients of two forensic hospitals were examined for early warning signs of aggression by means of the FESAI. These warnings signs were compared by means of rank order correlations for subgroups of patients with similar diagnoses, types of offences and for psychopathy, as assessed by means of the Psychopathy Checklist-Revised.

### Results

The FESAI finally contains 44 early warning signs of aggression subdivided into 15 categories. The face validity of the FESAI was judged to be adequate and the inter-rater agreement was satisfactory. The results show that the 171 Early Detection Plans contained 1478 early warning signs. Almost half of the recorded early warning signs fell within the categories Anger, frustration and/or tension, Social isolation, Decreased social contact and Changes of daily activities. The FESAI results of the subgroup of patients showed considerable similarities in the ranking of early signs. Patients with a PCL-R score of 26 or higher scored relatively often on the item Increasingly overstepping other's boundaries, humiliating and/or cynicism/sarcasm.

### Conclusion

The FESAI could be useful listing of early warning signs of aggression in forensic patients, which may contribute to the prevention of aggressive behaviours in forensic psychiatry. Applying the FESAI could reveal early warning signs of aggression, which could be observed by others and also those which could be noticed by the patient themselves. However, as this is the first study in developing the FESAI, more research is necessary for further validation of this inventory.

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## Educational goals

1. Gaining insight in early warning signs in forensic patients, which could be classified in categories and items with regarding to observable and non-observable precursors of aggression.
2. Gaining insight in the early warning signs of sub-populations forensic patients with distinguished diagnoses, offences and PCL-R values.

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# The Positive Intervention Programme: Including the secluded

## Paper

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**Keywords:** Seclusion; programme evaluation; aggression-coercion cycles.

Secluding service users in secure care has historically been controversial, and wide variations exist in how seclusion or segregation is implemented in practice (Fisher, 1994). The Positive Intervention Programme (PIPs) at Ashworth High Secure Hospital (UK) is a small multidisciplinary team made from nursing staff and Management of Violence and Aggression (MVA) instructors who work with patients in long term seclusion. The goals of this intervention are to provide access to a range of therapeutic activities to secluded patients and to work towards the eventual termination of seclusion. It has been theorised that for some patients seclusion can be elongated due to the maintenance of aggression-coercion cycles between the patient and environment (Goren, Singh & Best, 1993). As part of an ongoing programme evaluation, a small group of nursing staff were interviewed and routine audit and incident data were collated. Analysis of the quantitative data provided evidence that secluded patients were participating in the therapeutic activities being made available, and, that there were shifts in behaviours that gave rise to incidents. Thematic analysis of the interview transcripts suggested that the team's work can facilitate therapeutic relationships between ward staff and patients. It was theorised that through the team's intervention, the cycles of aggression-coercion which can extend time patients stay in seclusion were being interrupted via improvements in therapeutic relationships. Implications for further research and adjustments in the team's work will be discussed.

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# An overview of Canadian psychiatric nursing strategies and practices employed to reduce coercive measures related to violence

## Workshop

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**Keywords:** Canada, psychiatric nurses, non-violent nursing interventions

## Introduction

In care facilities and/or community settings, psychiatric nurses have long been on the front lines of violence, intervening to prevent injury to patients and others or damage to property. This presentation will present an historical overview of approaches to violence management employed by psychiatric nurses in Canada, with a particular focus on the province of British Columbia. It will explore practices and outcomes that include seclusion, chemical and physical restraints, leading to a discussion of post-modern psychotherapeutic interventions that reduce the need for more coercive measures in violence management. To this end, implications for the need for patient and staff education and training will be presented and discussed. The concept of the Code White nurse (a psychiatric nurse) in a general hospital setting will be introduced as well as his/her training and responsibilities in dealing with critical incidence involving verbal and/or physical violence. A number of examples of Canadian nursing practices will be provided to illustrate points at key junctures and participants will be invited to share their own. Finally, demonstrations and opportunities for interactive skill development based on 21<sup>st</sup> century Canadian intervention techniques will be facilitated by the presenters. These will include verbal as well as physical, non-violent crisis intervention techniques for dealing with violence.

This workshop will begin with a brief overview of Canada's approaches to mental health care to set the context for the session. More specifically, impact and implications for care when dealing with aggression or violent acting out in psychiatry will be based in the historical influences of clinical psychology in the 20<sup>th</sup> and 21<sup>st</sup> centuries. These provide the foundation for the main focus: Canadian psychiatric nursing strategies and practices employed to reduce coercive measures related to violence in the acute care setting of a general hospital. Introduction to the Code White Nurse and the Code White Team will illustrate Canadian best practice strategies for nursing staff. The authors will connect the current practice setting to interactive discussions and demonstrations of the accepted standards and means of patient care by nurses in situations of violence in psychiatry.

## Deinstitutionalization

Deinstitutionalization is an abstract construct; a philosophical approach adopted in Canada and elsewhere around the 1960s and finally realized by the end of the 20<sup>th</sup> Century/early 21<sup>st</sup> Century. Overtime, deinstitutionalization became a social movement that eventually shifted care from psychiatric institutions to new psychiatric units in general hospitals. It also led to an expansion of mental health care services into the community (Bourquet, 2004).

Deinstitutionalization was influenced by major developments in clinical psychology and the advent of psychotropic, psychiatric medications. At the same time (mid-20<sup>th</sup> Century), research on the care and treatment of patients in psychiatric asylums and facilities for the mentally retarded began to surface. Through this, Canadians became aware of the negative impact on a person's quality of life and opportunity for self-determination resulting from periods of long term institutionalized care (Kirby & Keon, 2004). This included a diminishing of social skills and abilities, acts of aggression and the development of an authoritarian and sometimes adversarial relationship that pitted staff against patients (Kirby & Keon, 2004). These notions and an increasing body of research and evidence influenced the move of psychiatric care to general hospitals.

## Acute care psychiatry in the general hospital setting

Psychiatric nursing involvement with the inappropriate expression of anger, hostile aggression and violent acting out has evolved in Canada from a authoritarian, custodial treatment philosophy seen in the days

of institutionalization through to an era of behaviourism to modern approaches in clinical psychology of humanism, social psychology, cognitive psychology and so on.

Today, most of the traditional mental hospitals (institutions or asylums) in Canada have now been closed and the last remaining few are in the process of closure. Acute care psychiatric units are common in general hospitals. They are staffed with Registered Psychiatric Nurses (RPNs) and Registered Nurses (RNs). There are contentious issues in Canada about the necessary knowledge and competencies to work on these units, with this special population. Some nurses, administrators and policy-makers see this as a place for general nursing practice while many others see it as a nursing specialty. This is certainly an issue in the quality of care given our patients and in respect to the topic of this workshop, a critical point of tension in the care and management of anger, hostile aggression and violence on the unit.

## Advent and influence of applied psychology

Behaviourism is the study of observable behaviour and the belief it can be explained as a learned phenomenon. This was based on the work of psychologists John Watson, B. F. Skinner and others. Behaviourism was one of the first clinical approaches in psychology to appear in Canadian institutions and elements of it remain today in non-institutional settings. Canadian psychiatric nurses are all familiar with the tenets of this approach and clearly aware of its need to be situated in the appropriate context with the appropriate client. For example, behaviour modification programs are still in effect in some manner on acute care psychiatric units for patients with intellectual or cognitive deficits, with young anorexic and bulimic patients (i.e.: adolescent step-programming), and so on. Some of these strategies include removing self from the room, going jogging, beating a pillow or mattress, earning privileges, etc.)

Therapeutically, the tenets of behaviourism are also used when psychiatric nurses teach patients with anger and aggression issues to cope in more effective ways, exploring rewards and consequences for making choices not to act out at the level of human cognition and emotion. Psychiatric nurses are able to role model effective anger management, demonstrate how to express anger appropriately and teach coping skills for dealing with escalating anger, combining behaviourism with social learning theory (Bandura, 1973). An example of the behaviorist approach adapted to in-patient psychiatry, anger and potential for violence will be presented.

Behaviourism has, for the most part, given way to more modern clinical approaches to the argument of anger, aggression and violence. Just prior to the end of the institutional period of care for mental illness, the social psychological theory of *locus of control* arose (Rotter, 1966 in Ellis, Adams, and Dengelegi-Adams, 2008). The premise of locus of control is that individuals believe they can and do control what happens to them in life. Indeed, it is a perspective similar to self-determinism wherein one believes in his/her own ability to act on life, act on the environment, and generally control one's existence and outcomes in some desired manner. To this day, anger management therapy incorporates this notion of locus of control, working with individuals who have a strong internal locus of control (who believe they can exert influence on what happens to them) versus individual with an external locus of control (who believe they are powerless to stop the external world from exerting its influence on them). This latter individual often feels thwarted; frustrated, caught off guard, and angry. If this sense of lack of personal power is stored as anger is in the form of injustice, resentment, frustration and so on, overt anger, aggression and violence are possible. On a hospital unit, the tenets of locus of control can be seen when psychiatric nurses ask patients to calm themselves or regain personal control, pointing out that the power to act out remains within that client, not others on the unit. Choices are given to leave the area of one's own accord, request a prn of medication and so on. An example of the behaviorist approach adapted to in-patient psychiatry that incorporates locus of control, anger and potential for violence will be presented.

Humanistic psychology gained popularity in the 1960s and 70s with the work of Carl Rogers and other imminent psychotherapists. The approach has greatly influenced how Canadian psychiatric nurses think about the care and treatment provided for people challenged with mental illnesses or intellectual disabilities even today. The foundations of humanism are a philosophical, psychological belief that people desire meaning and growth in their lives: they strive to find a reason for their existence and wish to live a meaningful, purposeful life. In acute care psychiatry, psychiatric nurses have become increasingly knowledgeable about how environment and personhood, self-efficacy and so on influence anger, aggression and violence.

Therapeutic milieu was introduced by Maxwell Jones (1960s) who understood that the hospital unit could also serve as part of the patient's treatment. In the 1970s, Canadian hospitals and care facilities for the mentally ill or disabled began to implement the principles of therapeutic milieu. The initiative was designed to reduce crowding on units by giving rooms that only had 1 – 4 patients, provide Quiet Rooms

and lounges on the unit away from the more stimulating and bright Day Room, improving quality of meals and mealtimes, and so on. These goals have been achieved and therapeutic milieu is standard in the design of every psychiatric unit in hospitals, care facilities and so on. The ability to find quiet spaces and remove self from over-stimulating or frustrating situations has been highly effective to decrease the incidents of violence and aggression on in-patient units. An example of the approach of humanistic psychology to working with angry or aggressive patients will be presented.

A nurse strongly influenced by humanistic psychology's client centered approach, Hildegard Peplau (1968) was instrumental in incorporating it into psychiatric nursing care. She clearly articulated the identity of the modern psychiatric nurse and the value of the professional, interpersonal relationship as a medium of treatment. Resultantly, psychiatric nurses came to spend more one-to-one and group time with patients in meaningful conversations, exploring their issues. Stress management groups appeared on the in-patient units to help deal learn more effective coping strategies and behaviours. An example of the humanistic approach to dealing with anger and/or violence will be presented.

The advent of cognitive psychology and the metacognitists Albert Ellis, Aaron Beck and others (1970s and 1980s) brought the concept of thinking about thinking to the skill repertoire of psychiatric nurses (Ellis, 1973, 1990, Beck 1976.) As psychiatric nurses became more aware of our own thinking processes, learned the skill of reflection and critical analysis so too were we able to bring these therapeutic interventions into our work with person's who had difficulty with anger management and acting out. Whether in one-to-one, group or family therapy situations, the psychiatric nurse was now able to explore triggers to anger and violence, teach patients how to prevent an escalation of inappropriate, hostile emotions and behaviours and to de-escalate themselves. Using the cognitive psychology approach, an example will be provided of anger management group therapy, a health promotion, violence prevention intervention used by nurses.

RPNs increasingly used therapeutic interventions to observe, monitor and intervene with aggression and violence prior to and during a critical incidence. Then and now, nurses pro-actively educated patients about coping mechanisms, de-escalation techniques, and self-soothing or calming utilizing elements of behaviourism (ie: locus of control) and cognitive psychology in anger management groups. These groups were closely tied to coping and stress management groups, one preceding the other.. The metacognition approach has also been helpful assisting patients in identifying triggers for inappropriate anger responses. Some de-escalation techniques will be presented and modeled.

## **21st century Canadian psychiatric nursing non-violent interventions**

Despite the best intentions and best practices in psychiatric nursing care in the general hospital setting, aggression and violence still occur. When a patient on In-patient Psychiatry does escalate to a point where harm to self or others is imminent, physical and pharmaceutical measures still need to be taken to resolve the crisis. The question of medication usage during these incidents is always contentious. The question arises: are the medications being used therapeutically or coercively to control behaviour? An example of current practices related to use of medications in incidents of violence or potential violence will be presented, including identification of medications of choice.

Physical restraints are still in use in In-Patient Psychiatry in Canada although there is highly restricted, requires doctors orders, strict adherence to nursing and hospital protocols. Some examples will be given. Additionally, the topic of seclusion as therapeutic or coercive will be explored from the perspective of the College of Registered Psychiatric Nurses of British Columbia (2008) and College and Association of Registered Nurses of Alberta (2009).

## **Best Practices**

Beginning in the 1980s, Canadian psychiatric nurses began to train in various forms of non-violence crisis intervention (NVCI). The goal has been to effectively deal with these crises without risk of harm to staff, patient, and others on the hospital unit. This approach facilitates the adaptive, non-violent expression of anger, intervening before it escalates further. NIC techniques include nursing skills and competencies that are both physical and psychological (Hull in Varcolis, Halter, Haase and Watkins, 2012). Specialized communication skills and the ability to establish trust and rapport with the patient very quickly are essential to success. Some of these techniques will be explored in detail and open discussion will be invited, sharing other techniques and protocols of chemical and physical restraints.

The Code White Team was borne from these theories and experiences. Arising in the 1990s in the general hospitals, Code White, the Code White Nurse and the Code White Team have become *de rigeur* for most general hospitals (Hull in Varcolis, Halter, Haase and Watkins, 2012). In the province of British Columbia

protocol has been established for the implementation and utilization of Code White Teams by a variety of governmentally supported agencies. These are now mandatory policies and practices in all hospitals. (Workers Compensation Board of BC, Health Association of BC, Occupational Health, Safety Agency for Health Care, 2002). This workshop will spend a good deal of time discussing the Code White approach to using the least restrictive, least coercive measures of violence management in the general hospital setting. Additionally, role-play and role-modeling will help demonstrate the effectiveness of this practice.

## Conclusion

In conclusion, participants will be invited to discuss implications for need for patient and staff education and training related to non-coercive measures in incidents of escalating anger, potential and/or actual violence based on what has been presented and modeled. Open discussion and sharing of information and techniques from participants will add richness to the session and enhance learning. Questions and answers at the end will round out the session. Upon completion of this workshop, attendees will have gained a broader perspective of what can be achieved by psychiatric nurses in prevention and management of anger, hostile aggression and violence on in-patient psychiatric units.

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# Patterns in use of seclusion, restraints and involuntary medication in acute psychiatric wards in Norway

## Poster

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## Abstract

### Background

When coercion is used both patient and staff can be injured. Use of coercion in treatment may also threaten the quality of care and patients human rights. Therefore it is of great importance to reduce the use of coercion in mental health care. To be able to reduce the use we need to understand the factors involvement in the process which coercion are used. Previous research on mental health care has shown considerable differences in use of seclusion, restraint and involuntary medication among different wards and geographical areas. This study investigates to what extent use of seclusion, restraint and involuntary medication for involuntary admitted patients in Norwegian acute psychiatric wards is associated with patient, staff and ward characteristics. The study includes data from 32 acute psychiatric wards.

### Method

Multilevel logistic regression using Stata was applied with data from 1016 involuntary admitted patients that were linked to data about wards. The sample comprised two hierarchical levels (patients and wards) and the dependent variables had two values (0 = no use and 1 = use). Coercive measures were defined as use of seclusion, restraint and involuntary depot medication during hospitalization.

### Results

Data from 1016 patients could be linked in the multilevel analysis. There was a substantial between-ward variance in the use of coercive measures; however, this was influenced to some extent by compositional differences across wards, especially for the use of restraint. The total number of involuntary admitted patients was 1214 (35% of total sample). The percentage of patients who were exposed to coercive measures ranged from 0–88% across wards. Of the involuntary admitted patients, 424 (35%) had been secluded, 117 (10%) had been restrained and 113 (9%) had received involuntary depot medication at discharge. Client aggression measured using HoNOS was a main reason for use of seclusion and restraints.

### Conclusions

The substantial between-ward variance, even when adjusting for patients' individual psychopathology, indicates that ward factors influence the use of seclusion, restraint and involuntary medication and that some wards have the potential for quality improvement. Hence, interventions to reduce the use of seclusion, restraint and involuntary medication should take into account organizational and environmental factors. Reasons for conflicts between staff and patients should also be investigated as interventions to facilitate better and non-violent interaction between staff and patients. Staff training should be targeted to train staff in de-escalation techniques and to be able to better communicate with patients.

### Educational goals

1. Understanding the process in which coercion are being used.
2. Learn to plan interventions to reduce the use of coercive interventions in mental health care.

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# The Irish approach to the reduction and standardisation of seclusion practices

## Poster

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## Introduction

The history of seclusion is vague in Ireland but there appears to have been 'cells for lunatics' as early as 1765 in one Dublin institution <sup>(1)</sup>. Certainly, seclusion was in widespread use in the 20<sup>th</sup> century, with little regulation through legislation or policies. The Mental Treatment Regulations 1961 were the attempt to define and legislate for seclusion but some of the language used was ambiguous and led to non-standardised practices.

In the first few years of this century, all that began to change. A new Mental Health Act in 2001 mandated the establishment of a Mental Health Commission (MHC) which was to 'make rules for the use of seclusion... on a patient' (MHA 2001 69.2). The MHC was established in 2006 and immediately published 'Rules Governing the Use of Seclusion and Mechanical Means of Bodily Restraint'. This article/presentation will not examine the 'rules' but instead look at the influences bearing on the commission in its formulation of the policy and try to determine the changes, if any, in seclusion practices that may be attributable to the new rules.

In an unpublished survey of 13 European countries by the European Violence in Psychiatry research group (EViPRG) in 2005, Slovenian and Norwegian respondents reported that seclusion is not used in their mental health services and respondents from other nations said that there were seclusion reduction and eradication movements underway. Meanwhile, in Ireland, the new MHC had clearly decided not to prohibit seclusion but instead reduce, regulate, monitor and standardise it. This author has tried, through discussion with the Commission and Directors of Nursing in mental health services, together with examination of all the published materials, to establish the influences that led the commission to follow this path. The main influences are outlined in Table 1.

Table 1 Influences on the MHC in regard to seclusion

International conventions and standards.	In its own report (MHC 2006), the MHC acknowledges the findings of various organisations in regard to seclusion. These include Article 3 of the European Convention for the Protection of Human rights and Fundamental Freedoms (CE 1950), the New Zealand mental health commission 1994 report, the Commission for Healthcare Audit and Inspection report 'Count me in' (CHAI 2005) and many others. The Royal College of Psychiatrists stated in 1995 that "Seclusion is not therapeutic and should be an exceptional event in all psychiatric units involved in the management of disturbed and violent patients" (CR41 RCPsych, 1995)
Consultations with service users and staff.	The MHC engaged with a consultative process with service user representatives, mental health and legal professionals, academics and staff unions in the formulation of its 2006 policy. A submission from the Psychiatric Nurses Association appears to have been quite influential.
Other research	The commission referred in particular to research on seclusion (Maguire 2002; Donat 2003; Colaizzi, 2005); management of violence and aggression (Gournay 2003; Manchester City Council, 2003; McKenna 2004 and NICE 2005) and ethics (Taxis 2002). Strangely, they do not reference the copious body of literature on coercion and there is no mention of the seminal seclusion author, Tom Mason.
Antipsychiatry / human rights movement	One of objects of the antipsychiatry movement is any kind of involuntary treatment and seclusion is included. Though not directly mentioned as an influence, the tenets of antipsychiatry in regard to seclusion are evident in current debate on the intervention. Several hospitals within the Irish mental health sector have abruptly ceased to use seclusion on the grounds that it is inhumane and unnecessary. The Commission did not adopt that approach, choosing instead to regularise and reduce its usage.

## Changes in Irish seclusion practices

Some of the effects on practice of the new 'rules' for seclusion are very apparent in the clinical areas. Maguire (2002) studied seclusion practices in 4 regional centres in Ireland. An overarching conclusion was that seclusion and seclusion legislation and policy was implemented and interpreted differently in each

region. It was also evident that official inspectorate figures were a poor reflection of actual seclusion usage. There was an urgent need for standardisation and audit. This is what the MHC set about addressing.

The Commission's new rules (MHC 2006) defined seclusion as *"the placing or leaving of a person in any room alone, at any time, day or night, with the exit door locked or fastened or held in such a way as to prevent the person from leaving."* (Sect. 2.2.1). In 2007, the Commission attempted to collect data in a new, detailed, standardised way using templates. It only sought and obtained data for second half of the year and achieved a 90% response rate. However, it reported that "due to data validity and reliability issues (a report) was not published" (MHC 2009).

In 2008, the MHC obtained a complete set of data from mental health and intellectual disability services. It also reviewed its 2006 Rules and set about a process of amending them. It commissioned an independent review (MHC 2008) or 'Prospectus Report' and set about improving its policy for ultimate publication in late 2009 (Rules, version 2).

In 2009, the Commission ordered an inquiry into one service that was in breach of several rules. In this facility, 9% per cent of seclusions took place because of staff shortages, recording of the starting time of the episode of seclusion was unclear in some cases, some signatures were not legible and the average length of time of seclusion was high. Also, the design of the unit was unfit for purpose. The Inquiry team recommended greater clarity on the use of seclusion, improved staff awareness and training, improved documentation, a review of all incidents of seclusion at clinical team meetings, a programme of day-time activities, more staff training, improved facilities and better clinical governance of seclusion.

2009 saw publication of the 'First report on the Use of Seclusion and Mechanical Means of Bodily Restraint', based on 2008 data (MHC 2009) and in 2009, the Revised Rules (Version 2) were issued by the MHC, effective from Jan 2010.

## Changes over time

In a sense, seclusion practice in Ireland appeared to be undergoing considerable reform but is there any evidence of actual change? The evidence is examined under three headings:

### 1. Statistics

Seclusion data collection in Ireland, despite annual reports by various Inspectorates of Mental hospitals for nearly 150 years, has been unreliably collected, if at all. Where data were collected, national or international comparisons were impossible due to several factors, not least the fact that the Mental Treatment Act of 1945 was vague in its definition of seclusion (Maguire 2002).

Table 2 presents official data from 2002, and 2008-09. The Commission has stated that data for 2007 were unreliable and those from 2003-2006 preceded the arrival of the Commission and therefore are not presented. The 2002 data are dependable as there was a 2-year research project on seclusion in Ireland completed in that year (Maguire 2002).

Table 2 Available Seclusion Data for 2002-2009

Year	No. centres using Seclusion	Official No. of episodes	No. of residents secluded	Episodes per resident	Ratio Eps/100,000 population	Duration	Reduction
2002	28	4882 <sup>†</sup>	499	9.78	116.23	††	34.5% increase on 2001
2003-07	Data incomplete and deemed possibly not reliable or valid						
2008	30	2642	663	3.98	59.25	90% <8hrs <sup>††††††</sup>	45% reduction on 2002
2009	29	2517	740	3.40	59.4	86.5% <8hrs <sup>††††††</sup>	0.47% reduction on 2008
2010	28	The 2010 report on the Use of seclusion is not available yet					

<sup>†</sup> This figure is known to underrepresent the actual no. of episodes in 2002 (Maguire, 2002); <sup>††</sup> Due to an anomaly in the 1945 Mental Treatment Act, max. duration will always be 12hrs. <sup>†††</sup> Eight hours is the maximum period a seclusion order can remain in force (Rules, Sect. 2.6). It must then be renewed, if

continuing. †††† Most seclusions (38.6%) lasted 1-4 hrs followed by 31% which lasted 4-8hrs. 25 episodes (1%) lasted more than 72hrs. 3.9% of episodes lasted 0-30 mins. ††††† Most seclusions (46.7%) lasted 1-4 hrs followed by 22.1% which lasted 4-8hrs. 35 episodes (1.4%) lasted more than 72hrs. 5.2% of episodes lasted 0-30 mins.

In all years, the highest rates of seclusion were an ID service and a mental hospital in Dublin. There are reasonable reasons for this that are beyond the scope of this article.

**2. Monitoring**

Since 2008, the Mental Health Commission has used criteria from its 'Rules' document as template items for its inspections of seclusion facilities and practices. The twelve criteria are *Seclusion Orders, Patients' dignity and safety, Monitoring of the patient, Renewal of seclusion orders, Ending seclusion, Facilities, Recording, Clinical governance, Staff training, CCTV* and (seclusion of) *Child Patients*.

In 2008, a facility was deemed either *compliant* or *not compliant* with each item, if applicable. In 2009, the Commission changed this to 4 possible findings in regard to each criterion; *Fully compliant, Substantially compliant, Compliance initiated* or *Not compliant*. Table 3 shows a typical report:

Table 3 MHC seclusion report template

Section (of 'rules')	Description	Fully compliant	Substantially compliant	Compliance initiated	Not compliant
3	Orders		X		
4	Patients' dignity and safety	X			
5	Monitoring of the patient	X			
6	Renewal of seclusion orders	X			
7	Ending seclusion		X		
8	Facilities		X		
9	Recording			X	
10	Clinical governance	X			
11	Staff training	X			
12	CCTV		X		
13	Child Patients	Not applicable			

Note: Breach of Sections 3.5, 3.7, 7.4, 8.3, 9.2

This is a marked change from pre-2008 reports, lending a standardised framework for audit that is comparable year-on-year. In addition to the grid, the MHC furnishes each service with details of the particular sections and subsections of the 'Rules' document they are in breach of, and a justification for the rating is given in writing with positive and negative comments. Here is an example:

The seclusion room was located in the high observation area. The seclusion register had not been signed by the consultant psychiatrist responsible for the care and treatment of the patient or the duty consultant psychiatrist in two episodes of seclusion: one occurring in March 2010 and one in August 2010: one of these involved the seclusion of a child. There was no indication from the seclusion register whether a former patient's next-of-kin had been informed of an episode of seclusion. There was no documentary evidence from one clinical file examined that the patient had been afforded the opportunity to discuss the episode of seclusion with a member of the multidisciplinary team. In two cases, the date of commencement of the episode of seclusion had not been recorded in the seclusion register. The ceiling lights were inadequate and it was reported that recessed lights were to be fitted. The seclusion room was inadequately ventilated: this has been reported on for the past two years in the Report of the Inspector of Mental Health Services 2008 and 2009. Shower facilities for patients in seclusion were across the corridor of the high observation area. It was reported that members of staff were currently being updated in Prevention and Management of Aggression and Violence training (PMAV). The use of CCTV in the seclusion room was not clearly labelled.

### 3. Governance

The Mental Health Commission manages to inspect all seclusion facilities on an annual basis, something the former Inspector of Mental Hospitals could not always achieve. Indeed, many facilities are re-inspected within the same year. In addition, night-time visits are carried out and an increasingly large percentage of inspections are unannounced, something unheard of in the past.

The commission is also striving to improve its methods. It engages with two-yearly review of its policy on seclusion, consulting service users and mental health professionals. It has recently appointed a researcher to further analyse seclusion data.

### Conclusion

Irish mental health services have seen huge changes in regulation and audit of seclusion practices since the establishment of the Mental Health Commission in 2006. The data presented here summarise the efforts being made to reduce and standardise the intervention but they are just summary statistics. The MHC reports are very detailed and a lot of variation is evident upon further perusal of their service by service data. Overall, there is evidence of a reducing number of episodes of seclusion with a particular contrast between the pre-MHC and post-MHC periods but there are anomalies in the more detailed data showing increased usage in some services in the 2008-2010 period. There are also several instances of services being fully compliant one year but failing some criteria the next.

The Commission has shown enthusiasm for its task of improving patient care and experiences in all areas and seclusion is to the fore. It has also been flexible, adapting its rules through independent audit, and it has shown its teeth in pursuing services that are particularly in breach of the new standards. There is scope for a lot more research and analysis of seclusion data in Ireland. It would also be very interesting to compare the approaches taken by the MHC with those of similar bodies in other countries.

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# Testing and discussing the NOW-Model (Workshop and Poster)

## Workshop, Poster

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**Keywords:** Aggression management, environmental factors, interaction, personal factors, problem solving, sense of security and equilibrium

## Introduction

Young research colleagues entering the ongoing discussion about the management of aggression report difficulties getting started and they talk about difficulties to appraise the existing models, their relevance and use in practice. Of course, in the field of aggression and violence many theories and models of violence are available. They provide statements, concept clarification and enable researchers to discuss aggression and violence related factors in many ways. However, the question may arise, which theory and model is the most appropriate in the field of healthcare or, more exactly, which theories fit together in a meaningful way. So we are in need for models to guide us and allow us to find appropriate comprehensive interventions for the prevention, management and aftercare of aggressive episodes in healthcare. We concluded, that for didactical reasons as well for scientific reasons and last but not least for practical reasons an integrative practice model should be developed as a sort of an umbrella model for explaining, reflecting and managing aggression and violence in health care. We carved out, that the model had to fulfil the following requirements:

- It should be applicable to various health care settings,
- It should incorporate personal, environmental and interactive factors as well as acknowledging triggers,
- It should acknowledge existing research and aggression models,
- It should acknowledge preventive factors,
- It should be easy to grasp.

## Methods

Inspired by the PATH-Model (Buunk & Van Vugt, 2008), which starts from formulating a Problem definition, proceeds to Assess the problem by finding explanations for the problem, continues to develop and test a Theory thereby, integrates a process model and merges into the development of Help, the authors developed a model similar to that will be presented. Using several case vignettes in different settings they tested the new model and made several further improvements till it seemed matured enough to be universal and accurate and at the same time clear and simple. In order to find flaws and get hints for further improvement the model was then presented and discussed with students, in several trainings and with experienced scientific colleagues for example at 2nd International Conference on Violence in the Health Sector 2010 in Amsterdam.

## Results

A model should take into account personal factors of patient/visitor and staff, environmental factors and the interactional course between staff, clients, environment as well as organizational issues. Aggressive behaviour should be seen as an attempt to communicate. The NOW-Model in its current state provides a theory integrating overview of the process from emergence up to the (preliminary) end of an aggressive episode. Its well referenced elements provide transparency, enable to study details and foster discussion as well. The process model stimulates thinking about essential elements of the occurrence of aggressive episodes (Box 1). Such elements are:

- Personal, interactive and environmental factors,
- Triggers,
- Interactive problem solving process,
- Open outcome,
- Preventive factors as well.

In addition it was possible to derive a check-scheme to determine influencing factors (table. 1). The model got the name “NOW-Model” because of its emphasis of the process at the present time (here and now).

## Discussion

Using the model in several settings some “difficulties” could be identified. It seems difficult to distinguish between personal, interactive and environmental factors without clarification by discussion (what is the basic influence?). A further difficulty may be that triggers can be seen as categories as well as single situations. However, both are helpful if clarified as such.

Some limitations of the model have to be addressed. First of all, the model is not designed to deal with criminal aggression like robbery. It deliberately focuses on reactive aggression which is, because of its complexity, difficult enough to be visualised in a diagram.

However, even if the restriction to reactive aggression would be accepted, the diagram may be perceived as old wine in new wineskins. Critics could state, that none of the elements is new. Yes, they are right. Of course, we would have not been able to develop the model without the preceding scientific work of others. However we are still on the way of further development. We hope, that future research will provide more insight into the phenomenon and that the science community will be able to identify more details of onset and course of aggressive encounters in health care and thus will allow filling the gaps and improving the model.

### Box 1

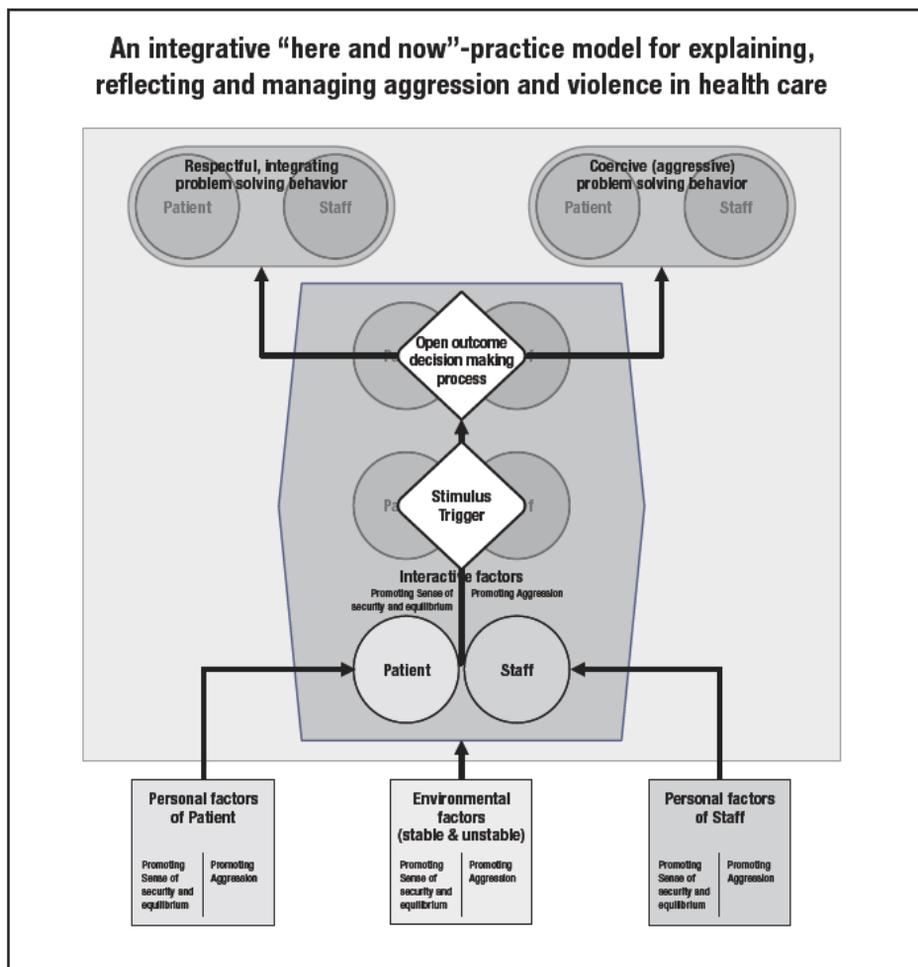


Table 1 Check-Scheme to determine influencing factors

	Promoting Sense of security and equilibrium	Promoting aggression
Personal factors of patient		
Personal factors of staff		
Environmental factors (stable and variable)		
Interactive factors		
Examples of Triggers		

## References for the model

### Personal factors (patient, staff)

- Physiological/biological factors (Rensing, Koch, Rippe, & Rippe, 2006; Tortora & Derrickson, 2006)
- Genetic determinants (Craig & Halton, 2009)
- Pathologic factors / diseases / intoxication (*Ferns & Cork, 2008; Schanda & Taylor, 2001*)
- Medical factors: (Bergk et al., 2009)
- Personal attitude towards aggression (Ajzen, 2005; Jansen, Dassen, & Jebbink, 2005)
- Personally traits, skills and resources (Anderson & Bushman, 2002; Bettencourt, Talley, Benjamin, & Valentine, 2006; Webster, Martin, Brink, Nicholls, & Middleton, 2004)
- Developmental factors (Bandura, 1973; Fonagy, 2003)
- Role expectation / Expectations concerning expectations (Luhman, 1987; Parsons, 1975)
- Influence of psychoactive substances (Holzbach, Publication in preparation)

### Environmental factors

- Managerial, edificial circumstances, team atmosphere (Bowers, Nijman, Simpson, & Jones, 2010; Bowie & Mountain, 1997; Colton, 2004; Duxbury et al., 2006; Hahn et al., 2009; Nijman, 2002; Richard Whittington & Richter, 2006)
- Behaviour depends on scripts and setting (Abelson, 1981)

### Interaction

- Communication (Berne, 2004; Harris, 1986; Schulz vonThun, 1985; Watzlawick, Beavin, & Jackson, 1985; Richard Whittington & Richter, 2006)
- Social interactionist approach (Tedeschi & Felson, 1994)
- Expectations concerning expectations (Luhman, 1987)

### Triggering factors

- Four elements of messages (Schulz vonThun, 1985)
- Perceived injustice (Tedeschi & Felson, 1994; R. Whittington & Richter, 2005)
- Attribution und emotion (Fiske & Taylor, 2008; Oud & Walter, 2009; Weiner, 2006)
- Aversive stimuli (Berkowitz, 1989; Berkowitz & Harmon-Jones, 2004)

### Decision making

- Perceived intention, emotion and beliefs of others (Förstl, 2007; Frith & Singer, 2008)
- Influence of mood (Fiske & Taylor, 2008)
- Goal expectation (Bushman & Anderson, 2001)
- Self-efficacy (Bandura, 1977, 1994; Dunn, Elsom, & Cross, 2007; Nau, Dassen, Halfens, & Needham, 2008)
- Inhibition of aggressive response (Felson, 2000)

### Problem solving behaviour (respectful, coercive...)

- Script theory (Abelson, 1981)
- Learning processes (Bandura, 1973)
- Coercive behaviour (Felson & Tedeschi, 1995; Tedeschi & Felson, 1994)
- Meaning of interaction (Richard Whittington & Richter, 2006)
- Assault cycle and related interventions (Breakwell, 1998; Oud & Walter, 2009)
- Conflict Solutions: Flight – Fight – WIN-WIN (Oud & Walter, 2009)
- Criteria of de-escalating performance (Nau, Needham, Dassen, & Halfens, 2009)
- Creative problem solving, Transcend method (Galtung, 2007; Testad & Aarsland, 2010)

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# Student nurses' attitudes to professional containment methods used in psychiatric wards and their perceptions of aggression

## Poster

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## Abstract

### Objective

The aim of this study is to determine the attitudes of student nurses to professional containment methods used in psychiatric wards and its relation with perception of aggression.

### Material and Methods

This research project used a cross-sectional descriptive design at December 2010. The study population was composed of 120 student nurses who had attended in the course of psychiatric nursing in the fourth (final) year of their education. "Attitude to Containment Measures Questionnaire" (ACMQ) (Bowers et al. 2007) and "the Perception of Aggression Scale" (POAS) (Jansen et al. 1997) were used in the study as measurement tools.

### Results

The most witnessed containment methods of students in psychiatric wards were "mechanical restraint", "PRN medication" and "physical restraint". Student nurses expressed positive attitude to "intermittent observation" ( $24.10 \pm 4.47$ ), "PRN medication" ( $21.97 \pm 5.16$ ) and "psychiatric care unit" ( $21.55 \pm 5.18$ ) respectively. The less accepted method was "net bed" ( $12.64 \pm 4.72$ ). A relationship was found between the perception of aggression and attitudes to containment methods of students. Students who perceived the aggression as dysfunctional were more likely to approve "PRN medication" and "mechanical restraint". Students who believed the efficacy of all containment methods were also perceived the aggression as dysfunctional.

### Educational goals

1. To specify the attitudes of student nurses to professional containment methods used in psychiatric wards.
2. To bring the attention the relationship between student nurses' perceptions of aggression and their attitudes to professional containment methods

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# Keeping everyone safe: prevention and management of assaultive behaviors in the institution

## Workshop

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## Abstract

This workshop will present the basic concepts which are necessary to establish a safe environment for both residents and staff. The institutions which ought to be caring for persons often inflict emotional and physical injury and call it therapeutic intervention. Staff who are charged with the duty to care can and do inflict injuries on persons in their care. Both safety and dignity are increased in an institution when staff in residential treatment, psychiatric care, and similar fields, who work with persons with a potential for assaultive behavior, are trained.

There are two basic questions which we ask in this workshop:

- Is the behavior dangerous, that is, physically injurious?
- How can we perceive such incidents accurately, analyze them competently, and handle them safely and effectively?

The conceptual framework in this workshop is the safe environment, which is one which

- is approved and actively supported by the administration of the institution;
- has a clear philosophy of care;
- has clearly written and strictly enforced policies regarding physical violence and a “zero-tolerance” policy for physical violence in any form, including physical interventions by staff for any other purpose than protection from immediate and serious harm;
- engages the client in the design of safety and caring for himself or herself;
- provides regular supervision;
- provides training and refresher courses in training of staff in the pro-active response to dangerous and assaultive behavior.

The principles which contribute to safety and dignity in the crisis are:

- Purpose: If we understand the goal and plan for the client, we make better choices than if we do not know where we are going (the map).
- Professionalism: The professional takes responsibility for mood and attitude and their impact on performance.
- Preparation: The professional takes responsibility for her or his Attire – what he or she puts on before coming to work and the impact of that attire on clients;
- Mobility – assessment of her or his ability to move about and to perform duties in a crisis; shared with the team;
- Precautions – knowledge of the client’s past history of trauma, current medical status, and medications and their side-effects, and the use of that knowledge in the selection of interventions;
- Observation – a clear strategy for assessing the environment;
- Self-control – a plan for bringing self back into control when the automatic and instinctual response of fight or flight occurs and for taking care of oneself (restoration).
- Identification/Assessment: The professional has a wide perspective on causes of assaultive behaviors and uses that knowledge to develop and use skills in assessment and response;
- Response: The professional exercises good judgment in the response to the impending crisis and selects:
  - Words, when words are the threat which is given;
  - Words plus evasion, getting out of the way to avoid risks of physical contact;
  - Or Words, Evasion, and possibly Restraint, when the danger is so high that limitation of the ability to deliver an injury becomes necessary.
- Documentation: The professional provides accurate behavioral descriptions of what occurred in the crisis.

The presenters will use instruction, discussion in small groups, and group exercises to illustrate the principles (Time for participant involvement: 45 minutes).

## **Educational goals**

By the end of the workshop, the participant will be able to:

1. demonstrate a knowledge of the principles and behaviors which contribute to safety in the violent crisis;
2. assess a violent crisis from a variety of perspectives and select an effective strategy for intervention on that basis.

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# The use of three educational movies as measures to reduce coercion at a psychiatric centre in Copenhagen

## Workshop

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## Abstract

At the Psychiatric Centre Copenhagen, we have a group from acute department, working with measures to reduce coercion. For use for further work in psychiatry for the reduction and disclosure of coercion, the group has developed 3 educational films for all health care personnel and recruitment in psychiatry. In order to focus on the reduction of coercion in psychiatry, we want to make a film to illustrate the good examples of how the law must be followed/is interpreted in the use of coercion.

The project aims to create films that teach base for health care professionals in psychiatry, with the purpose of coercion as far as possible to be avoided and also set an example of how coercion should be handled when this is unavoidable. The films focus is the Mental Health Act, but we emphasize that the whole process is a good example from communications to healthcare with the patient at the centre.

We want to improve the approach to coercion, to the new health professionals and to enhance professionalism among the existing staff, as they may be in doubt about the interpretation of the Mental Health Act, which by its nature can lead to an undesirable consequence for the patient.

The purpose of this movie is to show three types of coercion, forced hospitalization, acute sedative and belt fixation. The films will, in combination with text material, legal and practical aspects of coercion show what considerations, the personnel involved must make along the way, especially with a focus on least-average principle and patient safety.

The project is geared to physicians, social workers and nursing assistants and nurses and students in these disciplines. However, it is thought that the material could be used in teaching of other staff in a psychiatric hospital, and could be used in education of police and relatives groups.

The project aims to create films that teach base for health care professionals in psychiatry, with the purpose of coercion as far as possible to be avoided and also set an example of how coercion should be handled when this is unavoidable.

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# The reduction of seclusion and restraint in the University of Michigan Psychiatric Emergency Service

## Paper

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**Keywords:** Seclusion, restraint, psychiatric emergency

The University of Michigan Psychiatric Emergency Service (PES) is located in Ann Arbor, Michigan, U.S.A. PES is an unlocked unit, operated 24 hours/7 days a week and is located adjacent to a Level I Medical Emergency Department and has Hospital Security back-up via telephone and electronic alert. Rachel Glick, MD, Medical Director and John Kettley, MSW, Clinical Director have overseen this 20 year program. These trends have been apparent over the past several years:

1. Continual increase in number of patients evaluated annually.
2. Increased prevalence of medical co-morbidities in patients.
3. Increased level of care needed by children and adults with autism.
4. Patient elopement from PES requiring hospital security or police officer intervention.
5. Increased PES length of stay by medically and/or behaviorally complex patients due to difficulties in locating inpatient placement.
6. Continued goal of seclusion/restraint reduction, according to JCAHO & HCFA recommendations.

Based on the analysis of these trends, a new PES staffing model was introduced in June, 2008. Nurses with strong medical-surgical adult and pediatric backgrounds were added to the PES clinical staff team. Nurses were the logical choice because of their knowledge base and patient care expertise. This paper describes how the PES staffing model and the creation and utilization of safety behavior protocols have significantly enhanced patient safety and improved patient care. Most importantly, seclusion/restraint events and lengths of time in seclusion/restraints have been significantly reduced. There are no current studies examining seclusion/restraint reduction efforts in psychiatric emergency settings; only inpatient psychiatric units (Gaskin, 2007; Johnson, 2010; McCue, 2004; Scanlan, 2010; Sullivan, 2005; Visalli, 1997). Approximately 5000 patients were evaluated in PES in 2010 with an annual 4% yearly increase. The average length of stay for an evaluation when the patient is discharged home is approximately 5-6 hours. In addition, approximately 5500 telephone crisis calls are handled monthly by PES staff.

The prevalence of medical co-morbidities is becoming more evident in patients with psychiatric disorders. Patients seen in PES have conditions such as diabetes, hypertension, seizure disorders, acute & chronic pain, immobility issues and alcohol/drug withdrawal states. Numerous patients seen in PES are prescribed atypical antipsychotic medications, which are associated with obesity, abnormal glucose and lipid metabolism otherwise defined as metabolic syndrome (Pramyothin, 2010). Jin, et. al. (2011) compared the 10-year risk of developing coronary heart disease (CHD) among middle-aged and older patients with psychotic symptoms to the incidence in the general population. The 10-year risk of CHD was increased by 79% in patients with schizophrenia, 72% in patients with PTSD, 61% in patients with mood disorder accompanied with psychosis, and 11% in dementia relative to the risk in the general Framingham population. Epidemiological studies demonstrate the occurrence of metabolic syndrome between 22% and 66%, while the prevalence of diabetes is at least threefold compared to the non-psychiatric population in all age groups (Rethlelyi, 2011). Prior to the addition of nurses, patients presenting in PES with co-morbidities were referred to the Medical Emergency Department and experienced long wait times and/or an eventual medical admission.

Patients with autism are often brought emergently to PES when they are engaging in self-injurious, aggressive and/or obsessive compulsive behaviors. Autistic patients typically have behavioural dysregulation which has overwhelmed their caregivers who are unable to safely manage their behaviors at home. The caregivers may have been physically harmed and typically exhausted from their efforts to manage the autistic individual. When an autistic patient with behavioral dyscontrol presents to PES, the patient as well as the caregivers need attention. Mandell (2008) determined that hospitalization rates increase with age of the autistic person and over time. Our experience in PES, is that it is can be quite difficult to find inpatient psychiatric placement for children and adults with autism because many

institutions are unable to handle the patient's acuity. Subsequently, these patients may have lengthy stays in PES requiring increased nursing staff time and attention while waiting for inpatient placement.

Prior to the presence of nursing staff, patients at risk of harm to self or others left PES during their evaluation. The patient's absence may not have been noticed for several minutes after the patient left the area. Hospital Security staff or police officers would be called to assist with locating the patient and bringing them back to PES. Elopements occurred approximately x4/month. It became clear that this moderate risk group of patients needed more monitoring to ensure their safety during the evaluation and disposition process.

In 2000, the U.S. Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the Health Care Financing Administration (HCFA) mandated that, "Seclusion and restraint must be a last resort, emergency response to a crisis situation that presents imminent risk of harm to the patient, staff, or others". (p. 25) [99A]. When a patient is placed in seclusion or restraints, this impacts a patient's experience in various ways, mostly negative, possibly causing distrust of the mental health care system (Bower, McCullough & Timmons, 2003; Delaney, 2001; Mohr, Petti & Mohr, 2003; Winship, 2006).

In one study, patient and staff perceptions about the seclusion experience varied greatly upon patient interview (Palazzolo, 2004). Binder and MacCoy (1983) conducted semi-structured interviews with patients who had been in seclusion and most were unaware they were checked on frequently, half did not know or misunderstand why they were placed in seclusion and half felt nothing was gained from the experience. Ptutchik (1978), however, found that the majority of patients she interviewed felt that being secluded helped calm them down and could accurately relate their behavior prior to being placed in seclusion. Interestingly, patients in seclusion, accurately estimated the amount of time they spent in seclusion while the staff significantly underestimated the average duration of seclusion. Wadeson and Carpenter (1976) studied NIMH patients who were placed in seclusion at some point during their hospitalization, most of whom were un-medicated. The subjects were asked to describe their psychiatric hospitalization experiences during art sessions. One third of patients chose to draw their seclusion experience revealing negative feelings. Emotions such as "fear, estrangement, hostility, retaliation, guilt, paranoia, bitterness as well as sadomasochistic conflicts and comforting hallucinations were expressed about the seclusion experience.

The goal in PES is to limit the practice of seclusion or restraints unless it is necessary for safety. The complete elimination of seclusion and restraint practices, however, is not realistic. A secondary aim, therefore, is to utilize seclusion or restraint for as short a period as necessary, in order to keep the patient and others safe. The reasons for seclusion and restraint in PES are similar to what has been published by Larue, et. al. (2010). "Agitation, disorganization and aggressive behavior" were cited as the main reasons for seclusion and/or restraint. Sixty-five percent of patients seen in PES have a primary diagnosis of mood disorder which may involve mania and 16% of PES patients have psychosis, indicating these patients may be more predisposed to positive symptoms, such as delusions or hallucinations.

Since the introduction of nursing staff to PES, these actions have occurred:

1. Patients are initially triaged by a nurse who determines risk status, agitation and co-morbidities. Nurses perform the initial triage PES patient assessment. The nurse determines the patient's chief complaint, suicide screen, weapon screen, Positive & Negative Syndrome Scale (PANSS) score and universal screen. Medical history, review of systems, physical assessment, medication review, skin assessment, pain and untreated and treated co-morbidities are also obtained. Based on the above information, a nurse makes two decisions. First, a judgment is made about a patient's risk for self-harm/harm to others and secondly, the person's level of agitation is measured using the PANSS score.

A patient will be placed into one of the following risk categories based on the nurse's triage assessment:

- A) Voluntary - The patient is free to leave PES at any time and is not a risk to self or others.
- B) Green Band Protocol - The patient is not safe to leave PES before the evaluation process is completed and poses a risk to self and/or others.
- C) 1:1 - The patient is observed constantly for medical reasons such as respiratory status, seizures, blood pressure abnormalities, fall risk, withdrawal symptom monitoring or behavior changes.
- D) Seclusion - The patient is not safe to sit in PES waiting area and placed in a private, safe locked room with constant visualization by nurse or medical assistant and remote camera monitoring by other PES staff. The patient is able to talk with a nurse or medical assistant at all times and is never alone.
- E) Restraints - The patient is placed in 4 limb leather restraints on a stretcher in private room with door open, and constant visualization by a nurse or medical assistant and on video monitor. The patient is able to talk with a nurse or medical assistant at all times and is never alone.

2. Patients deemed high risk are placed on PES Green Band Protocol and closely monitored. The Green Band Protocol allows nurses to identify patients, during triage, that are at moderate risk for safety but are not appropriate for seclusion or restraint. The identified patient is educated about the need for their safety and the safety of others. The individual is searched using a metal detector, by a same sex security officer, a bracelet with a GPS monitor is placed on the patient's right wrist and their belongings are brought to a locked & secured area. The patient is aware that they are not allowed to leave the PES premises until their evaluation has concluded or they are deemed not appropriate for the PES Green Band Protocol. If the patient does leave PES, they will be brought back to PES by a Security officer, even against their will. All patients are continually monitored whether or not they are on Green Band status or not. The Green Band Protocol evaluation process is fluid and it may be discontinued if the patient is no longer felt to be a harm to self or others. On the other hand, a patient who was deemed voluntary at triage may escalate to moderate risk and require the Green Band status.

3. Patients are offered oral medications earlier in their PES evaluation, according to the PES Agitation Protocol.

The PES Agitation Protocol ensures that patients are offered oral medications as soon as they show signs of the slightest agitation, irritability or anxiety, based on the PANNS score. The medications, based on patient allergies, that may be offered are the following: Haloperidol 5-10mg (Elderly & Children 3-5mg), Lorazepam 1-2mg (Elderly & Children 0.5-1mg), Risperidone M-Tab 1-2mg (Elderly & Children 0.5-1mg), Olanzapine, Zydys 5-10mg.

If the PANNS score increases and the patient meets requirements for seclusion or restraints, an intramuscular medication is chosen and administered, such as: Haloperidol 5-10mg (Elderly & Children 3-5mg), Lorazepam 1-2mg (Elderly & Children 1mg), Ziprasidone 20mg (Elderly & Children 10mg). The PANNS score is checked every 30 minutes, until stable.

4. Patients are offered non-pharmacologic measures earlier and more frequently during their PES evaluation.

Nurses offer non-pharmacologic interventions when caring for patients in PES. This may be a warm meal or snack, a warm or cold drink, warm blankets, a quiet room with dimmed lights, or an empathic, professional ear. The reactions have made a difference, based on patient behaviors and feedback.

Since the introduction of nurses to the PES staff in 2008, these outcomes have been measured.

1. A significant increase in number of patients with Green Band status.  
Since 2008, when the PES Green Band Protocol was instituted, the number of PES patients designated in this category has doubled. Approximately, 53% of patients placed on PES Green Band Protocol are eventually admitted to a psychiatric hospital and the other patients are discharged home.
2. A significant reduction in seclusion and restraint events and time spent in S/R.  
The rate of seclusion and restraint have fallen by one-third as double-fold increase in Green Band Protocol status has occurred. Notable is the significant decrease in time a person spends in seclusion or restraint. Approximately 55% of person who have been in seclusion or restraints are involuntarily admitted to a psychiatric hospital and 30% are discharged home.
3. A significant reduction in elopement from PES.  
When elopement occurs now, because all patients are continually monitored, the patient is immediately seen leaving PES and may be brought back by the nurse or, if necessary, Hospital Security personnel assists.
4. An increase in identification of patient medical co-morbidities and treatment.  
Patients have been identified in PES who have had delirium, serotonin syndrome, hypoxia, electrolyte imbalances, decubitus ulcer infections, hyperglycemia, as well as asthma related symptoms, hypertension and seizure disorders relating to alcohol withdrawal. Depending on the severity of symptoms, these patients may be transported to the Medical Emergency Department or they remain in PES and are closely monitored.

In summary, the nursing staff in PES are able to assess and re-assess a patient's risk for harm and behavioral changes by the observation of non-verbal and verbal behaviors in the PES milieu. Nurses execute non-pharmacologic and pharmacologic measures proactively to prevent escalation of patient behaviors, according to established protocols. PES patients, as an aggregate, now experience less seclusion and restraint events, with less duration, while being kept safe. Patients with co-morbidities, especially untreated ones, are identified and treated. Overall, PES patients have benefited from the staffing model change and implementation of safety behavior protocols.

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# Frustration and boredom during involuntary seclusion

## Workshop

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**Keywords:** Constraining and force measures, separations, quality improvement, frustration, boredom, separation

## Introduction and background

Since 2002 insight has grown in The Netherlands that the number of involuntary seclusions and other constraining and force measures should be reduced and if used the quality should be improved. This had already been the wish of client organizations for a number of years, but now this also came from within the institutions of mental healthcare. The national branch organisation of mental healthcare services, GGZ Nederland, initiated a project in which several member institutions participated to fulfil this wish and several projects in which the reduction of constraining and force measures have been leading have started since.

A change of culture and of long grown habits and ideas was necessary. Therefore the Dutch government granted several years to the institutions who were active with projects of this nature. The Friesland mental healthcare services (GGZ Friesland) has been active since 2003 with projects concerning the reduction of constraining and force measures. This workshop is based on one of these projects.

## Dutch regulations concerning constraining and force measures

The Psychiatric Hospitals Act for compulsory admissions (Wet bijzondere opnemingen in psychiatrische ziekenhuizen, BOPZ) protects patients' rights in case of compulsory admission and during their hospital stay. It also regulates possible force measures when patients are staying in a closed section of the psychiatric hospital. The basis of this regulation is that the force measures should only be used if there is danger - for the patient, for others, or for possessions of others. The coercion should fulfil the following criteria: Subsidiarity (availability of less drastic measures to achieve the objective), proportionality (is the measure in proportion with the objective) effectiveness (is the measure suitable for achieving the goal).

When someone suffers from a psychiatric disorder, in some circumstances the tolerance for frustration decreases, which increases the chances of aggression. To guarantee the safety of the institution seclusions can be used as an ultimate measure. However, this can cause more frustration which can lead to a spiral of escalation in which the measures to deal with aggression can maintain or even increase this aggressive behaviour. In order to break this escalation GGZ Friesland uses in the town of Heerenveen the Seclusion Telephone and the Media pillar. In this way we try to improve the quality of the coercive measures and also reduce the duration of the seclusion and isolation.

## GGZ Friesland

GGZ Friesland offers professional help to people with psychiatric disorders or severe mental problems. In 2009 approximately 34.000 people made use of this care, divided over the 12 locations in the Province of Friesland.

## The Seclusion Telephone

The Seclusion Telephone is a telephone given to people who are in seclusion in a isolation cell has been in use since May 2009 at the Department of Clinical Intensive Care (closed department) in Heerenveen. Pushing any button on the telephone will automatically connect it to the telephone of the attending nurse. The nurse is able to connect an outside call to the Seclusion Telephone.

### Important rules and agreements

- All patients are instructed how to use of the Seclusion Telephone.

- If the Seclusion Telephone has negative effects on the treatment, the Telephone is retracted. During the next guidance moment (please explain this) there is an evaluation whether the patient can continue using the telephone.
- The telephone is answered at all times. This includes during shift changes and also even if the secluded patient has asked the same question the fifteenth time.
- The telephone is not a substitute for a guidance moment.

### **Change**

The Seclusion Telephone has resulted in a big change at the department. Before we used the telephone the patients would have to use the intercom. The intercom could not be heard at all times which led to the patient not getting a response. It also meant that the nurse decided at what moment in time there would be contact with the patient. With the Seclusion Telephone there is immediate contact, whenever the patients wishes. Also at times which might not be very convenient. The patient decides the moment of contact, not the nurse.

We are very enthusiastic about the results of the Seclusion Telephone. The fact that the patient can decide the moment of contact has had a very positive contribution and the patient can also communicate with his relatives in his or her own environment. Additionally the necessary investments are relatively small.

### **Media Pillar**

We found that boredom and unclarity with regards to the day programme and the treatment plan (despite written information) are a major sources of frustration for the, mostly separated, patients. To counter boredom and frustration and thereby increase the quality of care, we bought a media pillar for the isolation room. The media pillar is a device mounted to the wall of the isolation room. It is a firm metal casket of 40 x 60 cm with a screen of 27 x 34 cm and includes speakers. The patient can control the media pillar by the touch-screen. The nurse can vary the available offer (what does this mean?), depending on the situation of the patient.

We started using the Media Pillar in November 2010 as a pilot study. The study questions were:

1. Would a device like the Media Pillar be used by the secluded patient and could it stay in one piece?
2. Does increasing the “comfort” of seclusion lead to longer or more frequent stays?
3. Does the Media Pillar reduce aggression in the isolation room?
4. Are there any negative side-effects (e.g. less contact with the nurses or longer stays)?
5. Can the Media Pillar shorten the stays in seclusion, due to less frustration and severity of treatment?

The final evaluation regarding these study questions will take place in December 2011.

### **Conclusion**

In the 2 years that we have been working with the Seclusion Telephone the results have been very positive. Patients use it intensively and perceive it as being very positive that they can decide the contact moments. This helps in building trust with the patients instead of frustrating him. Although a formal evaluation of the Media Pillar has not taken place yet, the first experiences are very positive. Patients perceive the distraction of television and games as positive. No abuse of the pillar has taken place, nor have conditions of patients deteriorated.

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# Sensory Modulation as a coercion reduction initiative in New Zealand: Evidence for practice and the development of implementation tools

## Paper

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## Introduction

The New Zealand Ministry of Health (MoH) has directed that the use of seclusion and restraint in acute mental health inpatient units be reduced and limited (MoH, 2010). Seclusion rates vary markedly between District Health Boards (DHBs) who provide inpatient mental health care, with contextual issues cited as possible reasons for the variation. Some DHBs appear to be making some promising seclusion and restraint reductions. However a lack of national approach to practice issues, including coercion reduction, means that promising initiatives are often not publicised or replicated nationally.

One promising intervention, sensory modulation, is being used in many DHBs as a way to reduce seclusion and restraint usage. Sensory modulation has been supported by the work of Te Pou (New Zealand's national mental health workforce development, information, and research centre) along with academic and clinical partners. This has included supporting the safe implementation of sensory modulation in DHBs, along with strengthening the evidence base for this clinical approach.

This paper has three purposes (1) to show "whole of unit/service" approaches to coercion reduction in New Zealand (2) to describe New Zealand national initiatives in developing tools to maximise the likelihood of consistency and safety in the implementation of sensory modulation (3) to show the New Zealand research evidence for the efficacy of sensory modulation as a seclusion and restraint reduction practice.

## New Zealand context

Acute adult inpatient care in New Zealand is provided within 20 District Health Boards (DHBs). Each DHB provides free public health services to population in a geographically defined area. All but one DHB uses seclusion, with the exception being a DHB that does not have an acute unit (service users needing acute treatment are transferred to a neighbouring DHB).

Overall, approximately nineteen per cent of service users admitted to acute units are secluded, with some secluded more than once during (on average 2.7 times) (MoH, 2010). Although seclusion for individual service users is not noted in the MoH report, data from forensic figures suggest that some individuals are secluded for significant periods of time. In adult "mainstream units, most seclusions are only for a day or less (MoH, 2010). However a small number of individual service users have long periods in seclusion, and inflate overall seclusion rates.

Although the MoH has collected seclusion data for some time (restraint rates are collected within DHBs and are not externally available), a more recent innovation is to publish this data in a form that allows individual DHBs to compare their rates with others. This comparison has reportedly instigated a number of practice changes in DHBs leading to reduced seclusion rates. Feedback from individual DHB leaders suggest that seclusion rates are trending downwards, and are likely to be shown in the next publication of seclusion data. The latest data, however, shows a marked variation in seclusion rates between DHBs; however these variations are likely caused by a number of factors, including:

- differences in seclusion practice,
- geographical variations in the prevalence and acuity of mental illness,
- ward design factors, such as the availability of intensive care and low-stimulus facilities,
- staff numbers, experience and training,
- use of sedating psychotropic medication,
- frequent or prolonged seclusion of one patient, distorting seclusion figures over the 12-month period (MoH, 2010).

As the MoH (2010: 23) state “because it is difficult to measure and adjust for these factors, it may be more useful to compare an individual DHB’s performance over time rather than to make adjusted comparisons between DHBs”. Some of Te Pou’s future work is likely to be in supporting DHBs to do this in a meaningful way.

Some DHBs are now treating all seclusion and restraints as a “no blame” clinical event that requires debriefing of staff and service users in order to learn from these. Local data supplements these analyses, and practice is examined for evidence of “factual” bases to determine whether practice can change. For example, one DHB found in an audit that many seclusion events were associated with service users in an Intensive Care Unit becoming frustrated as a result of not having chairs in their rooms. Staff had previously thought these could be used as projectiles. After staff and service user feedback, along with research evidence and local data, the DHB trialled having chairs in rooms. This simple action decreased numbers of subsequent seclusions without increasing injuries.

A second approach taken by some DHBs is to use local data and clinical knowledge to look at the clinical pathways of individual service users to determine whether or not alternatives to seclusion could be found. In some instances this meant examining care plans that suggest seclusion as a therapeutic intervention, and finding better alternatives.

Current New Zealand routinely data does not allow for a substantive analysis of interventions that reduce seclusion and restraint. However, there is some evidence that the DHBs that are most successful in reducing seclusion are incorporating the above approaches. Te Pou’s future work is likely to support DHBs to develop tools that enable them to analyse their own data in a way that measures efficacy.

## **Sensory modulation as an intervention to reduce seclusion**

Sensory modulation uses a range of tools to help individuals get the right amount sensory input. In mental health settings, sensory modulation can be used to assist distressed service users to regain a sense of calm. In acute inpatient wards, dedicated sensory modulation rooms with sensory equipment (called sensory rooms), can be used by service users as a regular experience or when distressed. The service user is guided by trained staff to use sensory equipment. Once in the sensory room, the service user can choose from a variety of sensory tools to assist with self-soothing. Examples of these tools include specialised equipment, such as weighted blankets for the lap or shoulders and provide a sensation of pressure, massage chairs, audio-visual equipment that can use sound and colour to soothe or more everyday equipment (such as rocking chairs, blankets, or music).

There is a promising literature showing that sensory modulation can help reduce seclusion and restraint (Te Pou, 2011b). For this to occur, sensory modulation needs to be one part of a range of seclusion and reduction strategies, be delivered by staff trained in its usage, and well embedded within a service.

In 2009/2010 Te Pou, Auckland University of Technology and the University of Auckland undertook a pilot study with four acute inpatient units to test the introduction of sensory modulation rooms in acute mental health inpatient units. The pilot examined whether sensory modulation could reduce coercive clinical practices in acute inpatient units, and is an acceptable practice for clinicians and consumers.

The initial exploratory qualitative results gave guidance to ways that sensory rooms need to be set up, the best clinical practices with sensory modulation, issues with acceptability and sustainability, evidence for coercion reduction, and the need for consistent educational and practice and policy approaches.

Over the period of the research sensory modulation has rapidly gained clinical acceptance in New Zealand, with inpatient units beginning to introduce the practice. Te Pou has consequently worked closely with educational and clinical partners to ensure that sensory modulation is clinically implemented in a safe and sustainable fashion. This has been undertaken through a number of initiatives, including workshops and on-line tools, which have gained widespread uptake in New Zealand, and attracted interest from overseas clinical services.

## **The relationship between sensory modulation and seclusion/restraint reduction in New Zealand**

The pilot study showed that, unsurprisingly, it is very difficult to isolate sensory modulation as an individual variable in seclusion and restraint reduction in a multi-site study. However, further qualitative research across four sites provided useful information about use and impact in acute inpatient units one year post implementation of sensory rooms early in 2011.

Forty-five participants were interviewed individually. Thirty four of the participants were staff and the remaining 11 were service users. With a year passing since the first round of data collection, broader issues with organisational systems and maintenance of the sensory room and equipment had become apparent. While some sites had developed solutions to these issues, many of the difficulties had not been resolved and these became apparent in the participant accounts.

The qualitative data does not answer the question of whether sensory modulation directly impacts rates of seclusion and restraint in inpatient mental health services. However, the experiences of clinicians and service users supports the existing literature that suggest that when used as part of a service delivery model, sensory modulation may well make a difference. Because of space requirements only the discussion specific to seclusion and restraint reduction has been included here, and specific quotes are not given. However these are available in the fuller report (Sutton & Nicholson, 2011).

## Service user perspectives

Service users found that having a quiet, private space was very positive. Inpatient mental health wards have typically lacked this type of space. One of the service users interviewed described how s/he regularly absconding from the ward due to being overwhelmed by the noisy ward environment, but found the sensory room a welcome respite from overstimulation.

“Stabilising “was a key mechanism for many service users, with the grounding features of weighted blankets, massage chairs and other items encouraging service users to shift their attention to the here and now and focus on the physical sensation. Once service users are sufficiently calm, diaphragmatic breathing and mindfulness techniques can also be used to enhance the stabilising effect. This appears to complement the sensory modulation approach which also draws attention to the body and immediate environment but achieves this by using equipment, environments and activities to regulate sensory input.

Distraction was used to divert attention away from distressing thoughts or urges for destructive behaviour, and seemed to be useful for people who were highly agitated. The most helpful forms of distraction are activities that induce a calm physical state. So while more active strategies such as the use of a punching bag, or distraction through play station were suggested as more attractive options for men, these are less likely to reduce arousal than more focussed distractions such as listening to soothing music, blowing bubbles, doing plastic maze puzzles were all found to be useful and induced calm. Conversely, some service users were distracted by items in the sensory room, but became over-stimulated and unable to focus on one thing, leading to increased arousal levels.

The sense of control gained through the sensory modulation intervention was also important to many of the service user participants. The other calming mechanisms, such as soothing and stabilising assisted control over thoughts and feelings. Significantly it was the opportunity for service users to control their own environment that also made a positive difference.

This is not to say that the intervention was always effective. The findings also contain reports of service users not being able to sit long enough to engage in the sensory room due to their agitation or feelings of claustrophobia. The participant accounts also suggest that the efficacy of sensory modulation is influenced by many other variables, including staff engagement with service users, early recognition of agitation by staff and service users, an understanding of service user sensory preferences and the service users’ experience with self-regulation in extreme states. These variables are of course influenced by broader organisational factors such as staffing levels, training, ward culture and policy related to the use of sensory modulation practices.

## Staff Perspectives

There was an overwhelming consensus in the perceived efficacy of sensory modulation as a tool for de-escalation. Even those staff participants who were sceptical and believed the approach was not suitable for the most aggressive or highly agitated service users, recognised its usefulness in calming people with lower levels of agitation and distress. Staff and service users alike readily described a number of individual and generalised examples where use of the sensory room, equipment or strategies positively impacted on service user arousal.

There were also views presented suggesting that the efficacy of sensory modulation might vary depending on diagnosis or clinical presentation. However, there were several accounts of people experiencing psychosis finding the intervention useful also, so it would not be wise to prescribe intervention use based

on diagnosis. Indeed, the findings suggest that individual coping style, sensory preferences, self-awareness and self-regulation skills are more important influences on sensory modulation efficacy than diagnosis.

Another consideration related to efficacy is whether sensory modulation is effective for people who are already highly aroused. A principle of the sensory modulation approach is to recognize and address agitation early. However, it has also been suggested that to optimise the potential of the approach, the development of sensory strategies for people who are most agitated is required (Te Pou, 2010). Because the sensory rooms and equipment were largely placed in the general ward of the acute units, the findings provide limited examples of sensory modulation use within high needs or intensive care units. However, those accounts that have been given indicate that a sensory approach is relevant with highly aroused people if normal risk management principles are followed.

Staff recounted situations where they would have needed to use some form of coercive practice if the sensory intervention had not facilitated de-escalation. However, these perceptions cannot account for the many variables which impact on how and why seclusion and restraint is used, which makes isolating the impact of sensory modulation problematic. There are enough specific exemplars in the data to indicate that utilisation of sensory modulation is a promising approach which could have an impact on reducing seclusion and restraint rates in acute mental health services.

## Conclusion

Reduction in seclusion and restraint is occurring in New Zealand, with the most promising initiatives appearing to take a whole of service approach. However by it is hoped that work with DHBs to utilise and analyse local data will produce evidence of what does and doesn't work in practice.

The research undertaken by AUT and Te Pou indicates that sensory modulation implementation has occurred very differently in the different sites. There are a number of policy and practice issues that mean sensory modulation as a practice occurs quite differently. Examples of these differences included some DHBs not having specific sensory rooms while others do, and some DHBs only authorising trained clinicians in sensory modulation delivery, whilst others have broadened this scope to allow for trained peer workers to undertake this intervention.

These differences mean that it is methodologically very challenging to produce national data to show whether sensory modulation reduces seclusion and restraint rates. Because of this, it is likely that Te Pou will work with individual DHBs to provide context specific tools that support them to analyse their data in a meaningful way.

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# Reflecting and discussing aggression in health care using the NOW-Model

## Poster

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## Abstract

### Introduction

In the field of aggression and violence many theories and models of violence are available. They provide statements, concept clarification and enable researchers to discuss aggression and violence related factors in many ways. However, the question may arise, which theory and model is the most appropriate in the field of healthcare or, more exactly, which theories fit together in a meaningful way.

We were in need for models to guide us and allow us to find appropriate comprehensive interventions for the prevention, management and aftercare of aggressive episodes in healthcare. Especially young colleagues entering the ongoing discussion about the management of aggression report difficulties getting started and they talk about difficulties to value the existing models, their relevance and use in practice. Thus we concluded, that for didactical reasons as well for scientific reasons and last but not least for practical reasons an integrative practice model should be developed as a sort of an umbrella model for explaining, reflecting and managing aggression and violence in health care.

### Methods

Inspired by the PATH-Model (Buunk & Van Vugt, 2008), which starts from formulating a Problem definition, going over to Assess the problem by finding explanations for the problem, continuing to develop and test a Theory thereby, integrating a process model and merging into the development of Help, the authors carved out a model similar to that will be presented. Using several case vignettes in different settings they tested the new model and made several further improvements till it seemed matured enough to be universal and accurate and at the same time clear and simple.

### Results

A model should take into account personal factors of patient/visitor and staff, environmental factors and the interactional course between staff, clients, environment as well as organizational issues. Aggressive behaviour should be seen as an attempt to communicate. The NOW-Model in its current state provides a theory integrating overview of the process from emergence up to the (preliminary) end of an aggressive episode. Its well referenced elements provide transparency, enable to study details and foster discussion as well. From the process model a scheme could be derived which fosters thinking about essential elements of the occurrence of aggressive episodes. The model got the name "NOW-Model" because of its emphasis of the process at the present time.

### Discussion

Some limitations of the model have to be addressed. First of all, the model is not designed to deal with criminal aggression like robbery. It deliberately focuses on reactive aggression which is, because of its complexity, difficult enough to be visualised in a diagram.

However, even if the restriction on reactive aggression would be accepted, the diagram may be perceived as old wine in new wineskins. Critics could state, that none of the elements is new. Yes, they are right. However this includes the benefit that older theories are better tested. Often they are evidence-based and well referenced. However, even in that case one should remain careful because even evidence-based theories may fail, as we know. Sometimes, depending on their research design, they include oversimplification, may fail external validity or may provide contradictory evidence (Buunk & Van Vugt, 2008).

We hope, that future research will provide more insight and may be able to identify false theories and construct better theories and thus will allow improving the model.

## **Educational goals**

1. An aggressive episode is a complex and multidimensional phenomenon.
2. Current theories and research results fit together in one model.
3. Viewers are sensitised for an integrating respectful interactionist and situational approach for explaining and describing the onset and course of aggressive encounters in health care.

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# Chapter 19 – Training and education of staff

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## Violence in psychiatric settings: Anatomy of a comprehensive violence prevention framework

### Workshop

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### Abstract

Riverview Hospital, located in Coquitlam, Canada, has served as the major tertiary psychiatric hospital for the province of British Columbia (BC) since 1913. As part of a public policy initiative to deinstitutionalize psychiatric care and redevelop the mental health system in BC, the hospital is presently in the final stages of downsizing to closure in June of 2012. Part of the organization's final strategic plan is to share its legacy through knowledge exchange activities that profile the clinical success that Riverview Hospital has enjoyed over its 100 year history. The development of processes and systems to successfully manage violence and aggression is one of those legacies.

Over the past 100 years, and for the past 15 years in particular, Riverview Hospital has employed a variety of approaches that address policy, clinical, administrative, staff training, occupational health & safety, and critical incident stress management issues to successfully manage violence and aggression among its population of adult, geriatric and neuropsychiatric patients. The organization has taken a focused, pragmatic approach that has resulted in a steady decline in the rate of violent incidents resulting in injury to staff or patients. And it has done so despite increasing patient acuity; an increasing "density" of very challenging chronic and refractory patients that remain at the hospital; increased stress among patients, staff and families as the hospital approaches closure; and a constant movement of both patients and staff as units and buildings at this large asylum complex are closed. Notably, even in the face of these challenges, a strong commitment remains to continue to effectively manage aggression 'until the last patient is discharged'.

A contextual presentation will open the workshop to highlight key components of the Riverview Hospital violence prevention framework across four domains: policy, administrative and clinical programmatic approaches; violence risk assessment and mitigation strategies; staff training and education initiatives; and post-incident systems and supports for both patients and staff. The integration of these components as well as the organization's reliance on interprofessional, evidence-based approaches will be highlighted.

The interactive component of the workshop will engage participants to identify barriers and enablers related to the implementation of a comprehensive violence prevention framework in their organizations. The audience will be divided into groups reflecting each of the above-noted domains and encouraged to brainstorm methods of eliminating barriers and reinforcing enabling strategies using an appreciative inquiry approach. Each group will then be invited to share summaries of their deliberations followed by a brief open discussion and question and answer period.

Ultimately, the objective is for participants to leave the workshop with new ideas, new strategies and some new tools and resources with which to address violence and aggression in psychiatric settings.

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## **Educational goals**

At the conclusion of this workshop, participants will be able to:

1. Describe the components of a comprehensive violence prevention framework in a psychiatric setting.
2. Identify typical barriers and enablers related to successful implementation of a comprehensive violence prevention framework.

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# Identifying and managing primal and cognitive aggression

## Workshop

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**Keywords:** Aggression, Violence, Primal Aggression, Cognitive Aggression

## Abstract

This article outlines the difference between Primal (adrenaline filled, affective) and Cognitive (targeted, strategic and planned) Aggression. In the wake of numerous school and workplace violence incidents, it is essential to understand the differences between the immediate, adrenaline fueled primal aggression and the more calculated and strategic cognitive aggression that often accompanies rampage shootings and more extreme violence.

## Introduction

Byrnes (2002) proposes that there are two types of aggression, Primal and Cognitive, of which practitioners need to become aware. Primal Aggression occurs as part of a biological reaction to the production of adrenaline. Primal Aggression is similar in concept to affective aggression.

Cognitive Aggression is the result of a planned, intent-driven action. Terrorists and those engaging in rampage violence and school shooting sprees exhibit this behavior (Langman, 2009). In contrast to Primal Aggression, Cognitive Aggression involves a more strategic, focused attack and a desire for the individual to “complete a mission.” This concept is similar to the idea put forward by the FBI and other authors in terms of targeted violence. Byrnes (2002) develops the Cognitive Aggression model further and outlines nine separate, progressive levels an individual moves through from the engagement in harmful debate to the final murder/suicide attack.

## Primal Aggression

Threat and fear drive Primal Aggression. Howard (1999) writes, “A potential aggressor channels his appraisal into some form of coping. The strength of the reaction is a direct function of the validation of the threat and the degree of certainty that the threat will thwart an objective or a goal. It is the emotion of being threatened and the inability to cope with that threat that initiates aggression. The common thread throughout this process is the release of adrenaline.”

Imagine Jamie, a patient receiving outpatient care at a psychiatric clinic. Jamie shows up at the wrong time for her appointment and is told that she will have to reschedule. Jamie has some important information to share during that day’s session and begins to become upset when she learns she will not be able to see her doctor.

Jamie feels threatened by the office manager who continues to tell her she will not see her doctor. She is fearful she will not make it until the next appointment and continues to escalate. She argues with the office manager and slams her hand down on the reception desk. She screams, “You can’t do this! I had an appointment!” She is full of adrenaline and rages at the office manager. Her breath is rapid and shallow. Her face is flushed and her hands clench and unclench.

The adrenaline rushing through Jamie’s system has been well studied by Dr. Hart (1995). He conducted significant work relating stress and anxiety to adrenaline. When an individual cannot cope with his anxiety, his mind perceives this anxiety as a threat. Coinciding with Howard (1999), Hart concludes that at this point an individual starts to produce adrenaline, which triggers aggression. Lt. Col. Dave Grossman and Bruce Siddle (Kurtz, 1999) contribute landmark studies in how aggression induces epinephrine’s influence on the heart rate and its resulting body language, behavior and communication indicators.

Primal Aggression begins with an individual’s inability to manage anxiety and ends with a complete loss of control along with an accompanying violence. Byrnes (2002) suggests the progression can be observed through the Primal Aggression Continuum. The continuum is fueled by the perception of threat, anxiety and fear. A trained observer can use this continuum to measure the effects of emerging adrenaline on heart

rate and the resulting “non-verbal leakage,” or body language and behavior. Identifying these signals early allows professionals essential information to intervene and better manage primal aggression. However, these models do not account for the victimizer, the terrorist, or the predator fueled by intent, rather than rage. On July 22, 2011, Anders Behring Breivik set off a bomb outside the office of the Prime Minister killing at least 7 people (Birnbaum, 2011). He then moved to Utøya Island and killed at least another 86 people. In his manifesto, he talks about executing a ten-year plan to accomplish his goal of reclaiming Europe from Muslims. For this type of aggression, free of the influence of unrestrained adrenaline, John Byrne’s suggests the Cognitive Aggression Continuum.

## Cognitive Aggression

Cognitive Aggression, in its extreme form, results in an intent driven, planned attack. This aggression occurs when a student becomes isolated and frustrated by a perceived attack. He plots and fantasizes about his revenge and executes these plans with a militaristic, tactical precision.

George Sodini (King Greenwood, 2009) embodied this approach to aggression in his recent shooting at the LA Fitness Club in Bridgeville, Pennsylvania. News outlets describe several practice runs and reference his blog entries over several months as he planned the attack, preparing four guns and large amounts of ammunition (Fuoco and Gurman, 2010). His attack was fueled by a perceived history of disrespect by women through his lifetime. He planned his devastating revenge and executed this plan with a military precision.

Dr. Friedrich Glasl, a professor at Salzburg University in Austria, developed the Model of Conflict Escalation (Glasl, 1999). This model addresses intent-driven, deliberate aggression even prior to harmful conflict. After simplifying and placing Dr. Glasl’s Model of Conflict Escalation within the structure of Aggression Management, it becomes a useful scale for measuring deliberate aggression. This is the basis for measuring Cognitive Aggression.

The nine levels of Cognitive Aggression are progressive in nature and increase in their destructive impact to others. Early levels of Cognitive Aggression are predicated on behavior causing incremental loss of trust and increased threat, which is disruptive to community development and the cohesion of social groups and living arrangements within the community. The first three levels of the Cognitive Aggression Continuum illustrate the incremental precursors to conflict, permitting an individual to prevent or at minimum reduce the potential for subsequent violence and escalation. The later levels of cognitive aggression lead to devastating physical attacks such as those experienced at Virginia Polytechnic Institute (Flynn and Heitzmann, 2008) and Northern Illinois University (Sander, 2008).

## Hardening, Harmful Debate and Action vs. Words (1-3):

The first level along the Cognitive Aggression Continuum is Hardening. During this level an emerging aggressor is hardening his point of view; he is unwilling to compromise his opinion or point of view. From the aggressor’s perspective, he is simply standing firm on his beliefs. There is a lack of understanding and empathy toward others and the aggressor often becomes more argumentative when challenged or questioned. It is more about the perpetrator’s views than the victim’s behavior or situation. This person may simply be fundamentally distrustful and/or inconsiderate.

The second level of the continuum is Harmful Debate. The aggressive individual becomes more deeply entrenched in his position or perspective. This is not healthy debate; it is often cloaked in cutthroat-competition, obstructionist and/or antagonistic behavior. He develops a mistrust of others who might try to reach a compromise with him and may be willing to take unilateral action without consulting others. The aggressor observes and attempts to connect with those who share a common belief or philosophy. His thoughts become dichotomous: a person is either with him or against him.

The third level involves the aggressor communicating with Actions vs. Words. The aggressor appears detached, becomes more self-absorbed, and possesses a sense of righteous indignation. He has a disregard for the opinions and feelings of others. He begins to see himself as a victim. Arguments against his point of view simply reinforce his belief system and help build his frustration.

Levels 1-3 are often attributed to a human malady of the aggressor. He is not actively seeking to aggress against another or others; this aggressor may simply be inconsiderate of others, highly distrustful or overly cynical. This leaves others feeling a lack of trust, uncomfortable and threatened. While not dangerous in terms of violence and lethality yet, these elements tend to undermine community, loyalty and leadership development.

## Image Destruction, Forced Loss of Face and Threat Strategies (4-6):

Byrnes (2002) contends that as the individual moves to the fourth level, he becomes more direct and potentially destructive. Outward conflict is now observable. During Image Destruction, the aggressor

attacks his opponent's core identities in an attempt to cause harm to those the victim likes and respects and with whom they wish to be liked and respected in return. This is classic social triangulation, where an aggressor incrementally convinces the victim's own community to turn against him.

The fifth level of aggression is where the aggressor becomes increasingly focused on perceived losses and frustrations leading to an engagement in Forced Loss of Face, or some form of perceived humiliation. The aggressor "unmasks" his opponent to the victim's community and may verbally attack the object of his aggression in public. At this level, the aggressor is now working in concert with the victim's own community to conspire against the victim. He is no longer content with covert attacks against his target, but moves toward a more forceful and direct attack.

An example of these behaviors involve murder victim Barry Winchell. Winchell was stationed at Fort Campbell in Kentucky along with a fellow soldier Justin Fisher. A disagreement arose between Fisher and Winchell after Fisher spread rumors that Winchell was gay. According to published reports Fisher attempted to turn fellow soldiers against Winchell and was successful with one soldier, Calvin Glover, who was charged and convicted of murdering Winchell on July 5, 1999 (Bissinger, 2000; McHugh, 2000).

The sixth level of the Escalation Phase is Threat Strategies. Here, the aggressor responds to perceived threats. He feels righteous in his anger and any other actions taken toward his opponent. At this point, the individual is less able to practice any self-control. He begins to develop detailed plans and threats that he may carry out to harm those who stand against him. These threats remain at a planning stage and may include stockpiling ammunition, purchasing a firearm, memorizing a schedule or testing future plans to harm those who stand against the aggressor.

### **Complicit Tactician, Win/Lose Attack and Lose/Lose Attack (7-9):**

The Crisis phase of the Cognitive Aggression Continuum is particularly lethal and begins at the seventh level with the Complicit Tactician. This behavior can best be described as "Tactical." There is a level of tactical and strategic planning that occurs. At level 7, this aggressor does not intend to attack, kill people nor die for their cause; yet he is completely complicit with the attack, a murder or murder/suicide. It is his objective to inspire or aid others to do so.

In the case of Evan Ramsey at Bethel High School in Alaska, he shot and killed another student and the principal in August of 2009 (Cornwell, 1997). Reports indicate over 20 people knew of Ramsey's plan to shoot up the school, and two actually helped him. One student, James Randall, taught him how to use a shotgun while others tempted Ramsey with the fame that would come from his attack. One student is reported to have brought a camera to school on the day of the shooting (Ford, 2000). The other students encouraging Evan Ramsey can be seen as strategically planning the attack, though they had no desire to kill themselves. This exemplifies level seven behaviors.

Once within the Crisis Phase, this aggressor is in the incremental process of preparing to attack his victim, this is the last opportunity for this aggressor to intimidate his victim into submission. During this level the individual makes his greatest threats to intimidate his victim. These threats often undermine the opponent's sense of safety and security, which can turn a victim into an aggressor for self-preservation. It is at this time that the aggressor no longer sees the opponent as a person but as an object (Byrnes, 2002). In the absence of an intervening trusted advocate, the outcome of this level is that both the individual and the opponent now are in crisis and a physical confrontation is virtually inevitable.

At the eighth level of the Continuum, the Win/Lose Attack, the individual's goal is to "crush" the opponent. He desires to be the victor, leaving his opponent as the loser. According to Byrnes, this level is predicated on a physical assault and possibly murder. The aggressor is willing to take a life, but it is also essential that he survive any planned attack. He may be prepared to die but he intends to survive. This differs from the final level of Cognitive Aggression.

On January 19, 2010 Christopher Speight killed eight with a high-powered rifle before disappearing into area woods before surrendering the next day (Urbina, and Emery, 2010). Buford Furrow fired over 70 rounds into a Jewish Community Center and killed a Postal carrier in 1999 before taking an \$800 cab ride to Las Vegas where he eventually surrendered to the FBI (Murr, Hosenball, Stone, Weingarten and Figueroa, 1999).

On July 22, 2011, Anders Behring Breivik killed over seventy people in his dual bombing and shooting attacks in Norway (Birnbaum, 2011). The attack ended with him being taken into custody and some initial reports of his desire to be put on trial to explain the reasons behind his massacre.

All of these aggressors displayed a level of self-preservation in their attacks, different than many other rampage shootings and murders that end in the suicide of the shooter.

The ninth and highest level of aggressive intent is the Lose/Lose Attack. At this level, the individual is willing to take whatever action is necessary to destroy his opponent, including the loss of his own life, the active murder/suicide shooter. He is willing to “Plunge together into the abyss.” Dylan Klebolt and Eric Harris, the Columbine shooters (Ruderman, 2007), are a prime example of individuals with the desire to cause harm to their target while spreading their larger message. The unreleased footage of Klebolt and Harris talking for hours about their desire to inspire other school shootings has been kept from public view according to FBI supervisory agent Mary Ellen O’Toole. Both shooters end their massacre in suicide.

Other rampage and spree killers had less clear motives in their murders. Steven Kazmierczak the shooter at Northern Illinois University (Sander, 2008) and Seung-Hui Cho (Flynn and Heitzmann, 2008) of Virginia Tech, each provides an example. Both shooters ended their attack in suicide.

The Montreal Massacre occurred on December 6th, 1989 with the death of 14 and 14 others injured when Marc Lepine separated the men from the women and killed the women with a mini-14 rifle. His misguided desire was to “fight feminism” by moving throughout the school looking for women to shoot (Turque and Colin, 1989). He killed himself before being captured.

## Discussion and Implications

There is a difference in the thought process between Primal and Cognitive Aggressors. Identifying these differences assists those in the position to identify and monitor risks to the community some important information in terms of targeting interventions. While Primal Aggressors certainly are disruptive and a potential threat to the community, it is apparent that the developmental thought process of the Cognitive Aggressor on his path towards targeted violence requires a different focus. By identifying the early stages of cognitive aggression, prior to the development of targeted plans and revenge plots, administrators and clinicians can increase their chance to identify and then prevent a Cognitive Aggressor from moving up to a higher stage of aggression.

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# Aggression management in clinical psychiatry: staff education, registration and other related topics. State of the art in seven Belgian hospitals

## Paper

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## Abstract

### Background

Nurses in psychiatric settings run a high risk of being confronted with aggression. Considering the frequency of aggression and the impact it has on patients and staff, a sound aggression management seems important. A research project (2010-2011), financed by the Belgian Federal Public Service of Health, Food Chain Safety and Environment (Ministry of Health), focuses on the prevention and the management of aggression in psychiatric wards. The main aim of this research is to develop and validate an educational package concerning the prevention and management of (potentially) aggressive events and the registration of aggressive incidents in psychiatric settings.

### Aim

In the context of this research project, a preliminary study has been done to analyse the state of the art in seven Belgian hospitals regarding staff education, registration of aggressive incidents and aggression management.

### Method

A qualitative approach has been chosen and semi-structured interviews have been conducted in order to examine how staff education, registration of aggression and aggression management are organized in the hospitals. The interviews also focused on the opinions of the persons who were involved in the study. A thematic analysis was conducted and resulted in an extensive and anonymous description of the results.

### Results

Concerning staff education, the following elements came to the fore: the types of staff training, if it is compulsory or not, the duration, the frequency, the participants and the trainers, the material and other reflections. The majority of the hospitals organise a basic training and reminders. The duration of the basic trainings varies from one to four day(s). The reminders range between two and eight hours. Nurses are more willing than other professionals to follow these types of trainings.

The following aspects were analyzed in regard to registration of aggressive incidents: documents used to register aggressive incidents, other documents concerning seclusion and/or restraint, additional considerations. Health care workers are more inclined to register seclusions and restraints, whereas they are less disposed to register aggressive incidents.

Regarding aggression management, the following topics were studied: pamphlets, procedures, reference persons and working groups, prevention, help call systems, follow-up after an aggressive incident and other issues. The majority of the institutions consider aggression management as a multidisciplinary topic. However, several hospitals report that it is difficult to make collaboration work.

### Conclusion

Prevention and management of aggression in psychiatric wards is considered as an important topic by the hospitals involved in this study. It seems to be primordial to spend enough time and resources to this theme. Aggression is a complex and multifactorial phenomenon. The hospitals mainly focus on an integrative and

multidisciplinary approach. The institutions implement interesting initiatives: they are inspired both by daily practice and scientific literature. However, certain aspects remain problematic.

During the congress, the results will be presented precisely.

### **Educational goals**

1. To get an anonymous overview of staff education, registration of aggressive incidents and other topics related to aggression management in 7 Belgian hospitals.
2. To foster experience sharing concerning aggression management in psychiatric wards.

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# 'Challenging behaviour': A model for education and training

## Paper

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## Abstract

### Aim

This paper draws on the available theory and evidence to develop a conceptual staff training model for the management of 'challenging behaviour'.

### Background

There is growing concern with the problem of 'challenging behaviour' in nursing and other clinical professions. Staff working with clients who are experienced as challenging commonly report negative feelings such as anxiety, anger, guilt, fear, self-blame and powerlessness, as well as dissatisfaction with their job. However, current training programs in 'challenging behaviour' offer a smorgasbord of content, without a clearly defined conceptual framework.

### Methods

Literature searches of Medline and PsychInfo for papers in English from 1998-2008 were used to identify how the concept of 'challenging behaviour' is currently used in accounts of clinical practice, education and research; and to find evidence of the factors responsible for 'challenging behaviour'. Additionally, evidence about how staff perceive and respond to 'challenging behaviour' were sought in order to develop a model for training practitioners, which is conceptually sound and practical in application.

### Findings

The term 'challenging behaviour' has been welcomed as an alternative to terms such as 'problem behaviour' or 'behaviour disorder' because it shifts focus from an inherent property of the client to a problem that exists in interaction with carers and society. Nevertheless, research literature continues to present 'challenging behaviour' in objective ways. Our model directs educators to consider: the influence of the nurse, including their values, emotional processes and behavioural skills; features of the client; and features of the situation in which the behaviour occurs, including its culture and working practices and physical environment. The model recognizes that different staff will have different training needs and, indeed, will bring different perspectives and skills which should be allowed for and drawn on during training. The investment in skill training should be made only after other factors that determine whether practitioners can draw on their skills have been sufficiently addressed, and training models should allow trainers the freedom to tailor programs to meet staff's particular needs and the organisation's resources.

### Discussion

We developed a model which provides a conceptual base for training practitioners in respect of 'challenging behaviour'. 'Challenging behaviour' should be considered as a product of several intertwined factors: the actors involved – nurses, clients and others – and the situation in which the behaviour occurs, including its culture and working practices and physical environment. Staff training for the management of 'challenging behaviour' should move away from an exclusive focus on skills training.

### Educational goals

1. Understand the role of staff in contributing to the problems of 'challenging behaviour'.
2. Identify key points for educational intervention to address the problem of challenging behaviour'.

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# Strike when the iron is cold: Non-violence resistance and reducing aggression on psychiatric wards

## Workshop

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## Abstract

It is possible to have an influence on the level of aggression and the use of coercive measures in psychiatric settings. Non-violent resistance (NVR) is a technique which can lead to a reduction in aggression whilst still promoting a safe environment, working together with patients, family and staff.

NVR is based on the principles of not accepting aggression but being prepared to do everything necessary to fight against aggression, without using aggression (and in the psychiatric setting this includes the use of coercive measures).

In a ward setting the first step is to train the staff in the principles of NVR and then in specific techniques to help reduce aggression. The principles include: presence (being present on the ward); delaying reaction (not always responding in an escalating aggressive manner to incidents); working with patients to find a solution and openness. The techniques include: non-verbal and verbal communication (looking at how we communicate and how this can lead to escalation of aggression) and specific techniques designed to repair the damage of an aggressive act (reparation act). In some cases a 'sit-in' is undertaken - a complex technique which demonstrates the presence of the staff but using no aggression allows room for change.

NVR is a systemic intervention and requires the cooperation of the whole team. It helps formulate a new vision for a team, creating a new atmosphere where aggression is not accepted but also where staff can reflect on their own roles in the cycle of aggression.

NVR has been used successfully in a psychiatric setting in Amsterdam (de Bascule) to reduce aggressive incidents by over 75% and the use of coercive measures by over 50% - on an acute psychiatric ward for young people. It is also used on other wards for children and adolescents. The principles are transferable to adult settings.

## Educational goals

Workshop goals:

1. The goals of the workshop are to introduce people to the principles of NVR and allow them to gain experience in the use of the techniques.
2. Cognitive goals: to understand the principles of working with NVR in potentially aggressive settings.
3. Affective goals: To develop a sense of how it feels to use NVR to reduce aggression and coercion and the emotions that surround this form of working
4. Psychomotor goals: to experiment using NVR, focusing on personal behaviour.

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# Developing and promoting forensic psychiatry in Europe: Contributions by the Ghent group

## Paper

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**Keywords:** Ghent group, teaching, salesmanship, assessment versus treatment, forensic psychiatry

## Introduction

The Ghent group is an informal group of forensic psychiatrists interested and experienced in training in the field of forensic psychiatry. It was named after their first three-day meeting in Ghent, Belgium, in 2004. The group acknowledges the differences of the legal systems and the forensic services in different European countries and seeks to learn from each other (Gunn and Nedopil, 2005; Goethals and van Lier, 2009). They focus on the historical background for these differences in order to improve their understanding for them and thereby learn about the background of their own system. Yet they have come out with a common definition of forensic psychiatry, namely ‘a specialty of medicine based on detailed knowledge of relevant legal issues, criminal justice systems, mental health systems and the relationship between a mental disorder, antisocial behaviour and offending’. Their purposes are twofold: first of all, to assess, to take care of and to treat mentally disordered offenders and others requiring similar services; to provide expert risk assessment and management and prevention of further victimization; and secondly, to advance the practice of forensic psychiatry and teaching, training and research in the field across Europe. Developing and promoting forensic psychiatry in Europe were important issues of the seventh meeting of last year in Innsbruck, Austria.

## Models of teaching in forensic psychiatry

In our opinion, there are several professional domains in forensic psychiatry: health (e.g. nursing, clinical psychology, pharmacology), the criminal justice system (e.g. police, magistracy, advocacy, prison care, philosophy, including ethics), research (e.g. psychology, statistics), and systems (e.g. apprenticeship, modeling). Of all these disciplines, doctors have important skills: history taking, psychological and other investigations, psychiatric formulation, medication, and medical support and leadership. And, above all the gift of tolerating the chronicity of psychiatric disorders, and of leading and supporting other people to do so. Could it be that the medical specialty of psychiatry can stand much better chronically mentally ill people, compared with psychologists? Therefore, doctors need a holistic perspective, and so they must understand and respect the work of people in other professional disciplines, while begin robust and secure in their own. Forensic psychiatry – by excellence – means working interdisciplinary and with a multidisciplinary team. This is a great challenge for teaching and training. Teaching and training has become the core business of the Ghent group, since the members of the group strongly believe that forensic psychiatry can only grow if it promotes its own research and excellent training. While research is being dealt with by other international and European organizations, training is neglected by most international bodies and should be worked on by the Ghent group.

During our meeting in Innsbruck, it was recognized that there was not one model for training in forensic mental health. Uni-disciplinary, multidisciplinary and interdisciplinary teaching are each appropriate in different settings. According to interdisciplinary teaching, it can be said that this needs solid knowledge of one’s own profession and basic knowledge of other professions. The most fruitful training seminars comprise trainers and trainees from different disciplines at the same time at higher educational levels. Each profession must highlight the particular skills it brings to the multidisciplinary team. Forensic psychiatrists are responsible for decision making and leadership.

## Salesmanship in forensic psychiatry: selling pork chops in a synagogue?

Do all forensic psychiatrists have the gift of eloquence? A realistic answer can be: ‘Some of them have it, but they all can improve their skills’. Why do we want to address this question here? We – as forensic psychiatrists – ‘sell’ our knowledge to medical students, general psychiatrists, other mental health professionals, the criminal justice system, key workers overseas, the general public, the media, politicians and policy makers. We ought to do this because we want to improve recruitment to the specialty, to

improve understanding between disciplines, to garner resources for our services, to reduce stigma for our patients, and to accomplish a range of other tasks with the ultimate goal of improves services to our patients, and, thereby, their quality of life and the safety of the community. Forensic psychiatry renders services to a number of institutions, especially courts and the justice system, as well as to those who are trapped or served for in these institutions. One of the major skills forensic psychiatrists have to develop, is translating and interpreting empirical and clinical knowledge for those who speak a different (legal or law) language in a way that they can understand and use this knowledge for their decisions. In juridical systems with adversarial positions (common law), e.g. United Kingdom, these translations may be challenged (van Koppen and Penrod, 2003). But the question can here be raised if it is easier for psychiatrists to operate in countries with an inquisitorial system.

Also, forensic psychiatrists have to deal with the media. There are major differences between a media presentation and an average talk. Some specific features of a media presentation are: the relatively large audience, one's words are recorded for all the time; the way a speaker's words are interpreted and conveyed to the audience is usually not his decision, but someone else's; and, possible ramifications of the media interview. In summary, this combination of high impact and little or no control can make speaking with the media an exciting but risky proposition (Morgan and Whitener, 2006). Training therefore has to deal with improving the "salesmanship" of forensic psychiatrists.

## **Borderlands between assessment and treatment in forensic psychiatry**

First of all, in general medicine, the presenting person has requested the assessment whether or not he really wants it, and is feeling anxious about the problem on which he is consulting. A doctor would hope and seek to leave the person consulting him feeling better at the end of the assessment than at the beginning. In any case, the doctor needs to be sufficiently reassuring and able to lower anxiety to enable the presenting person to expose his vulnerabilities to the full extent necessary to produce a result. In forensic psychiatry, the situation is more complicated. Failure to leave the person feeling any better or reassured at the end of the encounter may have profoundly grave consequences, as people presenting to forensic mental health services are, by definition, particularly to act out distress through violence, whether self- or other-directed. The person may no, however, have requested the assessment and his competence to make judgments about participating in the assessment may be more than averagely impaired. The person may be unable to separate the person of a doctor from the concept of a wholly benign, therapeutic agent, acting for him, when in fact the doctor may be acting for another party. The presenting person may have difficulties with trust or attachment and so the assessing doctor may have to apply more therapeutic skills in order to break through this barrier.

Next, are there ethical limits to the use of the therapeutic element in forensic psychiatric assessments? There are four major ethical principles in medicine: the principle of 'nil nocere', the principle of informed consent, the principle of confidentiality, and the principle of honesty and striving for objectivity. The principle of 'nil nocere' means: first, do not harm, but potential consequences of use or non-use of therapeutic elements in an assessment cannot necessarily be foreseen at each stage of an assessment. Informed consent depends largely upon the extent or depth of given information on the one hand and the assessee's ability to hear and understand it on the other hand. The third principle is that of confidentiality, but in a court ordered assessment, how feasible is this if the person under assessment makes a 'confession' or self-incriminates? The fourth principle of honesty and striving for objectivity includes respect for human dignity. A fifth principle can here be added, namely transparency. One can consider a biometric experiment: the intervention must be described in full detail and transparency – in a way which would enable any other skilled person to make the same assessment and probably come to the same conclusion. However, 'scientific evidence' has been found sufficiently wanting on a number of occasions that there have been serious miscarriages of justice.

Therefore, forensic psychiatrists need some skills additional to those of good psychiatrists. They have to keep the balance between empathy and understanding, which is necessary to obtain information beyond the mere facts, and distance, which is necessary to remain neutrally and objectively in front of the court.

In conclusion, training in forensic psychiatry comprises the awareness of the different roles of treating patients on one side and assessing for court reports on the other side, but also the skill to keep the balance in order to remain empathetically without giving up neutrality and objectivity.

## **Further developing and promoting forensic psychiatry**

In summary, forensic psychiatry has to sell the issues of public safety, its expertise to courts, politicians and policy makers, health and social services, and particularly the provision of services. The core services

are to prisons and varying levels of secure inpatient provision and community services, but also services to victims, civil patients, sex offender, risk assessment and management, prevention and behavioural problem clinics. It is essential that any service advocated is appropriate and not purely serving a commercial need. In order to undertake these major tasks, the Ghent group has started to develop initiatives to practice these training goals and is doing so with great success. In August 2011, the second Training Seminar on Forensic Psychiatry in Europe will be held in Irsee (close to Munich), Germany, and in September 2011, the eighth three-day meeting of the Ghent group will take place in Antwerp, Belgium. It is therefore time to open the group to a broader number of professionals, especially from countries that are starting on their way to establish a more professionalized forensic psychiatry.

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# The challenge to be in front in prevention of workplace violence: How managers and workers across branches cooperate in order to develop new ways to prevent and handle workplace violence

## Workshop

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## Abstract

### Background

In 2010 the Occupational Safety and Health Sector Council for Social and Health Care in Denmark completed an educational program among managers, workers and professionals from different workplaces. The main aim of the four day long educational program was to set allow frontline participants from different workplaces to meet and join in on the prevention of workplace violence as well as cooperate in defining the right precautions against the negative consequences after episodes of violence. The participants were mixed both in job functions and types of workplace, such as hospitals , residential homes for the elderly, institutions for citizens with a variety of autistic handicaps and many more.

Occupational Safety and Health Sector Council for Social and Health Care is a non-profit organization who in the spirit of consensus work together to support workplaces with examples of good practice. The educational program was implemented by Social Development Center SUS. SUS is an independent non-profit and non-governmental organization that solves issues in relation to socially vulnerable people SUS has worked on preventing violence at work in nearly 20 years.

### The workshop

In the workshop we will present how trade organizations work and work together in order to support the managers and workers to prevent workplace violence. The subjects will be:

- How two trade organizations are combining the implementation of the EU agreement on violence and aggression with the national legislation and the cooperation with the employers?
- How trade organizations work together in Occupational Safety and Health Sector Council for Social and Health Care in Denmark, and particular in hospitals.
- The concept for educational program, the educational elements as well as the results

The workshop gives you good possibility to join a discussion about how to support the workplaces in their local activities from different positions.

### Educational goals

1. The goal is to give information about how trade unions and non-profit organisations in different ways can cooperate and support local workplace activities

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# An intervention for reducing violence against healthcare workers

## Poster

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## Abstract

Workplace violence against healthcare workers is a serious and growing problem. In addition to the significant stress workplace violence causes healthcare workers, violence has been shown to have a considerable impact on the care provided to patients and families. Successful interventions to reduce and manage violence against healthcare workers will need to incorporate a multi-component, collaborative approach. An intervention study was funded by the United States' National Institute for Occupational Safety and Health (NIOSH) to develop and test the effectiveness of a multi-component intervention to prevent physical violence against emergency department (ED) workers and reduce the negative consequences of violence. The intervention was developed and implemented using an action research model. This presentation will describe the methods used to partner with the hospitals to develop and implement the project, describe the formative and summative evaluation, and discuss the challenges encountered during the process. Six EDs were enrolled; three intervention sites and three control sites. Focus groups were held with hospital managers, employees and patients at the intervention sites to gather information regarding their beliefs about the violence and to identify strategies that they believed would be beneficial and sustainable in their work settings. (Gates et al., 2011) Workplace violence policies and procedures from ten hospitals were collected and reviewed to ensure development of comprehensive documents. After consulting with workplace violence experts, a gold standard for policies and procedures was developed by the research team. Meetings with intervention sites were held to review, revise and tailor the gold standard workplace violence policies and procedures for a successful implementation. An environmental assessment was conducted at each intervention site with subsequent recommendations made to managers based on the assessment s. Education and training consisted of two different strategies. First, all employees were required to take web-based modules that focused on workplace violence definitions, consequences of workplace violence, risks for violence, general interventions to prevent violence, protective environmental controls, non-confrontational presence, recognition of escalating behaviors, effective communication for de-escalating violence, early intervention, coordinated team approach during a violent event, and safe work environments after a violent event. Second, two hour tabletop training sessions were held to reinforce the content of the web-based training modules and the new policies and procedures. A train-the-trainer approach was used for the table-top training sessions; ED employees were trained to conduct the training with the rest of their employees. Challenges included differences in priorities, lack of support from physicians and other disciplines, legal concerns from administration , management and personnel changes, issues arising with accreditation and differences in focus (research versus project) and timelines. Developing an effective and sustainable intervention to reduce violence against healthcare workers requires a multi-component, collaborative approach that involves all stakeholders, written policies and procedures, environmental assessments, and education and training.

## Educational goals

The intervention to reduce violence against healthcare workers includes a cognitive and psychomotor learning approach. The conference participants will...

1. be able to state the prevalence, perpetrators, consequences, and risks of workplace violence.
2. also be able to state techniques to prevent aggressive behaviors, safety processes and interventions to safely and effectively manage a violent patient or visitor and the importance of debriefing after a violent event.
3. also practice a coordinated team approach for managing a violent patient.

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# A developing project to reduce violence work related accidents in Peijas hospital clinic of psychiatry

## Poster

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## Abstract

### Background

In the Peijas psychiatric department only part of nursing staff is trained to use safe and efficient methods to reduce and handle violent incidents. In HUCH (Helsinki University Central Hospital) psychiatric department MAPA (Management of Actual or Potential Aggression) training is used to better clinical practices. Purpose of training is to focus on patient centred methods of approach. On wards only part of staff has been trained to use MAPA, part has some previous training from previous workplace with different methods of approach, and rest are not trained. In clinical work this leads to situations where personnel doesn't have common approach towards threat of violence or violent behaviour and these situations escalate uncontrollably, especially when there are more personnel asked to help to deal with situation. Lack of situational leadership and management is quite often seen during these situations. Usually some "strong" person – who usually doesn't come from ward where situation is or even doesn't know the patient – takes control and begins to use (manual) coercive measures instead of trying to de-escalate situation with other measures. Also the lack of reporting before going to a patient is quite usual. The usual result of this is mishandled situations, excessive use of manual force and most restrictive measures, and the risk of serious injury either to patient or personnel.

### Objective

The first objective of our development project is to better clinical work by unifying practices in situations where there is threat of violence. Second objective is to make teamwork in these situations more fluent and collaboration with patient more de-escalation focused and less restrictive.

### Methods

In the autumn of 2010 we began monthly sessions for personnel. The focus of these sessions was on situations, during previous month, where a aggressive or potentially aggressive patient was involved. Clinical de-escalation and "hand on" situations were also practiced.

### Results

Personnel who took part in these sessions saw them purposeful and part of on-going development of clinical work. Major problem we had was lack of interest towards these sessions. The reasons for not attending were that sessions were too long, going outside of ward during shift was felt to make ward more insecure for the time of session and some even thought that sessions were nonsense. Although the use of seclusion and restraint and other coercive measures has been decreasing, it seems that problems that were in focus during this development program have not been solved.

### Ideas for further development

The future sessions are slightly shorter, more structured and clinical work oriented. In near future we intend to begin structured collection of reasons to use seclusion or restraint, and nurses opinion on how situations where teamwork and coercive measures were used. These reports are systematically analyzed and talked about in future sessions. The lack of nursing management involvement in these sessions might have been one of major reason for sessions being unsuccessful. In future there will always be nurse manager in sessions. We hope this will motivate personnel to take part in sessions and make it easier to solve organizational or structure related problems. Creating and maintaining training workshops to reduce violence seem to be prone to failure. To be successful in developing work constant auditioning has to be

done and when flaws are found, those should be corrected immediately. Involvement of nurse manager in developing work is crucial for success.

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# De-escalation strategies for health care staff: Is there a state of the art?

## **Paper**

*Dirk Richter*  
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## **Abstract**

Background: For many decades, prevention measures against violence and aggression relied mainly on physical techniques. Verbal and non-verbal de-escalation strategies have only recently been introduced to training and education of staff.

## **Methods**

This presentation provides a review and overview of published materials on de-escalation.

## **Results**

Up to now, only very few publications dedicated to health care settings are available. However, there is an interesting body of literature from related fields, e.g., crisis and hostage negotiations and business negotiations. When extracting the main strategies out of this literature, the following do emerge: 1. being prepared on an organizational level (e.g. policies); 2. being prepared on a personal level (verbal and non-verbal skills); 3. safety and security assessment; 4. building a working relationship with the 'aggressor'; 5. dealing with substantive demands; 6. dealing with feelings and emotions; 7. generation and exploration of alternative options.

## **Conclusions**

Although an empirically based de-escalation literature for health care staff is not available, it is possible to outline an overall state of the art strategy which relies on input from related fields.

## **Educational goals**

1. To learn about the state of research and literature on de-escalation in health care settings.
2. To learn about an overall state of the art strategy in this field.

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# Addressing nurse-to-nurse bullying to promote nurse retention

## Paper

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**Keywords:** Bullying, horizontal violence, peer harassment, psychological harassment and terrorization, nursing shortage, workplace violence

Nurse-to-nurse bullying in the workforce is contributing to the current nursing shortage. The literature reveals both victims and witnesses of bullying suffer silently and are often confused as to what to do when presented with bullying behavior. This confusion frequently contributes to nurses leaving their chosen profession. Canadian lawmakers are now beginning to address workplace-bullying behaviors. The purpose of this paper is to raise awareness of the challenges associated with workplace bullying among nurses by defining and describing the incidence and origin of workplace bullying; reporting the nature of and consequences of workplace bullying for both victims and witnesses; presenting the Canadian legal response, strategies to support victims, and approaches preventing workplace bullying; and considering the nurse manager's role in addressing workplace bullying.

Bullying among nurses in Canada is a problem that drains nurses of both energy and productivity. The Canadian Bureau of National Affairs, Individual Employee Rights Newsletter (2000) reported that bullying is not related to race or gender; rather it is a symptom of emotional distress. Regularly persons in authority positions appear either to not recognize bullying or to reject this concern (Lewis, 2004; Pearce, 2001). Nurses frequently feel at a loss when it comes to controlling the bullying behavior of other nurses. These feelings of helplessness lead to an increase in absenteeism, stress leave, and resignations, all of which contribute to the nursing shortage and cost the healthcare system millions of dollars each year in employee benefits, retention, and recruitment costs (Bureau of National Affairs, 2000).

The nursing shortage is a major concern in Canada. The Canadian Institute for Health Information (2007) reported that Canada had 252,948 registered nurses employed in 2006; 92% of these were Canadian graduates and 8% were International graduates. The number of nurses graduating in Canada has increased 5.3% from 2000 to 2005 (Canadian Nurses Association, 2008). Still, Shields and Wilkins (2005) stated in "The National Survey Report of Work and Health of Nurses" that the Canadian nursing shortage will only increase. Much of this nursing shortage has its roots in human resource management issues, such as failure to control workplace bullying (Canadian Institute for Health Information, 2007). The purpose of this article is to raise awareness of the challenges associated with workplace bullying among nurses by defining and describing the incidence and origin of workplace bullying; reporting the nature of and consequences of workplace bullying for both victims and witnesses; presenting the Canadian legal response, strategies to support victims, and approaches preventing workplace bullying; and considering the nurse manager's role in addressing workplace bullying.

## Definitions of workplace bullying

Workplace bullying is difficult to define. This lack of clarity has hindered the efforts of Canadian policy makers who have tried to tackle this subject. Hence, Quebec law and the Canadian Initiatives on Workplace Violence have worked to offer definitions of bullying. Quebec was the first province in Canada to amend its Labor Standards Act by defining workplace bullying. Quebec law refers to workplace bullying as psychological harassment and defines it as: Any vexatious behavior in the form of repeated and hostile or unwanted conduct, verbal comments, actions or gestures that affect an employee's dignity or psychological or physical integrity and that result in a harmful work environment for the employee (Canada Safety Council, 2005). Similarly, the report "Bullying and Intimidation" as presented in Canadian Initiatives on Workplace Violence (2007) has stated that workplace bullying "constitutes offensive behavior through vindictive, cruel, malicious or humiliating attempts to undermine an individual or group of employees. These persistently negative attacks are typically unpredictable, irrational and unfair... they happen with great regularity within the workplace" (para.1).

## Incidence and Origins of Workplace Bullying

Canadian nurses are not alone when it comes to workplace bullying. Cooper and Swanson (2002) have reported that workplace bullying among nurses is now recognized as a major occupational health problem in United Kingdom (UK), Europe, Australia, and throughout North America. Cooper and Swanson reported that 5% of healthcare workers in Finland have experienced bullying. In a survey of National Health Trust community workers in the UK, 38% of staff reported having experienced bullying and were likely to leave their job as a result, whereas 42% had witnessed the bullying of others (Cooper & Swanson). Chiders (2004) noted in "The Nurses in Hostile Work Environment's 2003 Report" that bullying is very prevalent in hospitals and workplaces across the United States (US) to the extent that 70% of victims leave their job, 33% of these victims leave for health reasons and 37% because of manipulated performance appraisals. After much study Cooper and Swanson concluded, that workplace bullying is a significant, under-reported, and under-recognized occupational safety and health problem. This section will now discuss the origins of workplace bullying.

The problem of bullying may have its origin in individual, environmental, and/or organizational factors. Individual factors include mental illnesses, female gender workers, and drug and alcohol habits. Environmental factors include poor lighting, lack of safety measures, and working with violent or hostile patients and families. Organizational factors include lack of resources, understaffing due to the nursing shortage, poor workgroup relationships, changes in composition of work groups, low supervisor support, increased workload, downsizing, and organizational restructuring (Cooper & Swanson, 2002; Salin, 2003).

Research completed on nurses in the UK has suggested that bullying behavior among nurses is a learned process (Lewis, 2006). For example, newly employed nurses may observe and embrace the bullying behaviors of other nurses just to fit in, thus contributing to the continuation of bullying behavior. This was evidenced in Lewis' findings related to pain management. Lewis found that some nurses strive for freedom from traditional ways of pain management and question traditional pain management regimes that sedate the patient every four hours, regardless of the patient's perception of their pain. Rather these nurses prefer to allow patients to have input into their pain control needs. This difference of opinion as to the degree of patient control over their pain management sets up an opportunity for inter-professional conflict and cliques which become favorable reference groups to which nurses aspire when looking for acceptance. Lewis has argued that these nursing cliques may become vehicles in which bullies may hide, gain support, and use the organizational bureaucracy to their personal advantage as they find strength in being a member of their chosen clique.

Researchers Chaboyer, Najman, and Dunn (2001) found that Australian nurses continue to be an oppressed group that uses bullying tactics as they interact with each other. Hutchinson, Vickers, Jackson, and Wilkes (2006a) also studied Australian nurses and noted that informal organizational alliances enabled bullies to control work teams using emotional and psychological abuse to enforce bully-defined rules. To illustrate these findings Hutchinson et al. (2006b) cited their qualitative study of 26 nurses who had personal experiences of bullying. This study explored the nurses' perspectives regarding the meaning of bullying, beliefs about bullying, and perceptions of bullying, so as to interrupt the bullying process at both rural and metropolitan Australian hospitals. Hutchinson et al. (2006b) found that nurses worked together to control the team "through ignoring, denying and minimizing bullying; indoctrinating nurses into bullying-defined rules; and structuring those they considered weak" (p. 228). Hutchinson reported that the nurses' stories revealed bullying-defined rules on the nursing unit enforced the hierarchical separation of labor with aspects of "militarism, public humiliation, and tactics of exclusion" (p. 228). These narratives revealed that bullying on nursing units is normalized through a "Process of Indoctrination" as the bullying breaks a nurse's physical and psychological strength and confidence. Hutchinson et al. (2006b) maintained this either forces the nurse to resign or accept the bullying rules of survival, and commented that these resignations serve no purpose other than adding to the nursing shortage

## The Nature of Workplace Bullying

Some time ago, when I had taken a new nursing position, I observed, and became concerned about the frequent bullying behaviors I was observing among the nurses. My concern regarding this bullying behavior prompted me to begin journaling about these behaviors, as is my custom when situations puzzle me, in an attempt to better understand what was happening. In reading through my journal entries, I realized these behaviors centered around three main themes: Interactions, Power Disparities, and Actions. Table 1 describes some of the bullying behaviors I had observed.

Lewis (2006) observed that bullies are fully aware of their actions, although actions such as these are difficult to pinpoint, often occurring behind closed doors. Anthony (2006) and Stevenson, Randle, and Grayling (2006) made similar observations while studying bullying behavior directed towards student nurses. Sometimes students experienced destructive innuendo, criticism and resentment, humiliation in front of others, undervalued efforts, and/or teasing. At other times, they were ignored and frozen out. Although students felt like failures if they did not understand something, they tolerated the bullying so they would fit in.

## Consequences of Workplace Bullying

Hutchinson et al. (2006a) documented workplace bullying as lasting from six months to seven years, and reported that nurses targeted by bullies frequently find themselves labeled as stupid or less capable. These nurses then become the focus of attention while the bully goes unnoticed, making the actions of the bully legitimate because the built-in power structures claimed by the bully serve to normalize the abuse. Salin (2003) observed that large organizations with lots of formality and lengthy decision-making processes make excellent shelters in which bullies may hide and go unrecognized. Meanwhile, the victim, and others, may suffer from isolation, fear, and/or stress-related illnesses, or commit suicide. Each of these possible consequences will be described below.

*Table 1 Examples of Nurse-to-Nurse Bullying*

Communication	Description
Interactions	Withholding information
	Posting documentation errors on bulletin boards for all disciplines to view and others to critique
	Intimidating others by threats of disciplinary procedures
	Writing critical and abusive letters or notes to co-workers.
	Verbalizing harsh innuendos and criticism
	Using hand gestures to ward off conversation.
Power Disparities	Rolling eyes in disgust
	Having personal values and beliefs undermined
	Using shift/weekend charge positions to direct/control staff assignments/breaks.
	Controlling co-workers' behavior by reporting them to their supervisors for perceived lack of productivity and assistances.
Actions	Placing others under pressure to produce work and meet impossible deadlines.
	Withholding knowledge of policies and procedures to get co-workers in trouble
	Yelling at co-workers
	Demanding co-workers answer the telephone, NOW!
	Refusing to mentor and guide new staff in their practice
	Refusing to help those who struggle with the unknown and uncertainty
	Refusing to help others in need of assistance
	Giving public reminders of incomplete/missed documentation or work

### Isolation

Lewis (2004) conducted in-depth interviews of 10 nurse managers working in the U.K.. National Health Service and found that bullies isolated their victim and created a climate of fear in an attempt to make the injured party feel inadequate. Lewis reported that nurses witnessing this bullying behavior were reluctant to speak out lest doing so result in their own censure. Lewis also observed that nurse managers lacked skills, training, and knowledge of how to deal with bullying events, and those complaints of bullying often went unnoticed by the managers. Lewis also noted that managers had an ambivalent attitude towards policies and procedures addressing bullying in the workplace. This lack of managerial skills and commitment to addressing workplace bullying contributed to unsatisfactory outcomes of bullying cases. Lewis concluded that bullies are highly devious individuals, who are well aware of their actions. Swedlund (2004) also observed the isolation experienced by the victim noting, "What people need to learn about is the complete isolation of bullying.... The whipping boy is hit by people while others just stand around.... The person being bullied sees the whole world against him... He's totally isolated" (para. 5).

### Fear of Going to Work

Lutgen-Sandvik, Tracy, and Alberts (2006) reported that a target of bullying often faces work with the thoughts of "impending doom and dread." For example, a bullied nurse often fears going to work and is secretly ashamed of being bullied, but is confused as to how to fight back. Lutgen-Sandvik et al. found that with the passing of each day the bullied nurse retreats into silence while others attack her or his person and workplace reputation. Cooper and Swanson (2002), Patten (2005), and the Workplace Bullying Institute

(2003) all noted that self-doubt takes over at this point and stifles the nurse's innovation and initiative, resulting in psychological and occupational impairment.

### **Stress-Related Illnesses**

Victims of bullying may show symptoms of nausea, headache, weight loss, insomnia, anxiety, depression, alcoholism, irritability, loss of libido, self doubt, and Post Traumatic Stress Syndrome (PTSS) (Canadian Initiative on Workplace Violence Website, 2007; Gilmour & Hamlin, 2005; Hoel, Faragher & Cooper, 2004; Jackson, Clare, & Mannix, 2002; Knight, 2004). A study done on healthcare professionals in the UK (Hoel et al.) concluded that one in five people being bullied at work exhibit symptoms of PTSS, such as hyper-arousal, feelings of constant anxiety, over-vigilance, avoidance of traumatizing events, and flashbacks. Other research on nurses in the UK (Patten, 2005) has shown that between one-third and one-half of stress-related-sickness absenteeism results from workplace bullying. Patten found that this stress often results in nurses giving up or having fractured careers with serious implications both personal (loss of financial security) and organizational (loss of a valuable employee).

### **Suicide**

Even more serious than stress-related illnesses is stress-related suicide. Hastie (2007) described one young Australian midwife who had entered nursing in 1995 with enthusiasm, passion, and commitment. This midwife had experienced hostility, criticism, and intimidation in her practice, which eventually lead her to taking her life by asphyxiation. Although this event occurred over ten years ago in Australia, Canada is presently reporting one out of seven adult suicides results from workplace bullying (Workplace Bullying Institute, 2003).

### **Witnesses of Bullying**

Bullying affects not only the victim; but also the witness (Patten, 2005). The witness begins to wonder if she or he is next. Subsequently, self-esteem decreases, erodes, and gives way to depression and anger for nurses who witness bullying. Patten found that this kind of depression and anger could lead nurses' spouse or partner(s) to see a decline in their partner's "thirst for life." Patten reported that divorce, loss of marital affection, and diminished attention to one's children can result from workplace bullying.

## **Canadian Legal Response Related to Workplace Bullying**

International attention to workplace bullying has led Canadian lawmakers to look more fully at bullying and establish laws related to bullying. Lewis and Lawson (2004) have noted the following changes in Canadian laws related to bullying:

- The Canada Labor Code amended its 2000 regulations requiring the employers to take prescribed steps to prevent and protect workers from workplace bullying.
- British Columbia, Alberta, and Saskatchewan amended their Occupational Health and Safety Acts to attend to workplace bullying.
- Ontario gave workers the right to refuse unsafe work; nurses arguing harassment under the Ontario Health and Safety Board may find their case referred to the Human Rights Commission for resolution.
- The Canadian bill C-45 holds corporations, senior officers, and directors criminally liable for reckless endangerment of the safety of staff in the workplace.
- Canadian law now states that nurse victims of workplace bullying who develop mental or physical illness may be entitled to compensation under Workers' Compensation legislation.

However, my personal observation has been that most nurses have only a minimal knowledge of these Canadian Anti-Bullying laws. No specific legislation exists in Manitoba, Yukon, North West Territories, Nunavut, Ontario, New Brunswick, Nova Scotia, Newfoundland or Labrador regarding workplace bullying, but General Duty obligations exist under Occupational Health and Safety Legislation whereby employers must provide a good working environment for its employees (Canadian Initiative on Workplace Violence, 2007).

### **Strategies to Support Victims of Workplace Bullying**

In spite of the fact that bullying is unacceptable and healthcare managers are expected to ensure a respectful work environment for nurses, workplace bullying continues to exist among nurses. An important person in stopping this bullying is the individual involved! However, when these victims of nurse-to-nurse bullying decide they have had enough of "going to war every day," they will need support from within and outside the organization that enables them to maintain a positive attitude within themselves while successfully dealing with workplace bullies (Patten, 2005). The ability of the nurse to stop this bullying can be enhanced by both support and counseling.

Tim Field has developed a support program to strengthen a positive attitude about workplace bullying (Field Foundation, 2005). In 1994 Tim Field, a Customer Services Manager in the UK, suffered a mental breakdown when bullied out of his job. As a result, in January 1996 Field set up the U.K. National Workplace Bullying Advice Line, and in 1998 established a Bully On-Line Website. Before his death in 2006, Field lectured throughout the world and received an honorary doctorate for his initiatives to stamp out worldwide bullying (Bullying On-Line Website, 2005). The Field Foundation remains committed to working for a world free of bullying through activities, research, and education. The Canadian branch of the Field Foundation, the Anti-Workplace Bullying Support Group, located in Vancouver, British Columbia, meets monthly to share information pertaining to bullying laws and regulations in British Columbia and to raise awareness of bullying within the province. The ultimate goal of this group is to facilitate changing attitudes about bullying in the workplace.

Although I found no mention in the literature of any healthcare region in Canada having support groups specifically for nurses experiencing workplace bullying, many healthcare regions throughout Canada do have Employee Assistance Programs that provide counseling. For example, the Vancouver Island Health Authority (VIHA) confidential Employee and Family Assistance Program is a program that nurses can access regarding problems that affect work life and general well-being (VIHA, 2007). Counseling is also available to nurses through their family physician and community mental health services.

## **Strategies to Prevent Workplace Bullying**

The Canadian Initiatives on Workplace Bullying (2005) found a need for nurse leaders to understand the relationship between nurse-to-nurse bullying in the workplace and economic costs associated with nurse resignation. Nursing leaders can play an important role in communicating that bullying behavior will be replaced with respect, while the perpetrators of bullying behavior receive help, thus creating a safe working environment for nurses. This elimination of workplace bullying includes education, policy, and celebration.

### **Education**

The first step in teaching nurses how to decrease bullying by others is to help them understand what to do and what not to do when confronted by a bully. Beech (2000) found that to reverse bullying behavior and keep nurses in the workforce nurses must support one another. Beech noted one of the major mistakes nurses make when confronted by a bully is to try to reason with the bully and help the bully understand their position. However, being nice to a bully only confirms the bully's superior beliefs. Beech found that the bullying occurs as bullies gather compliant co-workers around them and devise strategies to get rid of those who are less compliant. Beech encourages nurses to never resign, because their resignation would mean that the bully had won. Rather Beech encourages nurses to keep a file of what is happening to them, as they may be required to produce these evidence months in the future.

Nurses are encouraged to become involved in developing anti-bullying programs that teach the principles of bullying avoidance. The Canadian Center for Occupational Health and Safety (2007) has suggested the following content be considered in these programs:

- Definition of workplace bullying
- Legal obligations
- Anti-bullying prevention policies
- Bullying assessment
- Developing preventive measures
- Reporting and investigating

A formal evaluation of a program, conducted by a third party not directly responsible for the implementation of the program, can provide objective evidence of the effectiveness of the anti-bullying program (Canadian Centre for Occupational Health and Safety, 2007).

### **Policy**

Involving nurses in policy development gives them the opportunity to take ownership and responsibility for the environment in which they work. Enabling nurses themselves to develop a policy addressing workplace bullying is one strategy to decrease bullying. Such a policy should target positive behavior and work towards creating a working climate that treats nurses with dignity, respect, and fairness (Tehrani, 2005). Tehrani states that the aims of an anti-bullying policy should strive to accomplish the following outcomes:

- Ensure the dignity at work of all nurses
- Respect and value differences among nurses
- Make full use of the talents of all the nurses

- Prevent acts of discrimination, exclusion, unfair treatment, and other demeaning behaviors
- Demonstrate a commitment to equal opportunities for all nurses
- Display open and constructive in communication
- Handle conflict with creativity
- Show fair and just behavior when dealing with other nurses
- Become educated about nurse and employer responsibilities
- Develop positive behaviors

A policy such as this can enhance the self-concept of the workgroup itself, thus strengthening group members to prevent bullying within the group.

### Celebration

Celebrating positive, bully-free work environments can also decrease bullying behaviors. Bullying Awareness Week provides an excellent opportunity for nurses to celebrate a positive work environment. Bullying Awareness Week is for adults as well as for schoolchildren. The expectation of the Canadian Psychological Association is that Bullying Awareness Week will raise the awareness of bullying in Canada (Service & Cohen, 2007). National Nurses Week is a yearly celebration in Canada and elsewhere. During this week of celebration, nurses may also learn of opportunities to become leaders, innovators, and pioneers in anti-bullying initiatives (Canadian Nurses Association Website, 2007).

## The Nurse Manager's Role in Addressing Workplace Bullying

Nursing shortages for the future have been projected around the world (The Canadian Institute for Health Information, 2006; Fulcher, 2007; Horan, 2007; Stevens, 2002). Stevens, and Pearce (2001), have noted that intimidation of nurses by other nurses in the workforce is exacerbating the nursing shortage. Nurse Managers have an important role to play in preventing and correcting nurse-to-nurse bullying to keep as many nurses as possible in the nursing workforce. Ruggiero (2004) recommended visible participation of nursing leadership in addressing bullying to foster commitment, participation, trust, and open communication with front-line workers. Briles (2003) found that managers who acknowledged and addressed workplace bullying were able to effectively help healthcare organization retain good employees. Nursing leaders can do this by establishing an ombudsperson within the healthcare organization to which nurses can complain without fear of backlash. Nursing leaders can also decrease bullying by promoting teamwork and team building among nurses to promote flexibility, sensitivity to the needs of others, and encouragement of creativity within the group. Teamwork and enhanced productivity is achieved when the group members have a strong sense of belonging and loyalty to the group and the organization. When implementing strategies to address nurse-to-nurse bullying, nurse managers should endeavor to create a culture of change. The new culture will require an understanding of bullying and its implications and the establishment of guidelines for acceptable work behavior and peer interaction (Field, 2005). Additionally, a Dignity at Work Policy, which includes sections on harassment, discrimination, violence, and bullying, can highlight the employer's commitment to provide workers with employment that is free from acts of bullying and intimidating behavior.

### Conclusion

The problem of nurse-to-nurse bullying in the workplace has gained considerable attention as nurse leaders struggle to recruit and retain nursing staff. As role models and creators of the work group culture, nurse leaders play a key role in combating bullying in the workplace. It is not enough to simply help the victims; rather programs and policies need to be developed to address bullying behaviors. Bullying must become unfashionable. Education, policy development, celebration and support encouraged a whole generation of smokers to "butt out." The same efforts must be initiated to stop bullying in the workplace.

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# Training program for treating violence and aggressive behavior in HUCH psychiatric department

## Poster

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## Background

Violence and threat of violence are serious threat to psychiatric personnel. Constant threat increases nurse turnover and decreases work related welfare, also every single episode of violence strain the victim mentally and quite often physically. There has been lack of education of de-escalation techniques and handling of difficult situations focused for nursing students at Uusimaa-area in southern Finland. This has led to culture of excess use of force and authority, and lack of organization during the handling of difficult and threatening situations. Also dealing with violent behaviour or threats has been profiled as men's job.

## Aim

To improve clinical practices and to decrease use of coercive measures has HUCHS psychiatric department begun to use MAPA® training as part of education program focused for all personnel.

The main purpose of the training is to change personnel's negative attitudes towards patients and aggressive behaviour. On training program this is done by emphasizing importance of de-escalation, early interventions and creating therapeutic environment so, that unnecessary use of authority or coercive measures would end. This is done by giving personnel tools to handle difficult situations, thus empowering personnel to change old habits. During the training special attention is given to gender roles in situations when use of physical restraint is considered. Secondary purpose of training program is to train personnel to manage hands-on situations co-ordinately and safely.

The goal of training program is to create therapeutic atmosphere, where aggression is dealt competently, de-escalation is proactive and use of coercion is minimal. Therefore incidents of violence will reduce and be dealt safely, and potentially patient will participate in decision making. Training also aims to eliminate previous gender roles. The quality of training is continually observed with feedback after completing training and from wards.

Seclusion, restraint and other statistics related to use of coercive measures and safety are regularly followed.

## Results

Training has increased the use of proactive measurements and safety in clinical work. Personnel has felt that previous gender roles have somewhat been withdrew and that has increased job satisfaction. Also the fear felt by nurses during difficult situations has been diminished

Participating in training is voluntary. Therefore some nurses don't get training, possibly because of negative prejudice. This might lead to fact, that when S/R statistics between hospitals are compared, rates differ significantly. Also nurse turnover rate is quite high so there will always be personnel who have not been trained.

## Conclusion

To unify practices should participation to training and refresher course be compulsory. Nurse Managers should be more active in observing clinical nursing culture and in work of changing it to more proactive and patient centred. Nurse Managers should also be active to ask for customized courses or sessions, where each wards individual problems would be discussed. Problems related to physical limitations on wards, that in discussion are seen to increase aggression, should be fixed. 'Generic' training aimed to

decrease amounts of use of seclusion and restraint is not enough. We need more tailored training programs to get to our goal of use of minimal restrictions.

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# A review of verbal deescalation techniques, medical treatments and self-protecting measures in case of behavioural emergencies

## **Workshop**

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## **Abstract**

The workshop emphasizes on increasing the knowledge and skills of health care workers in de-escalating interventions, provides an overview of currently used medical treatments of behavioural emergencies and gives an introduction to self-protecting and harm-reducing techniques.

## **Educational goals**

At the end of the training, participants will know:

1. how to verbally react in case of violent incidents.
2. how to avoid physical confrontations and restraints.
3. how to properly use pharmaceutical options in case of aggressive behaviour.
4. how to protect themselves and others from potential harm.

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# Assessments of Need & Interest, Knowledge and Confidence in Managing Substance Misuse, within a Regional Secure Unit in South West London (UK)

## Poster

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## Abstract

### Background and review

In the Safety First Report of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness substance misuse was identified as an important factor in over 50% cases of homicide cases (University of Manchester 2001). A similar enquiry identified 36% of homicides as being committed by people with a dual diagnosis (University of Manchester, 2006). One study found that 62% of people with schizophrenia in a regional secure unit experienced substance misuse problems (Wheatley, 1998). People with a dual diagnosis are at greater risk of committing suicide, less likely to be compliant with treatment, have more inpatient stays, higher levels of violence and often a poorer prognosis than those with a mental illness alone (Barrowclough et al, 2001, Banergee et al, 2002).

### Aims

To perform an assessment of need & an assessment of interest, knowledge and confidence in managing substance misuse to plan future service provision in a regional secure unit

### Method

Cross-sectional surveys administered to patients and self-reported by clinical staff.

### Results

Response rates of 72.6% and 72% were achieved respectively. 77.7% of patients with a diagnosis of substance misuse experienced a severe mental illness. 25.3% of patients have harmful substance misuse whilst 21.3% have a dependency syndrome. 74% of clinical staff wants to manage patients' substance misuse problems whilst 92% of clinical staff believes a dedicated substance misuse support service is required. The vast majority of clinical staff believes such a service should also provide training in managing substance misuse.

### Conclusions

There is need for a substance misuse support service including the development of a training programme for clinical staff.

### Educational goals

1. To illustrate use of needs analysis in the development of a new service.
2. To outline how the importance of treating substance misuse within the forensic population.

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# 'Don't throw petrol on the fire!': The essential connection between assertive communication and safety in the violent crisis

## Workshop

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## Abstract

There is an essential connection between assertive communication and safety in a violent crisis. Verbal and non-verbal communication which is withdrawn, passive, aggressive, or assaultive from the professional can and probably will become the trigger for violent behavior from the client.

The workshop begins with a consideration of the professional in the crisis. There is a fight-flight response, which leads to impulsivity in the crisis because of the decrease in critical thinking. There are distortions in perception of the crisis, influenced by the emotional state of the individual. Higher cognitive functions become limited. The professional needs a self-control plan to bring self back into control and make good decisions in the crisis. Without this self-control plan, nothing positive happens. The members of the workshop group are invited to construct their own plan for self-control and for restoration (time: approximately twenty minutes).

Next, we consider some basic points regarding communication. Communication, as a behavior, is both verbal and non-verbal, and the non-verbal communicates the real meaning. Communication conveys culture as well, and culture provides the framework for accurate reception of communication.

Communication may take one of five forms: withdrawn, passive, assertive, aggressive, or assaultive. We examine the characteristic features of each form, concluding with assertive communication.

Assertion is incompatible with withdrawn, passive, aggressive, and assaultive communication and models respectful interactions, empowerment, and self-control. Examples of non-verbal forms of assertive communication include direct eye contact, even voice tone, open and erect posture, confirming nods.

Examples of verbal forms of assertive communication include factual messages, "I" messages that accept responsibility, messages that incorporate choices that empower the listener. Assertive communication is incompatible with assault. While not a guarantee, communicating assertively empowers the client and increases the likelihood the client will make a safe choice.

Next, we use Eric Berne's Transactional Analysis Model of Parent-Adult-Child to explore congruency and incongruency in communication and the role which assertive communication might have. Workshop participants are invited to describe or construct a dialogue in a crisis in which the professional engages in communication which is non-assertive and the client does also, and then the participant re-constructs the dialogue to reflect the professional's use of assertive communication (time: 30 minutes).

## Educational goals

By the end of the workshop, the participant will be able to...

1. construct a self-control plan to enable him or her to engage in critical thinking and decision making in the violent crisis.
2. construct or identify assertive communication, verbal and non-verbal, to the violent client.

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# Training programmes for preventing and managing violence and aggression: what works and why in dementia care

## Paper

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**Keywords:** Preventing and managing aggression and violence, training programmes, dementia care

## Introduction

This paper offers a review of the literature on the subject of evaluating training in Preventing and Managing Violence and Aggression (PMVA) in dementia care settings and was undertaken as part of a Msc. in Clinical Studies and Education. I have adopted a Realist synthesis approach to looking at the literature evaluating PMVA training as it offers an explanation of why an intervention works in a given setting in what circumstances rather than whether it works. (Pawson, Tilley, 2001. McCormack et al, 2006). By applying this approach to reviewing the literature I hope to offer a greater understanding of what it is about training of this nature that works in some circumstances and not others. This paper concludes by proposing a conceptual explanatory model of how these training programmes might work, drawing on my own experiences in delivering such training in dementia care settings. In understanding the literature from this perspective it has been possible to identify not only the underlying mechanisms at work in such training; caring, coping and confidence but also the likely conditions which are most likely to support them working; with strong clinical leadership identified as the key component in ensuring the success of such educational programmes as part of a supportive organisational context.

## Background: PMVA training programmes in Dementia care

I currently deliver a training programme in PMVA in dementia care, which I originally piloted in four in-patient mental health assessment units for older people in an NHS Trust. An evaluation of this pilot through questionnaires suggested staff would be more likely to use non physical means of managing incidents post training but failed to identify why this would be so. In addition the number of incidents of violence and aggression were recorded for six months prior to the introduction of training and six months after the training. These showed a noticeable reduction in number post training but did not demonstrate whether the introduction of the training was in any way significant. It is difficult to evaluate training programmes which could show why they are effective (or not) in improving the way in which nursing staff manage aggression and violence. It is also difficult to ascertain whether the inclusion of physical intervention skills into the training programme was a significant factor. The training was recently delivered in an in-patient unit in another part of the organisation. Unlike the pilot wards, nursing staff of this unit remained incapable of responding to incidents of aggression confidently and effectively. Using a traditional approach to reviewing the efficacy of training does not adequately explain how these training programmes work and so I have chosen to use realist synthesis.

## Realist Synthesis as a methodology to evaluate PMVA training

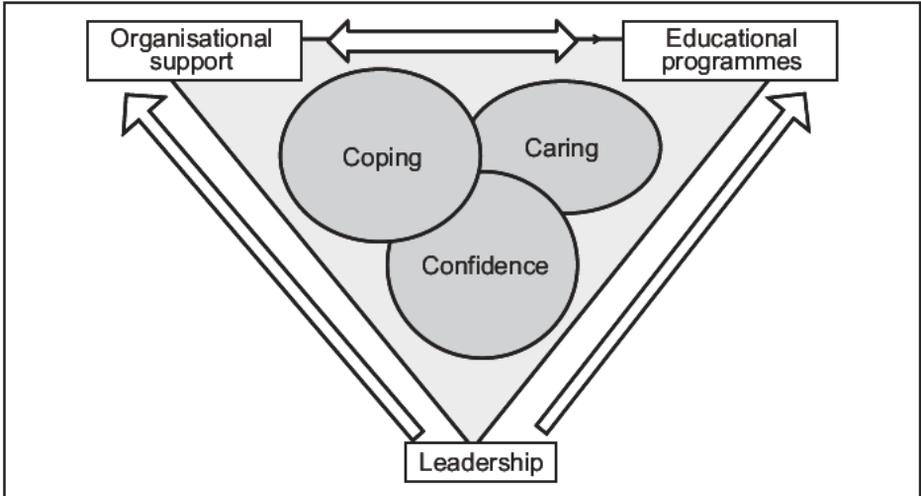
In realist synthesis training programmes are understood as complex social interventions which are designed to bring about change in the way people behave. Based on this premise PMVA training programmes can be seen as interventions designed to change the behaviour of nursing staff so that they manage aggression and violence more effectively. Realistic synthesis sees training programmes as interventions made up of assumptions or hypotheses of how they are intended to work. For example, 'if the training programme is delivered this way then this will bring about this improvement'. In this way a realist synthesis can offer an explanation of how something is designed to work in order for us to understand how we can make it work more effectively (McEvoy, Richards 2003. Pawson et al, 2004).

The literature review took the form of three distinct activities; an initial review of the formal literature looking for contributory theories, contextualising the literature by using a sample of 'grey' literature (In this case the PMVA training programmes and policies were examined from three NHS mental health organisations) and culminating in the development of the concepts to create the explanatory framework.

## Discussion: A conceptualisation of PMVA training programmes

Realist synthesis draws on the literature in order to describe the mechanisms involved in explaining how an intervention works. These theory areas are then organised to make up an explanatory conceptual framework considering what works (or not) in PMVA training programmes (Figure 1). In this paper the results of literature review have been organised into three theory areas; training as an educational strategy, creating a conducive organisational context and the concepts of coping, confidence and caring as mechanisms for change.

Figure 1 An Explanatory Conceptual Framework of PMVA training



Although realist synthesis is not intended to offer recommendations as such, it can offer some explanation as to the successes and failures of PMVA training programmes generally. This explanatory framework is discussed in more detail before I consider how the explanations drawn from the literature can be applied to my own experiences in delivering PMVA training programmes (Pawson, Tilley, 2001).

### Training as an educational strategy

Complex social programmes whether they are policy initiatives, educational courses or health improvement programmes are all designed to engage people in learning in order for them to change the way they behave (Pawson and Tilley, 2001). The majority of studies into PMVA training programmes stated their intention was to change the behaviours and attitudes of health staff ((Featherstone et al, 2004. Needham et al, 2004. Farrell, Cubit, 2005. Turner, 2005. Zarola, Leather, 2006. Chrzescijanski et al 2007. Duxbury, 2008). There is conflict between the nature of the theories informing PMVA training as mechanisms of change and the concept of training which inhibits this ambition. The problem with this premise is that a training approach focuses on the successful performance of a task rather than a process of learning (Milligan, 1998). As a strategy therefore intended to create change, it fails as it is not underpinned by the principles of adult learning that suggest adult learners tend to be self directed and want to be actively involved in the learning process (Brockbank, McGill, 2007). It is not surprising therefore that the two educational programmes in dementia care homes within the literature which had a degree of success were those that used regular supervision groups to promote those learning processes (Featherstone et al, 2004. Testad et al, 2005.). This is also the tension between practice development approaches, which are designed to be emancipatory of the individual and training initiatives which focus on the development of technical knowledge and skill (Wilson, McCormack, 2006). This dichotomy may well lie at the heart of why PMVA training programmes haven't been found to be effective in the literature. This is further compounded by positioning PMVA training programmes as part of an organisation's necessary response to risk and litigation rather than as legitimate nursing care.

## Creating a conducive organisational context

Studies on improving patient outcomes and organizational change show that training programmes alone do not really impact on practice without organisational support and credible clinical leadership. (McCormack et al, 2006, Middleton, 2008). Training in isolation of any other interventions fails to address such complex problems as the management of violence and aggression in healthcare as it proposes a very simple one dimensional solution; that A plus B will achieve C without any appreciation of the context into which A is introduced. PMVA is therefore seen within an organisation as a quality performance ‘must do’ rather than an essential part of good clinical care, which means it is seen as not valued by that organisation. This apparent divide between organisational values and those of staff working within that organisation has an enormous impact on staff morale, productivity, organisational performance and the patient experience. The evidence points to the fact that engaged and committed staff work more positively and therefore deliver a better quality of care (NHS Employers, 2008). It is in the interests of organisations therefore to support such initiatives as PMVA training programmes to ensure the quality of the services they provide.

The role of leadership is vital to ensuring this success by facilitating change in practice, while supporting nursing staff to feel empowered to deliver good nursing care. Positive and supportive leadership can ‘unfreeze’ and empower demoralised nursing staff in supporting those staff to find their own solutions. Some of the differences between the units in the initial pilot study and the unit in the other part of the organisation were in terms of leadership. The unit which failed to manage aggression effectively after training had been without a Ward Manager for quite a period following closure and investigation, whereas the pilot units all had established managers. I think was a significant contributory factor to that unit’s inability to respond to incidents of aggression following the training course (Roberts et al, 2008).

Leadership is also a key component in activating those processes or mechanisms which appear to be the active ingredients in managing incidents of aggression and violence. Credible leadership activates the processes of self-efficacy and perceived coping inherent in social learning theory through role modelling and by supporting a culture of shared professional values. The role of credible leadership is also evident in the literature around attributions of blame and caring behaviours in that professional values seem to hold more sway than personal attributions.

## Coping, confidence and caring as mechanisms for change

The literature suggests that there are three ‘active’ ingredients within PMVA training programmes which act as mechanisms for change. These are triggered by the processes involved within the concepts; caring, confidence and coping. Although these were considered earlier in the review as separate mechanisms, the literature suggests that they are in fact three interlocking and interdependent theories which, when triggered together will produce the desired changes in nursing staff that will enable them to effectively manage challenging and aggressive behaviour. This is represented below in figure 2 as a cycle as each process is dependant on the other to work. So if we start with the premise that if nursing staff believe they can effectively manage aggression it will lead to them successfully performing. In this way self-efficacy in terms of a person’s belief in their effectiveness is not only dependant on whether they have the skills to perform successfully but whether they believe it is in their control to cope with a situation (Ozer, Bandura, 1990). People’s self belief in their ability to cope is related to their cognitive self control of thoughts. The impact of not coping conversely has a damaging effect on their wellbeing and the level of risk and threat they perceive in aggressive and challenging behaviours. In turn these negative views effect the way people behave in adopting more defensive practices; caring becomes controlling in an attempt to protect them from this perceived level of threat. This is then compounded by the associated negative views and attributions held by nursing staff who are experiencing ‘burn out’ such as pity, anger and depression.

This may also offer up an additional insight as to why nursing staff working on the pilot wards became more successful at managing aggression following PMVA training, whereas staff working on the other unit in a different locality in the organisation remained unable to manage. Nursing staff working in the pilot locality were working well within their established teams and reported feeling confident about their level of skill in de-escalation and their ability to cope with the levels of aggression they were experiencing. The training delivered to the other unit was in response to the unit being closed following a series of untoward incidents and complaints. In such circumstances nursing staff will internalise negative views of their ability to cope which in turn will both limit and impair their ability to respond to change situations as these too are seen as threatening and potentially harmful (Ozer, Bandura, 1990).

## Conclusion

In this paper a realist synthesis process has been applied to a review of PMVA training programmes, with the intention of using it to begin to explore my own experiences in delivering training in PMVA in dementia care. Evaluating PMVA training programmes depends on your perspective and what can be seen from this work is that a simple 'solution' not only has failed to address a very complex problem but has probably made it worse. In understanding the literature from a realist perspective it has been possible to identify not only the underlying mechanisms at work in such training but also the likely conditions which are most likely to support them working. I have used my experience of developing the pilot programme to illuminate these mechanisms, contextualise the data in practice and provide a useful steer as to the prevailing assumptions being made around such programmes.

The root of the matter can be found in looking at the nature of the mechanisms and contexts in relation to each other to give the explanation as to how they work. What has been more illuminating is considering the relationships between the mechanisms at work, something which could not really be appreciated until the literature was analysed and organised into a conceptual model. This model considers the possible negative impact of training as well as the significance of leadership in creating a conducive organisational context. The content of that training appears to be informed by three concepts or programme theories; caring, confidence and coping, which have informed opinion as to how the training works. This explanatory framework also suggests that while the different training programmes reviewed in the literature included some of the theories into their training they did not present them as an inter-dependant triad. The literature seems to suggest that each theory cannot work independently from the other and that in order to work they need each other to be activated.

Realist synthesis as a methodology has the potential to transform our understanding of a contentious and difficult area of study in PMVA training generally and more particularly in people with dementia. However it has its limitations as a methodology; it is complex and time consuming and to create a synthesis that has worth requires methodological expertise and time. Within the scope and remit of this paper that is just not doable. It has though served to demonstrate how a realist synthesis approach to the literature can begin to answer those complex questions asked of such interventions and it is hoped that this initial exploratory study can be used in further evaluation (Pawson, Tilley, 2001, Pawson et al, 2004).

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# Early intervention by early recognition: nurses quality of life, self-efficacy, attitude and detached concern

## Paper

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Keywords: Aggression, mental health, prevention

## Background

Nurses are at high risk of being confronted with aggression (Farrell & Cubit, 2005). This risk is even more elevated for nurses working in psychiatric settings (Bowers et al., 2009; Fingfeld-Connett, 2009; Foster, Bowers & Nijman, 2007; Kindy, Doyle & Dolan, 2002; Peterson & Parkhurst, 2005; Needham, Abderhalden & Meer, 2004; Björkly, 1999). Aggression is a complex phenomenon, caused by multidimensional processes. The development is affected by internal, external and interpersonal factors (Foster et al., 2007; Irwin et al. 2006; Bisconer, Green, Mallon-Czajka, Johnson, 2006). The occurrence of aggression has an impact on and consequences for the patient, the health care practitioner, the therapeutic relationship between both and the environment (Serper et al., 2005). Considering the frequency of aggression and the impact on patients and staff, a sound aggression management is important.

Interventions to prevent or handle aggression are often focused on actions taken by health care practitioners. Hereby the patient is put in an inactive position of undergoing and enduring the staff's actions. Recently more interventions have been developed to enable and promote cooperation between the patient and the staff. The Early Recognition Method (ERM; Fluttert et al., 2008) is an example of such an intervention.

Within the ERM the management of aggression is a shared responsibility of the patient, the nurse and (if possible) the social network. The focus of this method is on the recognition of early signs of aggression. By mapping and monitoring these signs the development of aggressive behavior can be prevented. Working with this protocol enables patients to take responsibility for their own (aggressive) behavior (Fluttert et al., 2008). The ERM proved its effectiveness in forensic psychiatric care settings in The Netherlands (Fluttert, Van Meijel, Nijman, Björkly & Gryndonck, 2010).

## Aim

The aim of the study is the introduction, implementation and evaluation of the ERM method in nine Belgian hospitals on non-forensic psychiatric wards. The evaluation is focused on the impact of the ERM on self-efficacy, attitude, professional quality of life and detached concern of nurses after an intervention period of eight months.

## Method

Nine hospitals are selected to participate in the study. From each hospital at least one, and maximum three wards take part in the study, with a total of 17 participating wards. The wards are selected by two main criteria: length of stay and incidence of aggression. A certain comparability between the different wards is aimed at. Despite this a high diversity exists in terms of patient population and treatment methods, which makes standardization impossible. For this reasons a pre-post design is chosen to evaluate the effectiveness of the ERM protocol.

During the first phase of the research all nurses of the participating wards are asked to take part in the research. After signing the informed consent form, a pre-measurement is conducted. The participating nurses are asked to fill out a questionnaire concerning their attitude, relationship with the patients, self-efficacy and professional quality of life. The questionnaire is therefore composed of four different measuring scales: Attitude Toward Aggressive Behaviour Questionnaire (ATAQ; Collins, 1994), V-Stacon (Betgem, 2000), Confidence in Coping with Patient Aggression Instrument (Thackrey, 1987) and Professional Quality of Life Scale (PROQOL; Stamm, 2009).

In a following phase all the nurses of the participating wards receive a training in preparation of the use of the protocol. The formation consists of two main parts. First it covers theoretical components about the causes and development of aggressive behavior. Besides this the use of the protocol (underlying principles, practical application) is taught during the course. Afterwards the nurses are asked to fill out a short questionnaire concerning the training (knowledge, attitude and skills). The training is provided to enable the nurses to cooperate with the patients in aggression management, using the ERM.

When all the trainings are delivered the implementation process starts. During a period of eight months eligible patients are asked to participate in the research. Patients are excluded if they are younger than 18, don't speak or understand French or Dutch and have less than two aggressive incidents in the anamnesis. Both verbal and non-verbal aggressive acts are included, the anamnesis encompasses the incidents before and during the current admission. After consent, the protocol is implemented until the end of the implementation phase or until discharge. In a final phase the nurses are asked to fill out the post-measurement questionnaire. This consists of the same questions as the pre-measurement.

## Results

The pre-measurement was conducted in October 2010. The training was given in January/February 2011. The implementation process started February/March 2011. The post-measurement is planned for September 2011. The effect of the use of the Early Recognition Method on nurses self-efficacy, professional quality of life, attitude towards aggression and relationship with the patients will be examined. The scores on the different scales and the evolution will be linked to different demographical variables (age, sex, years of experience, education) as well as to the number and nature of incidents at the wards.

## Discussion

This research is part of the development of a comprehensive aggression management. Getting insight in the effect of the ERM on nurses attitudes, self efficacy, professional quality of life and relationship with the patients is relevant to practice because of the emphasis on the cooperation between the nurse and the patients.

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# Chapter 20 – Seminar of the British Institute for Learning Disabilities (BILD) on handling violence in the intellectually disabled

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## Preventing restraint and seclusion in disability services Victoria, Australia: One or two things that could be done differently

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**Keywords:** Challenging behaviour, intellectual disability, restraint, seclusion, restrictive interventions

### Abstract

#### Background.

In Victoria, Australia, the Senior Practitioner's role is a legislative strategy to safeguard the rights of people with disabilities subject to restraints and seclusion and compulsory treatment. The role has extensive legislative powers to influence practice change, lead research and make recommendations for practice improvement to the Minister responsible for Disability Services.

Since 1 July 2007, the focus of the role has been to: (1) monitor, evaluate and report on the use of restrictive interventions and compulsory treatment in Victoria; and direct independent reviews where required; (2) provide education and advice to disability professionals with regard to behaviour support and treatment plans and use of restrictive interventions; and (3) research into restrictive interventions and compulsory treatment to find alternatives to these practices.

#### Results.

Overall, since 2007 there has been a 6% decrease in the total number of people reported to be subjected to restraint and seclusion over the three years. This is primarily in the number of people subjected to chemical PRN restraint (-24%) and seclusion (-21%). On the other hand, there has been no change in mechanical restraint and the use of emergency chemical restraint has increased (56%). At the same time, there has been a significant increase in the quality of behaviour support plans submitted in 2007 to those submitted in 2010.

#### Challenges to advancing practice.

Several challenges exist to advancing practice in Victoria including: The medicalisation of restraint (97% of people are subjected to chemical restraint that is prescribed by medical practitioners) and the gap between policy and practice (the Senior Practitioner can only recommend policy changes).

#### Strategies needed to prevent restraint and seclusion in disability services.

At this stage, it is unknown whether the six core strategies used in the USA (outlined later in this paper) will be sufficient to reduce the use of routine chemical restraint (which is prescribed by medical practitioners) or the use of mechanical restraint. However, in Victoria only 4 of the 6 core strategies described by

LeBel, Huckshorn and Caldwell (2010) have been used. Two strategies needed in Victoria to optimise the transformational change include: leadership at an organisational level and debriefing techniques.

People with an intellectual disability are one of the most marginalised groups of people in our community. As a group they have the poorest health and wellbeing outcomes (on average dying 20 years earlier than those without disabilities, Lennox, Bain, Rey-Conde, Purdie, Bush, & Pandeya, 2007). In Australia, people with disability depend on government funded services and the Victorian government has responsibility for providing accommodation, day, respite and forensic disability services to approximately 24,000 people within the State of Victoria (Australian Institute of Health and Welfare, 2009).

Many of the people with disability have limited ability to communicate and challenging behaviours may be their only way to show distress, which may be correctly or incorrectly interpreted by support workers and carers. Severe challenging behaviours (such as harm to others) often result in adverse events, including police involvement and prison sentences; there is a tendency for there to be a comparatively higher proportion of male and female prisoners with an intellectual disability in the Victorian prison system (Holland & Persson, 2011).

Many challenging behaviours will result in the use of restraint and seclusion by their support workers and carers (Webber, McVilly & Chan, in press). Restrictive interventions impact directly on a person's human rights, limiting among other things, freedom of movement (physical, mechanical restraint and seclusion) and the ability to think clearly (e.g., chemical restraint). Their continued use within disability service settings has been increasingly challenged (Allen et al. 2009; Ferleger 2009; Sturme 2009). Although the reduction of use of restraint and seclusion is currently one of the four national priorities in mental health in Australia, no such national plan exists for disability services.

Most of the evidence about the effectiveness of restraint and seclusion reduction strategies has come from work in psychiatric services. LeBel, Huckshorn & Caldwell (2010) from the U.S.A., have proposed that a combination of six strategies are necessary to reduce the use of restraint and seclusion in adolescent psychiatric services. The six strategies comprise: (a) leadership towards organizational change, (b) use of data to inform practice, (c) workforce development, (d) use of restraint and seclusion reduction tools, (e) improve consumer's role in inpatient setting, and (f) vigorous debriefing techniques. Recently, Azeem, Aujla, Rammerth, Binsfeld, & Jones., (2011) examined the impact of these 6 strategies and reported significant reductions in the use of "manual" (also referred to as physical restraint in UK and Australia) or "mechanical" restraint and seclusion within a year.

It is unclear from this research whether the six strategies are sufficient and necessary for restraint and seclusion reduction because it was not possible to partial out effects of the individual strategies. However, research from psychiatric hospitals in Finland shows that legislative and policy changes alone are not sufficient to result in reductions of manual or physical restraint and seclusion (Keski-Valkama, Sailas, Eronen, Koivisto, Lo'nnqvist, Kaltiala-Heino, 2007).

From work within disability services within the USA, Sanders (2009) used a similar set of strategies to those used by LeBel et al (2010) and found significant reductions in the use of physical restraint (99% less) and 38% less staff injuries from clients. Although similar strategies were used, the way they were interpreted within this particular setting was different in some ways to above studies. For example, Sanders (2009) reported that an important component of their leadership towards organizational change was the increased physical presence and support from management and one of their de-escalation tools used was a procedure they called "extraordinary blocking". To date the studies mentioned above have focused on physical and mechanical restraint and seclusion, none have examined chemical restraint. It is unclear how efficacious the 6 strategies would be within the cultural context of Australia in applying these strategies in the reduction of chemical restraint.

Victoria is the second most populous state in Australia, with a population of approximately 5.3 million people (Australian Bureau of Statistics, 2008). In 2006, the Disability Act (2006) established the role of the Senior Practitioner in Victoria to monitor and protect the rights of people with a disability who were subjected to restraint and seclusion in government funded disability services. The Senior Practitioner's main function is to independently monitor, research, and educate around the use of restrictive interventions and compulsory treatment in disability funded services in Victoria. The establishment of the Senior Practitioner provides a unique opportunity to examine the impact of various strategies to reduce restraint and seclusion, since all disability service providers in Victoria providing government funded services, are required by law to report any chemical and mechanical restraint and seclusion that occurs within their organisation.

The Senior Practitioner developed four main strategies to reduce the use of restraint and seclusion. These were similar to four of the 6 core strategies used by Azeem et al (2010) and Le Bel et al. (2010); they included:

1. Leadership for organizational change.
  - a. The Senior Practitioner communicated a vision to all disability services about promoting the dignity and rights for all people with a disability and safely reducing the use of restraint and seclusion.
  - b. Working with regional leadership groups to find alternatives for people who have complex needs.
  - c. Working with professional organisations such as the Australian Psychological Society and Disability Professionals Victoria to develop practice standards and guidance for their members.
2. The use of data to inform practice. Data is collected on a monthly basis and analysed regarding:
  - a. Who is subjected to restraint and seclusion (e.g., age, gender, disability).
  - b. Where the restraint and seclusion took place, time of the shift, staff involved, and the behaviour of concern that led to the use of restraint or seclusion.
  - c. Effectiveness of restrictive interventions (ratings from service providers)
  - d. The data is shared in all meetings with staff and is used to inform the skills and knowledge needed to be included in workforce development.
3. Workforce Development. Workforce development focused on:
  - a. understanding individual support needs,
  - b. how to complete functional behaviour assessments,
  - c. how to develop focused positive support strategies including de-escalation approaches, and
  - d. how to improve the overall quality of behaviour support planning.
4. Use of restraint and seclusion reduction tools.
  - a. Clinical review by specialists to review and provide suggestions for alternative preventative measures.
  - b. Funding for small change projects to encourage disability service providers to find alternatives to restraint and seclusion.
  - c. A series of plain English reviews about alternatives such as mindfulness, use of comfort rooms, occupational therapy techniques.

The purpose of this study was to assess the efficacy of above strategies in reducing the use of chemical and mechanical restraint and seclusion from July 2007- June 2010.

## Method

These analyses of a de-identified population database were authorised through the provisions of the Disability Act 2006, and in accord with a protocol approved by the Department of Human Services Ethics Committee. Data reported in this paper were those reported by government and non-government organisations (not-for-profit organizations who receive government funding) in keeping with their statutory obligations. Reports covered the months of July 2007 to June 2010. The potential client group predominantly consisted of people with an intellectual disability receiving disability services funding from the government, approximately 0.5% of the population in Victoria (Australian Institute of Health and Welfare, 2009).

## Measures and procedure

Every time chemical or mechanical restraint or seclusion was used when a person was in receipt of a disability service, staff were required to report this use to the Senior Practitioner using an electronic reporting system. It should be noted that the Senior Practitioner does not have jurisdiction over the use of restrictive interventions in schools, family homes or prisons. Consequently, the reports related mainly to adults with disability and a smaller group of children and adolescents who accessed respite services that did fall within the jurisdiction of the Disability Act 2006. For reporting purposes, and consistent with the Disability Act 2006, there were three kinds of restrictive interventions defined: chemical restraint, mechanical restraint and seclusion. *Chemical restraint* referred to the use of medications where the primary purpose was to control a person's behaviour. This precluded the use of medications for the treatment of an identified / diagnosed medical illness or condition. *Mechanical restraint* referred to any device (e.g., gloves, socks etc) that was used to control a person's movement. This precluded devices used for therapeutic purposes or to enable safe transport (e.g., buckle guard on a seat-belt in a car). *Seclusion* referred to the sole confinement of a person with a disability at any hour of the day or night in any room or area where disability services were being provided. Education sessions and on-going support has been provided to service providers about what constitutes restraint and seclusion, especially the "grey" areas of restraint and seclusion; for instance whether a medication constituted "treatment" for an underlying mental illness or a "restrictive intervention".

For each episode of restrictive intervention reported, staff were requested to provide the following information: (1) demographic information about the person subjected to the restrictive intervention, reported using both mutually exclusive categories such as gender and non-mutually exclusive categories such as disability type (note: no identifying information was available to the researchers, with a departmental officer responsible for de-identifying all data prior to analyses); (2) the type of restrictive intervention (chemical, mechanical or seclusion – not mutually exclusive) and type of administration (routine – administered on an ongoing basis e.g., daily, weekly but reported once a month if it had been used one or more times in that month; PRN - administered in response to an incident when authorised within a behaviour support plan (BSP), and reported at each instance of use; or emergency- administered in response to an incident, but not included within a behaviour support plan); (3) the reason for restraint use (harm to self, harm to others, harm to self and others, property damage with harm to self, property damage with harm to others, property damage with harm to self and others).

## Data Analysis

Analyses reported in this paper used whole population data for the period July 2007 to June 2010. The analyses were generally limited to descriptive statistics due largely to the manner in which data had been gathered. In particular, the independence of various groups could not be assumed, as in most instances individual persons were represented on multiple occasions across the data set both in terms of time intervals (i.e., monthly reports) and the types of restrictive interventions to which they were subjected. An *Access* data base was used for data management. Tabulations were undertaken using MS-Excel, with additional analyses using SPSS (Statistical Package for the Social Sciences, Version 19).

## Results

### Characteristics of people restrained and or secluded

There were approximately twice as many males who were reported to be subjected to restraint and seclusion as females (males=66%; females=34%). The average age of people subjected to restraint and seclusion in 2009-2010 was 34.7 years (ranging from 5 to 85 years of age). On average, females were slightly older than males (females =37.5 years old; males=33.2 years old). Previous years show similar findings in terms of average age and the proportion of males to females. The majority of both males and females were reported to have an intellectual disability (96%). The other 4% had either only an acquired brain injury or Autism Spectrum Disorder (ASD), a neurological disability, a physical disability, or some combination of the above disabilities. The majority of males (82%) and females (72%) were also reported to have more than one disability.

### Number of people restrained and secluded

In the year, 1 July 2009 to 30 June 2010, a total of 1952 people were subjected to restraint and or seclusion at least once. This is a 6% decrease since the first year of data collection (July 2007 – June 2008).

The majority of people subjected to restraint and seclusion (97%) were administered some kind of chemical restraint. Those at greatest risk of being chemically restrained were people who were reported to have an ASD. The majority of people who were administered chemical restraint were administered antipsychotic medications.

An examination of different types of restrictive practices showed that over the last three years the number of people subjected to chemical PRN restraint has decreased (-24%) and the number of people subjected to seclusion has also decreased (-21%). The findings also showed that the use of emergency chemical restraint had increased (56%). Emergency chemical restraint is only used if there is no behaviour support plan in place.

There have been no changes in the number of people subjected to mechanical restraint over the three years. This group, for the most part, appear to be the most functionally disabled in terms of having more than one disability and the particular kinds of disabilities (physical, speech, neurological) are likely to impact severely on the person's ability to make their needs known.

### Quality of behaviour support plans

An examination of the quality of behaviour support plans as assessed by the Behavior Support Plan-Quality Evaluation Guide II (Browning-Wright, Saren & Mayer, 2003) showed a significant increase in quality over the three years. That is, behaviour support plans submitted to the Office in 2010 were on average higher in quality than compared to those submitted in 2007 (Webber, McVilly, Fester & Chan, in press). In addition, people who had received fewer restrictive interventions in 2010 than 2007 were more likely to have higher quality plans than those who had received the same or more restrictive interventions

in 2010. The results of this research provide support for the notion that the inclusion of evidence-based quality components into behaviour support plan formats may reduce the use of restrictive interventions.

## Discussion

The above findings suggest that when looking at the total number of people who are subjected to restraint and seclusion in disability services in Victoria, the strategies developed have had only a marginal effect over the last three years. However, the majority of people are reported to be administered chemical restraint on a routine basis which is prescribed by medical practitioners. While this finding is consistent with world-wide trends, it is a concern given the lack of evidence-based support for the efficacy of these medications (Oliver-Africano, Murphy and Tyrer, 2009; Tsiouris, 2010). This finding suggests that the Senior Practitioner needs to find more effective ways to enable closer collaboration and co-operation with the Department of Health who oversee medical practitioners. Cross departmental buy-in has been found to be essential for this change in other countries (LeBel et al., 2010, Whitehead et al., 2008).

Service providers do have control over the use PRN and emergency use of chemical and mechanical restraint and seclusion. An examination of reduction of these types of restrictive practices showed mixed results. On the one hand, decreases were observed in the use of PRN chemical restraint and in the use of seclusion over the three years. On the other hand, no changes were observed in the use of mechanical restraint and increases were observed in the use of all types of emergency restraint (chemical, mechanical and seclusion). It should be noted that the majority of emergency restraint was chemical restraint.

The finding regarding the increase in emergency restraint can be explained by an administrative data-entry loophole. In Victoria, emergency restraint and seclusion is to be reported if either there is no behaviour support plan in place or if that particular restraint and seclusion is not included in the person's behaviour support plan. It appeared that some services were using emergency reporting for months at a time, for what was effectively routine restraint, simply because they had not completed a behaviour support plan. The restrictive intervention data system has now been changed to prevent this.

The finding regarding the lack of mechanical restraint reduction is consistent with the literature in that mechanical restraint is one of the more difficult restraints to reduce for several reasons, including the finding that people who have been mechanically restrained may engage in self-restraint (Powers, Roane & Kelley, 2007; Rooker & Roscoe, 2005) and beliefs that staff hold about the reasons for using mechanical restraint; for example, if a person shows self-injurious behaviour, mechanical restraint is the only possible solution (Schreiner, Crafton & Sevin, 2004). The findings are not consistent with the findings by Azeem et al (2011) but it should be noted that Azeem et al. (2011) examined physical and mechanical restraint together, so it is not possible to directly compare with the findings of this study. In sum, the finding about the lack of changes in mechanical restraint in the present study suggest that some forms of restrictive practices, such as routine chemical restraint and mechanical restraint may require more intensive prevention strategies than other types of restrictive practices such as physical restraint and seclusion. It should be noted that in response to these findings, the Senior Practitioner has recently implemented a mechanical restraint reduction strategy.

Taken together the findings suggest that the strategies currently in place are not sufficient to reduce the use of all types of restraint and seclusion currently monitored in Victoria. When compared to other work by LeBel et al (2010), Azeem et al (2010) and Sanders (2009), two strategies that are missing to some degree are leadership at an organizational level and debriefing techniques. There is considerable evidence within the broader organizational change research to show that transformational change will only be achieved when there is a critical mass of people forming a leadership coalition within an organization (Kotter, 2011). In Victoria, the leadership coalition (headed by the Senior Practitioner) may be too far removed to have an impact on day to day operations. According to Sanders (2009) this leadership coalition must be at the level of the service provider. It is recommended that leadership at the organizational level with a guiding coalition be considered for inclusion in the Senior Practitioner's strategy for reduction of restraint and seclusion.

Although less is known about the impact of debriefing techniques on the change process in preventing the use of restrictive practices, it is likely that debriefing is a critical strategy in moving away from restrictive interventions towards non-traumatising forms of support. For example, the formal debriefing used by Azeem et al (2011) required staff to examine the incident in a root cause analysis fashion, so that staff had to adopt a rigorous problem-solving procedure to identify what went wrong, what could have been done differently, and how to avoid similar incidents in the future. In addition the debriefing procedure used by Azeem et al (2011) also meant that the interventions needed to mitigate the impact of traumatization and re-traumatization to the patient and staff were more likely to be implemented. It is recommended

that debriefing be included in the Senior Practitioner's strategy for reduction of restraint and seclusion in Victoria.

In conclusion, similar to trends in the UK, it could be argued that the four strategies used by the Senior Practitioner have been effective on a few rather than the many (Whitehead, Curtice, Beyer, McConkey, & Bogues, 2008). It appears that prevention of restrictive practices depends both on the strategies used to reduce restraint and seclusion and the types of restraints and seclusion to be reduced. At this stage, it remains unknown as to whether the six core strategies would be effective for reducing routine chemical and mechanical restraint use in disability services in Australia.

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# Restraint and seclusion prevention in the USA: Core strategies to reduce use and sustain gaps

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**Keywords:** Restraint, seclusion, prevention, reduction, core strategies

## Background

The United States has been actively working on reducing and preventing restraint and seclusion (R/S) for nearly a decade (Huckshorn & LeBel, 2009). This process was activated by significant media and federal government attention following a scathing exposé of R/S deaths that occurred and were largely unreported (Weiss, Altamari, Blint & Megan, 1998). Staff and organizations were seldom held accountable for these deaths. Regulatory and accrediting standards were changed and millions of dollars were appropriate to address the problem and develop alternatives to R/S use (LeBel, 2011, 2008).

A comprehensive, multi-year action plan was launched and many resources were developed and implemented by the Substance Abuse Mental Health Services Administration (SAMHSA), the nation's mental health authority (LeBel, 2011). One of the new resources created with federal fiscal support was a curriculum to implement organizational change to eliminate violence and coercion in care (LeBel, 2011; NASMHPD, 2011). The model identified Six Core Strategies<sup>©</sup> which were collectively identified by field experts who had successfully reduced R/S use in a variety of treatment settings (Huckshorn, 2006; NASMHPD, 2011). The model was refined, rigorously studied, broadly disseminated, and taught across the USA and to other countries where it has been adopted and studied (LeBel, 2011).

After nine years of implementation across a variety of care settings, many "success stories" have emerged from Core Strategy implementation as well as exceptional innovations and pragmatic alternatives to R/S use (LeBel, 2011). Essential catalysts for service transformation have also been identified and SAMHSA has realigned its strategic initiatives as a result (LeBel, in press). However, despite significant R/S reductions, innovations, and clinical and economic advantages to practice change, severe national economic and service upheaval pose a significant threat to sustainability.

## Method and results

A review of the literature on R/S reduction prevention identified several methods to change R/S practice including the National Association of State Mental Health Program Directors' (NASMHPD) curriculum, *Creating Violence-Free, Coercion-Free Treatment Environments for the Reduction of Seclusion and Restraint* (NASMHPD, 2011). This curriculum is organized around Six Core Strategies<sup>©</sup> to reduce and prevent the use of R/S and provides a comprehensive approach to implement organizational practice and culture change. It was developed by the NASMHPD Office of Technical Assistance in 2002 (Huckshorn, 2004; Huckshorn, 2006; NASMHPD, 2011). NASMHPD conducted a thorough review of the literature, met with consumers, and convened working sessions with national experts—all of whom had successfully reduced R/S. The experts identified similar patterns of reduction efforts which formed the basis of the Six Core Strategies<sup>©</sup> (Huckshorn, 2006; NASMHPD, 2011).

The Six Core Strategies<sup>©</sup> are imbedded in prevention-oriented, trauma-informed care framework and include: 1) leadership toward organizational change; 2) using data to inform practice; 3) workforce development; 4) use of seclusion/restraint prevention tools; 5) consumer roles in inpatient settings; and 6) debriefing (Huckshorn, 2006; Huckshorn & LeBel, 2009; NASMHPD, 2011). The curriculum also includes an action planning template and implementation checklist. These tools guide the development of a R/S reduction plan and provide organizations with methods to assess their change efforts against multiple tasks and processes over time (Human Services Research Institute, 2009; NASMHPD, 2011).

The Six Core Strategies<sup>©</sup> have been widely taught throughout the US and internationally (LeBel, 2011). More than 4,000 leaders from 48 US states were instructed in this approach (LeBel, 2011). Sixteen (16) states also participated in the Substance Abuse Mental Health Services Administrations' (SAMHSA) grant initiative to implement alternatives to R/S and reduce their use. Most of these states implemented the Six Core Strategies<sup>©</sup> (NASMHPD, 2011). As a part of the SAMHSA grant process, the curriculum was formally studied and the outcomes of the model were evaluated. The evidence suggests that the training

curriculum meets the criteria for inclusion on SAMHSA's National Registry of Evidence-Based Programs and Practices (NREPP) (Human Services Research Institute, 2009; NAMHPD, 2011). The application and data demonstrating the efficacy of the Six Core Strategies© have been submitted for NREPP review and approval for inclusion is pending (Kevin Huckshorn, personal communication, January 10, 2011).

Significant R/S reductions were reported as a result of this Six Core Strategy© training and curriculum. Several examples follow. In Massachusetts, two continuing care hospitals reduced their use of R/S more than 90 percent in less than three years (LeBel, 2011; NASMHPD, 2011). In Maryland, Johns Hopkins Hospital staff participated in NASMHPD's training in 2005 and reduced their use of R/S (-75%) with no increase in injuries to staff or consumers (Lewis, Taylor, & Parks, 2009). Barton and colleagues from Chambersburg Hospital in Pennsylvania (2009) attended the same NASMHPD training. They eliminated R/S use and have not used these procedures for more than four years (Barton, Johnson, & Price, 2009). In addition, Barton and colleagues noted a 22 percent decrease in medication use (Barton et al., 2009). A child and adolescent psychiatric facility in Minnesota conducted a 33-month retrospective review of R/S use before and after the Six Core Strategies© training and reported more than 66% reduced use and 50% fewer youth experienced R/S at their hospital (Azeem, Aujla, Rammerth, Binsfeld, & Jones, 2011). The Medical leadership at this facility took this approach to a facility in Connecticut and achieved significant R/S reduction as well. Moreover, staff and youth conducted, "*Healing Benches*" from restraint beds no longer being used (Waqar Azeem, personal communication, July 16, 2011). At South Florida State Hospital, R/S was discontinued several years ago and staff removed all restraint devices after their second anniversary of being R/S-free (NASMHPD, 2011). In Illinois, Psychiatrist-leaders in a large hospital serving forensic and civilly committed patients reduced R/S 95% and promoted the use of the Core Strategies (Hardy & Patel, 2011).

In addition to R/S reductions and in some cases R/S elimination, other benefits resulted from this or similar approaches which informed the Six Core Strategies© development (LeBel, Huckshorn, & Caldwell, 2010). Several organizations reported significant reductions in staff turnover and related costs and decreased staff injuries, absenteeism, hiring, and retraining costs (LeBel, 2011; LeBel & Goldstein, 2005). Other agencies reported that core strategy implementation resulted in decreased worker's compensation premiums, claims, and medical costs and increased staff satisfaction and staff retention were (LeBel, 2011). Benefits to consumers were identified in successful R/S projects as well. These benefits included reduced injuries and length of stay, decreased medications, reduced incidents of rehospitalization and increased satisfaction with the care provided (LeBel, 2011).

In addition to facility-specific R/S reductions, several states have embarked on large-scale R/S reduction efforts and report significant change in practice and reductions in use (LeBel, 2011). Innovations and practical alternatives to restraint and seclusion have been implemented, such as sensory interventions and methods (LeBel & Champagne, 2010). Key catalysts to service transformation and culture change have also been identified through this process (LeBel, in press). The key catalysts are: trauma-informed care and full consumer inclusion. The catalysts are not mutually exclusive or functional tasks but rather are they are integrally related conceptual positions that require a concerted philosophical shift toward person-centered practice (Jennings, 2007; NASMHPD, 2011).

## Results and conclusion

Statistically significant R/S reduction and in some cases R/S elimination has occurred in organizations that have implemented the Six Core Strategy© framework to reduce and prevent conflict, violence and coercion in care (NASMHPD, 2011; LeBel, 2011). Innovations in staffing, workforce development and alternatives to R/S have been developed and widely implemented (NASMHPD, 2011; LeBel & Champagne, 2010). Many organizations have been able to sustain gains made and advance their reduction/prevention efforts, but some have not. Challenges to R/S reduction, prevention and advancing practice are numerous but not insurmountable.

Central to sustaining this work at the local and national level is unwavering leadership commitment and the appropriation of the necessary resources to make and support the change over time. Key tasks to promoting systemic R/S reduction efforts include strategic action planning, policy development, and application of 'lessons learned' to other R/S-using settings (Huang, 2011). Catalysts for transformative change include trauma-informed care and full consumer inclusion (Huckshorn & LeBel, 2009). All of this work, however, rests upon a fundamental platform of values that promote the prevention of conflict, violence, and the use of coercion in human service settings (Huckshorn & LeBel, 2009; LeBel, in press; NASMHPD, 2011).

The Six Core Strategies© are an effective multi-task method to reduce and prevent R/S and create organizational and practice change in human-service settings (NASMHPD, 2011). Significant reductions

in many different settings have occurred and substantively changed cultures of care. Trans-system application and implementation of the Six Core Strategies© outside of behavioural health is beginning to occur (Huang, 2011; LeBel, in press; NASMHPD, 2011). This provides an important vehicle to maintain gains made and mitigate the potential for a return to past practice, or what some have referred to as R/S reduction 'scotoma' - that is, forgetting progress was ever made (LeBel, 2008; Sacks, 2002).

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# A cluster randomized controlled study of seclusion and restraint reduction in high security psychiatric care

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## Abstract

### Background

No controlled trials have been published on safety and effectiveness of coercion reduction among in-patients with psychotic disorders and violence.

### Aims

To test if safe coercion reduction is possible.

### Method

Four high-security wards for males with psychoses were randomized, and two intervention wards were trained to reduce coercion.

### Results

Patient days with seclusion/restraint/room observation decreased from 30% to 15% at intervention wards vs. from 25% to 19% for control wards during the 6-month intervention ( $p=0.009$ ). The trends of violence did not differ ( $p=0.54$ ). For the entire hospital, the proportion of coerced patients had increased during 2 preceding years but declined during the next two years after the onset of the trial ( $p<0.001$ ).

### Conclusions

It is possible to decrease coercion safely and effectively in the care of violent persons with psychoses. Information and local intervention may have a strong, non-specific, time-dependent effect on the entire hospital.

### Acknowledgements

We are grateful for Dr. Janice LeBell, Kevin Ann Huckshorn, the leaders and staff of the state hospitals of Pennsylvania and South Florida, European Violence in Psychiatric Research Group, particularly professor Richard Whittington and Dr. Brodie Patterson, for help, education and practical advice. We thank the patients and staff of Niuvanniemi Hospital for the project.

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# Integrated Care Pathway: An innovation in secure care services for people with intellectual disability

*Jane McCarthy, Colin Doyle, Debra Moore, Lee Fairhurst  
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## Abstract

### Introduction

St Andrew's Healthcare is a charitable provider of specialist health care for people with mental disorders, intellectual disabilities and acquired brain injury. By putting our service users' needs at the heart of everything that we do, we have built a culture encouraging innovative practices, leading clinical expertise and forward-thinking attitudes.

The Integrated Care Pathway (ICP) is helping us to clearly define and articulate our patient journey through secure care, ensuring that service users are engaged throughout the process as equal partners. Beginning with our Intellectual Disability service, the ICP will help to increase the ownership and shared responsibility with service users for their care and treatment by providing a clear and transparent process of assessment and therapy that addresses the risk factors that brought them into secure care. This requires a change in cultural approach which is driven by Person Centred Care, Planning and Treatment.

### Outcomes

The ICP supports our clinical teams, providing tools, information and resources related to the pathway at any particular stage of the treatment journey. Details of relevant assessments, interventions and tools will be on hand to support the teams in providing the best possible care at the right stage in the journey and these will be available through a user friendly eLearning interface. Initially this will be available for staff, but it is our aspiration to ensure service user access this resource as well.

### Conclusion

Placing service users at the centre of their care improves their experience of secure care; provides clarity of the pathway and works towards a reduction in length of stay, whilst supporting front line staff with the necessary tools, resources and learning to deliver the required programme of intervention.

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# Clinical and process outcomes for positive behaviour support for people with intellectual disabilities and severe challenging behaviour: The P-CPO project

## **Paper**

*Peter Baker*

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## **Abstract**

Positive behavioural support (PBS) combines the technology of applied behaviour analysis with the values base of social role valorisation within a framework of person-centred approaches. This presentation describes the origins of PBS along with the existing evidence base for the approach. The P-CPO project is a multi-centre study attempting to evaluate PBS within the context of routine service provision. Data will be presented that describes the inputs received by users of specialist services in Wales and England along with provisional outcome data.

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# Mechanical Restraint: Impact of support staff

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## **Abstract**

### **Background**

Some people who have intellectual disabilities engage in severe self injurious behaviour and have mechanical restraints applied as part of their behaviour support plans. However, the impact on support staff of applying these restraints has not been investigated.

### **Method**

Interviews were carried out with support staff working in with service users who engage in severe self injurious behaviour and have mechanical restraint in their care plans. The interviews were recorded and analysed using content analysis and emergent coding.

### **Results**

All participants described the use of mechanical restraint as having a negative impact on them. They were concerned about the public's reaction to their use in the community. There were also concerns about competence in their use, training given in their use and whether alternatives could be found.

### **Conclusions**

Support staff who work with clients who have MR in their care plans generally describe this aspect of their work as having a negative impact on them at and out of work. The study also raised concerns about lack of support and training for staff.

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# Experiences of violence at work in NHS Community Learning Disability Teams in the UK

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## Abstract

Much of the research related to experiences of violence at work in community learning disability services has focused on paid carers, with very little exploring the experiences of staff in NHS community learning disability teams who may provide more indirect, or time-limited direct support. This study aimed to address this issue, beginning with a brief survey sent to staff across six NHS Community Learning Disability Teams in South East England. The results of this indicated that 34 percent of the respondents (n=105) had experienced some form of verbal or physical aggression at work during the previous six months. These experiences were further explored using thematic analysis of in-depth interviews with a sub-sample of the respondents. Emerging themes focused on the types of risks faced by this staff group; factors that helped with risk assessment and management (and why these things don't always happen) and how workers develop the skills in managing these risks. Implications are discussed in terms of gaps in current formal training and the role of more informal learning processes in addressing the specific needs of staff working with this client group.

## Educational goals

This study aimed to explore incidents of violence at work in a sample of people working in community learning disability teams in the UK. The cognitive and affective outcomes of these events are explored, with recommendations for training and support networks required to address these.

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# Addressing organizational toxicity in children's treatment facilities that leads to violence and maltreatment

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**Keywords:** Organizational toxicity, institutional abuse, maltreatment, leadership

## Introduction

Child maltreatment in institutional care befalls traumatized and aggressive children who are looked after by adults ill-equipped to care for them in facilities with inadequate program, policy, practices, supervision, leadership, training and clinical oversight (1-4). Maltreatment is often correlated with high levels of aggression and violence between the facility's staff and the young people served, between staff members, and between resident youth (4-9). Yet, child welfare systems, at least in the United States, have few effective responses to address these destructive dynamics and to ameliorate their consequence (10).

To ensure children's safety and their positive developmental outcomes, out-of-home treatment environments must design environments that are aggression and coercion free (11). The aggression reduction literature shows that organizational initiatives that seeks to understand and modify constructs such as culture and climate are essential to the success of any program whose goal is to prevent interpersonal aggression, violence and maltreatment and to improve patient or child outcomes in treatment (12, 13).

## Methodology

This workshop will be based on this author's work as an expert in civil court actions, as a researcher in child fatality studies, and as a consultant to state licensing or regulatory agencies. The author in his professional capacity has observed and examined scores of psychiatric and child welfare agencies that have had either multiple reports of child maltreatment, child fatalities, increasing and dangerous levels of aggression, violence, and high-risk interventions (physical and mechanical restraints/seclusion), numerous children absconding from program, and / or serious and protracted injuries to either children or staff. In the course of this work, the author has noted central themes emerging within the organizational domains of leadership, clinical management, supervision, training, and incident review that have a direct impact on the organization's ability to prevent and manage aggression and violence, as well as child maltreatment.

## Results

Through a brief presentation, case studies and discussion, this workshop will address toxic elements of organizational culture and climate that sustain and re-enforce aggression, violence, and maltreatment. Toxic organizations are characterized by a combination of organizational structures or processes that increase risk factors that lead to negative development outcomes and child maltreatment. In this workshop, seven organizational structures and processes will be viewed through a risk assessment prism that focuses on the themes of leadership, program congruence and integrity, intake, clinical participation, documentation and critical incident review, fear, interpersonal aggression and violence, and supervision. These organizational themes and examples can be summarized in the table below.

Themes	Toxic Facilities	Examples
Leadership	Establishes or maintains a culture that is rigid, authoritarian, formal, and centralized Culture communicates solutions to adverse events or interpersonal conflict in light of compliance and control Defensive approach to risk management Risk management seen as a negative experience	Extensive policy, procedure, rules that governs the actions of every aspect of daily life Risk management seen in the context of compliance and control Leadership disconnected from the daily life of the facility Leadership that gives little support and is inconsistent with its accountability
Program	Compliance based-program governed by the interests of the agency or and staff	Program governed by crisis management principles Little connection between the program and the needs of the child population served Little or no comprehensive training for new or experienced staff Little or no congruence in program articulation among leadership, supervisors, care staff and children served
Intake	Admission criteria linked to need to maintain bed census little or no control over intake	External programs and policies dictate intake decisions Intake influenced by no eject/no reject contracts Financial considerations guide admission No comprehensive system to ensure informed consent No safety and individual crisis management plans developed and adhered to by all parties
Clinical participation	Minimal clinical participation in the daily life of the facility	Little weight given to clinical perspective and no consequences for deviating from clinical protocols Little attention to individual crisis management plans and when written ignored or circumvented Ignoring or circumventing child's safety plan or individual crisis management plans is considered the way we do business around here. Clinical staff removed from children and care staff
Documentation and critical incident review	Reliance on exhaustive documentation of critical events or poor or no or inadequate documentation of events Documentation is seen as a "cover your ass" requirement.	Data gathered is rarely used for prevention of adverse events but rather used to defend the facility from external threat No formal system is available that reviews and assesses adverse events in the facility No functional and structural analysis of aggressive or violent behaviors When reviews are done on events they focus the blame on parties involved
Fear	Documented expressions of fear for safety among staff and children	Fear for safety expressed by staff and children is minimized, ignored, and suppressed Ameliorating fear for safety is seen as an individual responsibility
Interpersonal Aggression / Violence	High levels of aggression and counter-aggression among staff and children	Multiple restraints and police visits Reports of abuse High levels of injury to children and staff
Supervision	Supervisors divorced from the life of the facility Infrequent or non-existent supervision focused on compliance, rules	Supervisors are unavailable and/or not present at all shifts Supervision is infrequent Supervision used to enforce agency rules, policy, and procedure Supervision is disconnected from training

## Discussion

Leadership, supervision, clinical participation, training and critical incident monitoring are never stable but always changing and dynamic. Even subtle modifications in one or two of these areas can significantly change organizational and interpersonal dynamics and risk. It is important to remember that no one theme is paramount but if effective and sustainable change is desired then a focus on organizational leadership and the treatment and care principles and theory program at all levels of the facility is necessary to maximize that change. A central premise of this workshop is that successful aggression and violence reduction programs are quality indicators of treatment and that these programs are driven by leadership and strong developmentally and relationship based program. These leadership and the program qualities inoculate against the toxic elements of an organization that breed and spread aggression, violence and maltreatment. In order to link positive organizational climates to aggression-free treatment environments agency leadership has to connect to the daily life of the facility to develop a culture that encourages risk identification and reduction, self-assessment, communication and individual and systems learning. The

organization's culture and its climate must communicate priorities of aggression and violence prevention, management, and monitoring of foreseen and unforeseen adverse events in child developmental context.

Through the voice and the vision of leadership, the facility's program itself has to achieve program congruence, strength, and articulation within the best interests of the children served (14). Therefore this program congruence must extend beyond the organization's mission and its program philosophy to a clearly articulated program theory and a published theory of change that produces documented positive child outcomes. This congruent articulation of program and the basic philosophy of meeting the child's best interests must be communicated throughout all levels of the organization. The most powerful communication of this message is through the inherent congruence between what is stated by the organization's mission and leadership and what is practiced by all levels of staff and children within their interpersonal dynamics.

## Conclusions

Healthy organizations are a combination of organizational structures and processes that produce safety, positive developmental outcomes and child well-being. Leadership of these healthy organizations inoculate themselves against toxicity by ensuring that their program and practices to contribute to the safety, the well-being and the best interests of children in their care. Healthy organizations are results oriented in that they measure their performance less process performance and more in outcome improvements to children. Healthy organizations seek continuous improvement in their own effectiveness through self-reflection and quality improvement. They focus on those relationships in a child's life that are most important to their well-being and their best interests. Finally, healthy organizations are participation-centered organizations that include service providers, stakeholders in forming policy, designing strategies, and adopting technologies for the well-being of children.

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# The neurobiology of aggression and its implication for management options

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## **Abstract**

A review of the evidence underlying the neural substrate underlying aggressive behaviour. This reviews broad categories of evidence underlying both structural and functional components of the brain associated with aggressive behaviour and points towards a rationale for treatment approaches.

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# Chapter 21 – Seminar: Staffing and patients characteristics in relation to seclusion use

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## Recent developments in reducing coercion in Dutch mental health care

*Gee de Wilde  
The Netherlands*

### **Abstract**

During the last decade many successful attempts were made to reduce coercion and seclusion in Dutch Mental Health Care. In this mainly policy focused presentation two aspects of recent developments in this nationwide movement are clarified.

First of all nowadays the phase of experiments changes gradually into the phase of implementation. After years of creating good practices we know which interventions, methods and environmental changes help to reduce coercion. Not all good practices are science based, but the ‘do’s and don’ts’ are evident. Nonetheless it will take many years to implement these effective interventions. What inhibit organizations to execute new ways of providing good and desired care, where most of the organizations have a policy to reduce seclusion and coercion? What incentives and working methods can help them?

Since 2010 psychiatric wards in general hospitals are engaged in the national program to reduce coercion. In October 2010 eight of them started to join a community of practice (or collaborative). Psychiatric wards in general hospitals are often confronted with coercive measures taken in other departments of the general hospital (physical restraint, chemical restraint, forced feeding). The question is how care providers in general hospitals can learn from their mental health colleagues and vice versa. And do psychiatric wards develop different alternatives to reduce coercion, due to the different patient groups they encounter?

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# How communities of practice can contribute to develop new insights on reduction of seclusion and restraint in psychiatry

*Yolande Voskes, Guy Widdershoven  
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## Abstract

The use of seclusion and restraint in the treatment of mentally ill patients is controversial. In the Netherlands, various mental health hospitals organized projects to reduce seclusion and restraint and to improve the quality of care. Participating health care institutions experienced that the reduction of the amount of seclusion and restraint is not only a matter of staff training or implementing new interventions. To exchange experiences in a community of practice offers advantages to learn from each other. Participants in communities of practice inspire each other mutually and develop new insights by entering in a dialogue on this subject.

In this presentation we explain the learning processes in a community of practice concerning reduction of seclusion and restraint. This community of practice was founded three years ago by five mental health care hospitals in the South of the Netherlands. The community was supported and monitored by researchers of the VU University Medical Centre, who also performed qualitative evaluation research. The topics to be investigated at the meetings were selected by the participants. The community defined several topics, like teamwork, professionalization, prevention and participation. We will describe the processes which took place at the meetings, and present the insights resulting from the meetings.

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# An exchange program for psychiatric nurses of acute wards to reduce the use of seclusion

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## Abstract

In order to reduce the number of seclusions, an exchange program was organized for psychiatric nurses (two per ward) of three acute closed wards of a mental health care institution. The central aims of this experiment were to exchange best practices, to develop new insights in how to provide care and to harmonize care in the three wards. The final aim was to reduce the number of seclusions and aggressive episodes on the wards.

To monitor the effects of this exchange program, qualitative research was conducted in a close collaboration between the mental health care institution and the VU University Medical Centre, Amsterdam. The research method used was responsive evaluation. The nurses were asked to report daily in a journal with semi-structured topics. Interviews were conducted with the nurses that participated in the exchange program a week before and during the exchange period. Interviews were also conducted with the managers of the wards. After the exchange program a focus group was organized with the nurses to evaluate their experiences and discuss insights.

In our presentation we will go into the results of this exchange program. We will focus on the experiences of nurses at the exchange wards concerning culture (communication between staff, and between staff and patients/ habits), physical surroundings and working routines. We will present what the nurses considered most useful in the exchange program and what they intend to introduce at their own ward to reduce seclusions and improve the quality of care. Finally, we will give suggestions how to use exchange programs to develop a continuous learning process on quality of care.

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# Association between physical environmental factors and levels of conflict and containment on psychiatric wards in the Netherlands

## Paper

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**Keywords:** Containment measures, environmental factors, healing environment, psychiatric hospital design, evidence based design

## Introduction

Aggression and conflict on (acute) psychiatric wards threatens the safety of patients and staff. It often leads to the use of containment measures like seclusion and restraint. These measures are emotionally charged and controversial. Inpatient aggression and conflict results from a complex interaction of individual characteristics of patients, staff characteristics and contextual characteristics, like the physical environment of the ward [1].

Little is known about the role of the physical environment in psychiatric hospitals in general, and more specific, to what degree it might contribute to inpatient aggression and containment measures [2,3]. First, because most studies have focused primarily on clinical and demographic characteristics of patients. Second, research on the impact of the physical environment on psychiatric patient behaviours has not been widely or systematically investigated. Some case studies consist of descriptive evaluations of moves from old to new buildings, and report for instance a reduction of psychiatric symptoms, improvement of ward atmosphere, or reduced violence and vandalism. Third, only recently architects and psychiatrists start to pay attention to the rationale and effects of physical design, supported by research in the field of environmental psychology and evidence based design. These studies demonstrate the impact of the physical environment on emotional states, behaviour, and even patient outcomes [4-7].

This study describes the physical characteristics of psychiatric wards in the Netherlands and their probable effect on levels of conflict and containment measures. The results may help to reduce the use of seclusion and restraint, and provide recommendations for the design of psychiatric facilities.

## Methods

The literature was reviewed to identify determinants of aggression and conflict, the use of containment measures, and the features of the physical environment that influence patient and staff outcomes. To assess the relation between ward environment, conflict and containment measures, data from a multicenter study in the Netherlands on building quality and safety of psychiatric hospitals 'the Healthcare Building Monitor/HBM' [8] are combined with data on frequency and type of containment measures in the Netherlands 'the Argus-scale' [9]; while controlling for a range of potential confounding patient and staff factors.

The building features of the wards (HBM) were collected on a site visit by a trained researcher and consist information on: ward size, type of rooms and patient facilities, location, layout, privacy and autonomy, indoor climate, (private and public) space, natural light, views from the window, safety measures, available seclusion rooms, spatial alternatives to prevent containment (e.g. comfort rooms, time-out rooms), available garden, date of construction, single bedrooms, number of beds, ward typology (long stay, acute care), etc.

The Argus-scale measures the use of seclusion, and other types of containment and coercive measures like time-out and enforced intramuscular medication. The incidence and prevalence of these measures were determined per ward across the 12 month sample period (2009) and standardized to wards of 20 beds to adjust for number of patients. Significant univariate and multivariate relations between building features and seclusion and other containment measures are identified. Significant differences between wards are also identified. CATPCA is used to reduce the observed variables (125 building characteristics) to a smaller number of uncorrelated principal components (5-6). Multilevel analysis is used to explore relations on three levels: trust/hospital, ward, and patient. By this the nature of potentially causal connections can be clarified.

## Results

In 2009 the environmental characteristics of 77 hospitals (including forensic care) with a total of 505 (locked) wards (93% of the locked wards in the Netherlands), 491 seclusion rooms (95%) and 199 time-out rooms and 56 other spatial alternatives was collected. Argus-data was available for a total of 199 wards with a total of 2.446 beds covering 23.868 admissions of 14.838 patients either once or more often.

Differences between wards are identified and large variations were found on standardized rates for the various containment measures. For example, the number of seclusions per ward (the first day of admission excluded and standardized to 20 beds) varied between 0.00 and 190.77 (mean 24.70, s.d. 33.58) and n=58 wards (30%) did not have any seclusion incident at all in 2009.

Since 2004 the total number of seclusion rooms in the Netherlands is reduced with 10%. Due to closure of seclusion units and/or transformation of seclusion rooms into more humane alternatives. Recently build seclusion units tend to have an enclosed garden, are located outside the ward, and contain less seclusion rooms. The privacy of patients on the ward has improved (single bedrooms with bathrooms en suite, more private square meters per patient).

Preliminary findings suggest that building features such as privacy and (psychological and physical) space –derived from ward size, number of patients, single bedrooms, private en semi-public square meters- the availability of various facilities on the ward (distraction, stress reduction), comfort and spatial alternatives to prevent containment, may have a positive impact on the level of conflict and containment in psychiatric wards. The atmosphere of the ward and safety level (e.g. impact resistance of materials and interior, fences) is also explored.

## Conclusions

This study explores the role of the physical environment of the ward in reducing the frequency and severity of containment measures in psychiatric care. Certain building features can play a role in the use of containment measures like seclusion. The results indicate that the design of psychiatric hospitals helps. Informed architectural design choices can support health and well-being of patients and staff.

## Acknowledgements

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# Variation in coercive measures over a large Dutch sample: understanding differences

*Eric Noorthoorn, Wim Janssen, Adriaan Hoogendoorn, Petra van der Schaaf, Femmy Keunig, Guy Widdershoven, Henk Nijman*

## Introduction

Aggressive behaviour and carrying out containment measures are an inherent risk in working in clinical psychiatry. In the Netherlands seclusion is the measure of first choice, primarily due to choices made in Dutch law. From 2006 onwards, Dutch government provided nationwide funding aimed at the reduction of containment measures, especially seclusion. To enable evaluation of reduction efforts, a registration rating scale following international standards was developed to count containment measures. This rating scale was implemented in most psychiatric hospitals throughout the Netherlands. To compare data on containment measures between mental health trusts a case register on containment measures was developed. In 2009 17 mental health trusts participated in the register.

One of the first studies (Janssen et al., submitted 2011) involved a comparison of admission wards with respect to seclusion incidents and the proportion of time spent in seclusion. An important finding in this study was the large variation in secluded rates between wards. The number of seclusion hours per 1000 bed hours proved to vary between wards from 1 to 159. While nearly half of the wards showed less than 7 seclusion hours per 1000 bed hours, five wards show figures above 40 per 1000 bed hours. This study, performed on 29 wards within 7 hospitals, showed that 23% of the variability of the time spent in seclusion was explained by ward characteristics, while 10% was explained by patient characteristics.

This current study is aimed to achieve further understanding of the large variability in the use of seclusion in the Netherlands. The study extends the study by Janssen et al (2011) allowing an investigation of more determinants related to seclusion use by using data on patient characteristics, ward characteristics and staff compilation over more data from 170 wards in 15 hospitals. The study addresses the issue to what extent the differences in seclusion rates are contributed to patient characteristics, ward characteristics and staff compilation. Findings presented here are based on first analyses and may be valued as indicative for the final results presented at the conference.

## Methods

### Settings

This study was carried out in all 170 closed wards of 15 mental health trusts in the Netherlands. The size of the wards varied between 4 and 31 beds, with a mean of 12. The wards counted a mean of 1,5 seclusion rooms. At the closed wards a total of 21006 admissions was counted and a bed occupancy of 98%.

The hospitals had a total annual admission number of approximately 25000 and a catchment area of 6.8 million inhabitants. We will distinguish several types of wards: 46 wards were admission wards, 16 provided short term treatment and 29 were long stay wards. 26 provided specialized treatment to specific patient groups, 40 were caring for the elderly and 13 provided treatment to forensic patients.

### Data

Over 2008 or 2009 patient background data were collected in routine hospital procedures over a full year per Mental Health trust. All patients admitted to the participating wards were included. The database covered patient characteristics such as gender, marital status, birth date, ICD10 diagnosis and ethnicity, along with contextual characteristics such as ward type, the number of single and double beds at the ward, ward overview, the amount of space per patient, the degree of autonomy over own space, the spread of personnel at various shifts, the number of nurses and the total personnel at the ward. Hospital characteristics such as urban location, competition within the same catchment area and commitment to reduction efforts were added to the database.

The Argus rating scale<sup>3,4</sup> was used to count containment measures in a reliable way. The proportion of hours in seclusion as related to admission hours was used as outcome measure. Next to the number of seclusion hours, also the number of times enforced medication was administered was counted. The database was ordered at an admission level, counting all measures a patient underwent. Data of the healthcare building monitor<sup>9</sup> were used to identify a number of the ward characteristics. Staff compilation was assessed by means of a survey sent to the participating hospitals.

### **Statistical analysis**

Several frequencies on patient, ward and staff characteristics were calculated at the ward level. Differences between ward types were tested by means of analysis of variance, student-t test and chi square tests. To model the contribution of various variables to the proportion of hours in seclusion multilevel modelling by means of generalized linear mixed models was used, first including patient characteristics, then including ward characteristics and finally including staffing variables. After each step pseudo R-square measures were calculated to determine the contribution of either patient, ward or staff characteristics to the variance.

## **Results**

Table 1 presents the findings on patient, ward and staff characteristics over various ward types. With respect to the patients two counts are presented, first the count at an admission level, then at a patient level. Ward characteristics and staff compilation are presented at the ward level. 13304 of the 13323 patients presented had sufficient data to be included in the multilevel model.

The table shows that men are overrepresented in short term treatment wards, specialized treatment wards and forensic wards. In the elderly wards, not surprisingly, women proved to be more frequent. The table also shows schizophrenic as well as personality disorders are more frequent in the short term treatment wards, the long stay wards and the forensic wards. While patient and ward characteristics vary a quite deal over the wards, the staffing is reasonably constant. Concerning ward characteristics space per patient proved to be reasonably constant, while safety measures of course varied.

In the presentation at the conference the definitive findings of the multi level analysis, which was performed in 3 steps will be presented. The final model will be presented, together with the improvement of pseudo R-square at each step. Preliminary analyses show that in a pseudo R-square matter of speaking, 19% of the variability in seclusion rates is explained by patient variables. When ward characteristics were added this percentage improved by 24% to 43%. Inclusion of staffing to the model showed a small increase of 7%, which is consistent with the small variance of these variables. At the patient level, male sex and schizophrenia were related to an increased proportion of time in seclusion. Being of ethnic minority, an older age, having neurotic, mood, personality or organic brain disorders were related to less time in seclusion. Not surprisingly, the administration of enforced medication was related to more time in seclusion.

At the ward level, ward in itself, the hospital the ward was located in as well as the urban location of the hospital predicted much of the time in seclusion. Ward type and number of safety measures predicted less seclusion time. Space per patient showed predicted less seclusion, but was a small effect. Concerning the staffing, nursing staff proved to predict seclusion, especially the staffing in evening shift. This effect is known from the literature and probably is due to the lesser staffing during night shifts. Teams tend to take safety precautions especially at the change of shifts.

Table 1 Patient, ward and staff characteristics over ward types

	Ward Types														
	Admission		Short term treatment		Long stay		Specialized treatment		Elderly		Forensic		Totals		
Determinants	Patient characteristics														
	N admissions / patients	11999	6859	1286	571	2942	1664	2415	1696	3004	2105	763	428	21609	13323
	Of admissions / patients														
	% Men	48	51	58	61	50	55	59	64	40	40	77	81	50	53
	% not married	73	72	87	83	84	82	86	85	51	49	80	80	74	72
	% ethnic minority	11	10	3	3	10	9	10	10	6	6	16	16	9	9
	age groups% <35	35	35	36	36	22	23	44	44	1	1	50	46	30	27
	% 35-65	61	60	63	62	63	62	54	54	33	29	49	51	56	54
	% 65+	4	5	1	2	15	16	2	2	66	70	1	2	14	16
	ICD10 Diagnoses														
	F0 Minor disorders	18	21	10	11	8	12	12	15	11	13	8	9	14	17
	F1 Substance Abuse	7	7	10	9	7	7	32	35	6	4	17	18	10	11
	F2 Schizophrenia	27	27	42	45	44	44	20	19	26	24	42	40	30	29
	F3 Mood disorders	17	18	12	13	16	13	8	8	23	23	5	4	16	16
	F4 Neurotic disorders	5	5	3	3	3	3	6	5	4	4	2	3	5	5
	F5 Physical syndromes	1	1	0.5	1	1	0.5	1	1	1	1	1	0.3	1	1
	F6 Personality disorders	19	15	16	12	15	13	12	8	10	9	21	21	16	13
	F7 Mental retardation	1	1	1	1	2	1	0.5	0.5	1	1	3	3	1	1
	F8 Developmental	2	2	2	2	2	2	3	3	0.5	0.5	1	1	2	2
	F9 Childhood disorders	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
F10 Organic disorders	2	2	4	3	2	3	2	3	5	5	18	20	2	5	
Ward characteristics															
N wards	46	16	29	26	40	13	170								
Number of patients at the ward	13.3	10.1	11.4	12.3	12.1	11	12.1								
N of security measures (0-6)	0.4	1.5	0.9	1.3	0.2	2.2	0.8								
M <sup>2</sup> space per patient	37	35	34	36	39	41	37								
Nurses in day service / 20 beds	2.8	2.5	2.6	3.1	2.5	2.7	2.7								
Nurses in evening service / 20 beds	2.6	2.3	2.4	2.4	2.1	2.3	2.4								
Nurses in night service / 20 beds	1.3	0.8	0.9	1.1	0.7	0.8	1								
Total number of nurses	14.8	13.5	13.2	14.6	12.9	11.9	13.7								
Total full time in services	18.9	17.3	14.6	18.7	16.8	17.2	17.4								
Patient - staff ratio	1.42	1.71	1.28	1.52	1.36	1.56	1.43								
Mediating variables															
Number of administered enforced medication admission per 1000 admissions	7.1	0.1	44.1	0.2	29.9	4.4	8.2								
Outcome variables															
Number of seclusion incidents	1603	476	676	221	177	241	3394								
Mean / admission	0.14	0.37	0.23	0.09	0.06	0.32	0.16								
Range / admission	0 - 14	0 - 84	0 - 19	0 - 26	0 - 22	0 - 12	0 - 84								
Proportion seclusion / 1000 admission days															
Mean	14.6	20.7	15.2	3.1	2.7	44.5	13.2								
Range	0 - 1	0 - 1	0 - 1	0 - 0.9	0 - 0.7	0 - 0.9	0 - 1								

## Discussion and conclusion

This study analyzed how seclusion rates depend on ward, patient and staffing characteristics. Frequencies of patient characteristics over several ward types showed higher percentages of schizophrenia and personality disorders occurred in admission wards, in wards for the chronic mentally ill as well as in forensic wards. Multi level modelling showed ward characteristics predicted much of the variance. In the presentation the final outcome of the study will be presented. These tentative first analyses show future studies should aim at ward characteristics, not only with respect to the building environment, but also with respect to ward culture, as most of the outcome at the ward level was predicted by ward in itself as well as by the hospital the ward was located in.

# Staffing and patients characteristics as determinants of seclusion

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**Keywords:** Seclusion, staff and ward characteristics

## Background

Seclusion is a widely used intervention to manage violence and aggression in acutely ill psychiatric patients in the Netherlands as well as elsewhere in Europe. Over the past five years several studies into the frequency and duration of seclusion use were carried out (Martin et al 2005, 2007, Janssen et al 2008, Noorthoorn et al 2010, Bowers et al 2010, Janssen et al 2011). Some studies related seclusion to other factors such as characteristics of the patients on the wards or daily staffing on the ward. Previous studies into number of staff on the ward conclude that a larger staffing per shift leads to more patients being secluded (Morrison 1990, Morrison & Lehane 1995). On the other hand, smaller numbers of nursing staff may lead to more prevention of disruption and control of patients' behavior (Gerlock & Solomons 1983, Lendemeijer 2000). Two studies, Nijman et al (1994), Janssen et al (2007) concluded that there is no relationship between number of staff and seclusion use. However, most of these studies are small-scale studies, limited to single wards or hospitals.

Other studies have focused on the relationship between patient characteristics and seclusion. In these studies, schizophrenia and bipolar disorders were found to be the most common diagnoses among patients experiencing seclusion (Thompson 1986, Way & Banks 1990, Noorthoorn et al). A recent study of Janssen et al 2011 (submitted) in 29 admission wards in 7 Dutch psychiatric hospitals shows that a lower Global Assessment of Function (GAF), diagnosis unknown, bipolar disorder, psychosis and substance abuse are related to frequency and duration of seclusion. This study also shows that an overrepresentation of patients with these characteristics predicts higher seclusion incidence and duration figures, especially on small wards. But more importantly the study shows that ward characteristics explain 23% of the variance, while patient characteristics explain only 2%. These studies focus on single determinants of the use of seclusion. In the Netherlands the development of a new registration method on the use of coercive measures, named Argus (Janssen et al 2011 submitted) and the development of a nationwide benchmark open the possibility to investigate the contribution of several determinants to the use of seclusion in large-scale studies.

Over the past years, budget cuts have led to many reorganizations and reduction of personnel. In an international perspective the Dutch wards have one of lowest numbers of staff per patient. Staffing is therefore an issue in the Netherlands and leads to the main question of the current study: What is the relation between the number of patient per staff, patient characteristics and the use of seclusion. Findings presented here are based on first analyses and may be valued as indicative for the final results presented at the conference.

## Methods

For this study we created extreme groups of wards with low and high seclusion use based on the outcomes of seclusion hours per 1000 bed hours. The patient diagnosis on DSM 4 axis 1 was divided into diagnostic categories (0 – 6) according Foulds index (de Jong et al 1986) ascending in seriousness of their illness. Patient diagnosis, global assessment of functioning (GAF) and Staff composition, were compared for both (extreme) groups. A student-t test was performed over wards with either low or high seclusion use, to test differences. Second, a (multilevel) Generalized Linear Model (GLM as well as GLMM) was performed, using these three variables as determinants and the proportion of time spent in seclusion per admission time as outcome. In the multilevel analyses we corrected for dependence of the outcome within wards and hospitals. For diagnosis, a dummy variable was constructed. To determine the contribution by means of the explained variance (McFaddens pseudo-R<sup>2</sup>) of each set of variables to the final model, a stepwise procedure was used.

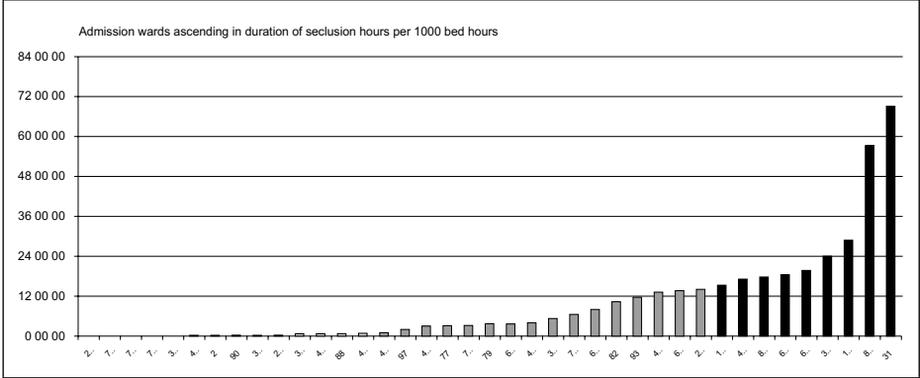
Materials

The seclusions were uniformly encoded by means of the Argus rating scale. Nursing team completed this scale day by day over each patient. Ward managers completed questionnaires on the daily composition of staff and team management. Patient administrations provided anonymous data on patient characteristics such as date of birth, gender, ethnicity, diagnosis and date of admission and discharge of all admitted patients. The number of seclusion hours per 1000 bed hours and number of patients per nurse per shift were calculated using these background data.

Results

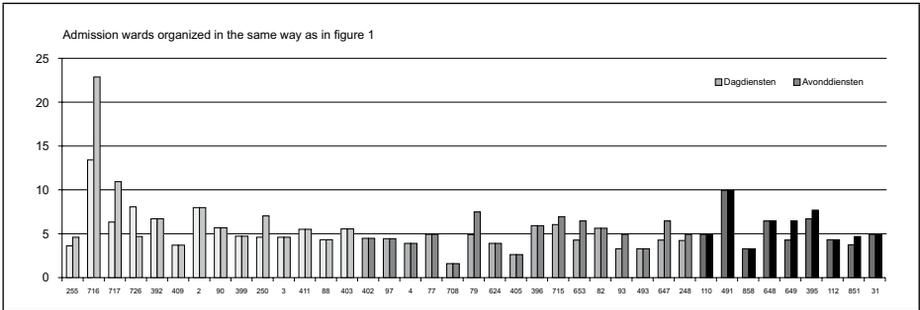
The current study included data of 39 admission wards of 17 Dutch psychiatric hospitals. In the year 2009, 9822 patients were admitted to these wards one or more times. They had access to 41 seclusion rooms (TNO report 034-UTC-00230, 2010). Patients were secluded 23,6 hours per 1000 bed hours on average. Fourteen wards secluded patients less than 10 hours per 1000 bed hours on average. These wards were assigned to the group of wards with low seclusion use. Nine wards secluded patients between 30 and 170 hours per 1000 bed hours. These wards were assigned to the group of wards with high seclusion use (Figure 1).

Figure 1. Seclusion hours per 1000 bed hours of all admission wards



The number of patients per nurse varied between shifts, with 5 patients on average per nurse in the day shift and 5.6 in the evening shift (Figure 2). Wards with low seclusion had respectively 5.3 and 5.5 patients per nurse in the day and evening shift. Wards with a high seclusion had respectively 5.3 and 5.8 patients per nurse. These differences were not significant ( $t=-0,112$ ;  $df=21$ ,  $p=0.91$  and  $t=-0,350$ ;  $df=21$ ,  $p=0.73$ ).

Figure 2. Number of patients per nurse per shift.



With respect to the diagnosis, the Foulds (severity of psychiatric illness) index is 2.68 in average. When we look at extreme groups, we observed wards with low seclusion to have a Foulds index of 2.48 and a mean GAF of 47, while wards with high seclusion use showed a mean Foulds index 2,71 and a mean GAF of 43. Differences were significant ( $t=-4.2$ ,  $df=4546$ ,  $p<0.001$  and  $t=4.8$ ,  $df=3795$ ,  $p<0.001$ ). This implies that the

last wards have more severely ill patients. Within wards with high seclusion rates relatively more patients with no or delayed diagnosis and patients with schizophrenia and less patients with mood disorders or psychosocial problems were admitted.

The univariate General Linear Model showed diagnosis on axis 1, axis 5 as well as the number of nurses in itself proved to have a small effect on time in seclusion ( $R^2=0.023$ ). In a combined model, all variables proved to have a significant contribution. Adding the diagnosis on axis 5 to diagnosis on axis 1 to the model showed some improvement ( $R^2=0.088$ ), while adding the number of nurses in the evening shift provided a powerful improvement of the model ( $R^2=0.48$ ). Interaction effects explained most of the model, implying a combination of variables predicted outcome. Multilevel modelling confirmed the naïve analyses, showing less explained variance but in general the same finding (null model Mcfaddens'  $R^2=0.019$ ; diagnosis only Mcfaddens'  $R^2=0.028$ ; Mcfaddens'  $R^2=0.093$ ; full model Mcfaddens'  $R^2=0.219$ ). These results implied the combination of a more severe disorder on axis one with a lower degree of functioning on axis 5, together with lower number of nurses predict an increasing proportion of time in seclusion.

## Discussion and conclusion

This study shows there is no relation between number of staff on duty and duration of seclusion because of the small variance in the number of staff on all the wards. This is in line with previous findings of Janssen et al (2007). When we look at diagnosis we observed that wards with high seclusion use admitted more severely ill patients than other wards, also in line with earlier studies (Thompson 1986, Way & Banks 1990, Janssen et al 2011). Combined (multilevel) regression models showed staffing in combination with diagnosis and level of functioning on axis 1 does predict seclusion time per admission time. Seclusion time on wards with more severely ill increased by less available personnel, especially in the evening shift. Even though the findings are based on first analyses and need to be seen as tentative, the results of the current study shows that staffing of wards with more severely ill patients is comparable to that of wards with less severe ill patients. Diagnosis is however, different. In the presentation the final results will be presented.

This study shows for the first time that there is no correlation between the severity of patient's disorder and staffing. We conclude a better fit between patient need of health care, as expressed in an increasing severity of diagnoses and lesser global functioning, and number of staff might reduce the number and duration of seclusion use.

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# Announcement

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**The 8th European Congress on Violence in Clinical Psychiatry will be held in the Belgian City of Ghent from the 23rd till the 26th of October 2013.**

**Please reserve these dates in your diary.**

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# Supporting Organisations

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**World Psychiatric Association**



**CONNECTING**

## ***“Challenges for care and treatment”***

“Challenges for Care and Treatment” is the motto of the 7th European Congress on Violence in Clinical Psychiatry held in Prague from the 19th till the 22nd of October 2011.

This book of congress proceedings offers an overview of the work of many clinicians, researchers, and other professionals on topics pertinent to the field of clinical violence such as legal and ethical perspectives on violence, the impact of violence on patients and staff, coercive measures, the pharmacological treatment of violence, the biology of violence, and interventions aiming at treating and reducing violent behaviour of psychiatric and forensic patients. In addition this congress has also a strong focus on treating and reducing severe problem behaviour in persons with intellectually disability.

The congress offers a platform to all persons interested in the subject and to encourage the congress participants to engage in discussion and exchange on the various facets of violence.

Readers of the congress proceedings will benefit from the topical findings presented here and will receive a wealth of stimulating ideas to enrich their own clinical practice.



*Ian Needham  
Henk Nijman  
Tom Palmstierna  
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