User involvement in structured violence risk management within forensic mental health facilities – a systematic literature review

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Aims and objectives. To examine empirical literature on user involvement in collaboration between patients and nurses. The scope of the review was limited to structured violence risk management interventions in forensic mental health settings.

Background. Violence in forensic mental health settings represents a significant problem for patients and staff. Structured violence risk management interventions in forensic mental health have been reported to ignore patient participation, despite the growing attention on user involvement in clinical practice.

Design. A systematic review.

Method. Searches were conducted in six databases: the Cochrane Systematic Reviews, MEDLINE, CINAHL, ProQuest, ScienceDirect and PsycINFO. Papers were assessed according to a predetermined set of inclusion and exclusion criteria.

Results. After searches of the reference lists of retrieved articles were conducted, only three papers met the inclusion criteria.

Conclusions. This review has shown that empirical research on the topic of risk management interventions in which patients are involved is scarce.

Relevance to clinical practice. There is barely any research evidence of the clinical effect of user involvement approaches on violence risk management in forensic mental health practice. Therefore, we suggest that clinicians may learn from positive experiences concerning user involvement in general psychiatry and carefully adapt and test them out in the forensic treatment context.

Key words: forensic psychiatry, structured risk management, systematic review, user involvement, violence

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Introduction

Inpatient aggression and violence represent a significant problem, with adverse effects for both patients and staff in forensic mental health facilities (Bowers et al. 2006, Martin & Daffern 2006, Lauvrud et al. 2009, Nicholls et al. 2009). Recent years have seen a growing body of studies on violence risk management concerning patients’ early...

Structured violence risk management interventions in forensic mental health have been reported to ignore patient participation, despite the growing attention on user involvement in clinical practice. User involvement is increasingly recognised as valuable and important in mental health settings (Stringer et al. 2008). Tilley et al. (1999) defined user involvement as the extent to which the patient is involved in defining problems and setting the targets that constitute the plan of care. Involving the patient in developing and implementing violence risk management plans has several benefits. It may lead to a better understanding of the patient’s perspective. It also increases the likelihood that patients take responsibility for their own actions and further development (Kroner 2012).

Two decades ago, Kalogjera et al. (1989) and Bjørkly (1993) already suggested that structured violence risk management approaches should be based on an interactional understanding to mitigate risk of violence in psychiatry. This approach has been offered support by more recent literature emphasising that patients’ active participation in reconstructing vulnerable interactions and precursors may contribute to insight into factors that are related to the onset of aggression (Bulten et al. 2009, Nicholls et al. 2009). Still, despite the potential advantage of user involvement in the development of efficient violence risk management strategies within forensic mental health services, empirical research on such strategies has been claimed to be scarce (e.g. Encinas et al. 2005).

Admittedly, some research publications have addressed the issue of user involvement in forensic psychiatry (e.g. Faulknner & Morris 2003, Duxbury & Whittington 2005, Meehan et al. 2006). However, very few have specifically aimed to develop and implement treatment and risk management strategies. This may be due to the fact that user involvement in forensic mental health nursing has obvious challenges because of the restrictive and coercive nature of these services (Pouncy & Lukens 2010). One important approach to user involvement in developing and implementing violence risk management strategies invites patients to contribute with their knowledge concerning idiosyncratic warning signs and interactional vulnerability. In many cases, this important knowledge is not very easily accessed by persons other than the patient. For instance, if a patient has warning signs that are predominantly of an intrapsychological nature, then it is very likely that these signs will be inaccessible to nurses’ observations. Without user involvement and cooperation, important information that may inform treatment and risk management plans will be ignored (Fluttert et al. 2013).

The increasing focus on user involvement in mental health services has led to a growing demand for tools and methods to support this development (Stringer et al. 2008). However, the state of the art concerning empirical research on tools and methods for this purpose in forensic mental health services is not yet clear. This systematic review was conducted to examine the empirical literature on user involvement in collaboration between patients and nurses.

Aims and objectives

The principal aim was to do a systematic review of the published literature on user involvement and patient–nurse cooperation concerning structured violence risk management strategies in forensic mental health. The scope of this review was limited to structured violence risk management interventions in forensic mental health settings.

Method

Data collection

The following databases were searched for scientific publications in the anglophonic literature: The Cochrane Systematic Reviews (1992–October 2012), MEDLINE (1980–October 2012), CINAHL (1980–October 2012), ProQuest (1980–October 2012), ScienceDirect (1980–October 2012) and PsychINFO (1980–October 2012). The search terms (MESH terms and free text) were progressive, stepwise and gradual: forensic psych* or forensic mental health AND interv* or progr* or method AND aggress* or violen* AND risk management AND user involvement or user participation. The authors also conducted hand searches in the reference lists of the retrieved articles of journals on forensic mental health (n = 264). The issues of volume one to nine of the International Journal of Forensic Mental Health were hand-searched by two of the authors (GE and FF) because these volumes were not indexed in literature databases.

Assessment criteria

Studies were assessed using predetermined inclusion criteria and a final consensus decision by the authors.

Inclusion criteria for study type

Studies were included if they provided qualitative or quantitative data from empirical research on violence risk management strategies that were based on user involvement in forensic mental health settings. In accordance with previous recommendations, studies were excluded if they had only
been published as abstracts or conference proceedings (e.g. Lloyd Jones 2004).

Inclusion criteria for studies of forensic risk management

The term forensic mental health covers all levels (low, medium and high) within this specialised field of mental health services for adult patients (≥18 years). The operational definition of violence risk management was any systematic treatment strategy carried out to reduce risk of violence within a forensic mental health setting. User involvement was defined as the user’s contribution to plan and/or participation in measures taken to mitigate risk of violence. Interventions were only included if they involved strategies based on cooperation between patients and forensic mental health professionals. Publications on seclusion, control and restraint methods, de-escalation or crisis intervention techniques to manage imminent violence without involving nurse–patient cooperation were excluded from the review.

Sifting retrieved citations

The titles and abstracts of all obtained articles were assessed independently by the first (GE) and second (FF) author and included for further analysis by consensus agreement. The final decision of inclusion of full-text publications was also taken after consensus agreement between the authors (see Fig. 1).

Results

A total of 264 articles were found. Two full-text articles were included after consensus agreement (Jones & Hollin 2008, Fluttert et al. 2010). Hand searches of reference lists in articles published in forensic psychiatry journals yielded one more article (Bjørkly 2004) and a total of three full-text articles for analysis. Two articles presented data from quantitative research methodology, and one article showed data from a literature review and a case illustration. The articles addressed the following structured violence risk management strategies: The progression ladder approach (ProLad) (Bjørkly 2004), managing problematic anger (MPA) (Jones & Hollin 2008), and the early recognition method (ERM) (Fluttert et al. 2010) (Table 1).

A brief introduction and discussion of violence risk management strategies in included articles (n = 3) (Bjørkly 2004, Jones & Hollin 2008, Fluttert et al. 2010).

Often patients have impaired insight into their illness and the need for treatment. Therefore, these patients may not be motivated for treatment. In the document prepared for the National Mental Health Risk Management Program ‘Best Practice in Managing Risk – principles and evidence for best practice in the assessment and management of risk to self and others in mental health services’, user involvement is recommended: ‘Risk management should be conducted in a spirit of collaboration and based on a relationship between the service user and their carers that is as trusting as possible’ (Department of Health 2007, p. 11), and further ‘Risk management must be built on a recognition of the service user’s strengths and should emphasize recovery’ (Department of Health 2007, p. 11).

The Progression Ladder approach (Bjørkly 2004) requires that patients are motivated to create their own progress through active collaboration with nurses. A wide spectrum of goal areas may be integrated in this strategy. A patient may, for instance, work on anger management, coping with violence-triggering psychotic symptoms and social skills training at the same time. This versatility concerning goal areas allows nurses and patients to work within two inter-related risk management modalities: risk reduction and personal growth.

In the ERM (Fluttert et al. 2010), emphasis is on the recognition and management of early warning signs of aggression that may include psychotic signs and symptoms or changes in behaviour in the early onset of aggression. It is primarily an inpatient strategy, and descending rates of inpatient violence may be an indication of its contribution to more stability in the patients’ behaviours. In the early phases of ERM, however, motivation is not a main issue because also less-motivated patients can be introduced to the ERM initially to have a conversation about nurses’ perceptions of the patients’
early signs and behaviour. However, in the long run, it is an explicit goal to make patients engage in analysing and responding to their own warning signs. ERM was originally developed for patients admitted by court to an inpatient forensic unit. One important goal of the ERM is to assist patients in gaining insight and developing pro-social skills to prevent relapse, when early warning signs are recognised. ERM also offers an opportunity to be applied by members of the patient’s social network. However, so far, the ERM framework has mostly been applied in the inpatient context.

Managing problematic anger (Jones & Hollin 2008) is an anger management programme specially adapted for mentally disordered offenders in high-security settings. A cornerstone of the MPA is that patients are motivated to engage in the modules and sessions. Nursing mentors are involved in collaboration with the patients both during the sessions and modules and, as well, at the ward, between the sessions. The MPA is a structured programme, based on 36 sessions in three modules: Module 1: Preparing for change (six sessions); Module 2: Recognising and owning anger (16 sessions); Module 3: Reducing problem anger (14 sessions). The two-hour per week group sessions have a predefined session plan. The one-hour per week individual sessions, however, are based on the information and experiences regarding the patient’s log book, the hassle log, where the patient registers and monitors anger-provoking situations arising in daily living between the sessions. In MPA, an anger assessment protocol is used to formulate a personalised treatment plan: ‘Mentors have a specific focus on enhancing skill practice and transfer to everyday situations. Group sessions are conducted where the patients and their mentor work together on individual or small group exercises. Outside these sessions, the mentor continues to assume responsibility for the patient, providing support, skills coaching and liaison with the patient’s clinical team’ (Jones & Hollin 2008, p. 202).

### Participants and setting

Progression Ladder (Bjørkly 2004), MPA (Jones & Hollin 2008) and ERM (Fluttert et al. 2010) were developed in forensic mental health units for involuntarily admitted patients with major mental illness and/or personality disorder and violent behaviour.

### User involvement features

Progression Ladder (Bjørkly 2004), ERM (Fluttert et al. 2010) and MPA (Jones & Hollin 2008) are all rooted in cognitive behaviour therapy (CBT) and humanistic psychology. Patients are acknowledged as individuals with an in-born capacity for personal growth, self-determination
and self-control (Bjørkly 2004). A structured approach to gain insight into their coping strategies and shortcomings may enhance patients’ abilities to identify and manage their precursors of aggression and to cope with stressful situations. The aim is to enhance patients’ self-control and growth. Special attention is given to develop individualised interventions to recognise recurrent individual warning signs and stressors.

The ERM is a violence risk management approach where patient and nurse cooperate to describe, monitor and evaluate patients’ individual and idiosyncratic early warning signs of aggression, ‘signature risk signs’ (Fluttert et al. 2008, 2013). The early warning signs and a related relapse prevention strategy are described in the individual patient’s early detection plan (EDP).

One significant characteristic of the ProLad (Bjørkly 2004) approach is the dual emphasis on personal growth and self-management of violence. Patient and nurse cooperate to identify potential goal areas of growth concerning social interaction, work, leisure, education, etc. The next step is to develop a coping ladder that can assist the patient in a stepwise approach towards the actual goal. The joint efforts are supposed to create a patient–nurse fellowship that will enhance motivation and progression. The same procedure is followed for self-management of violence, but here the emphasis is on the identification of warning signs of violence and interactional vulnerability. The progression ladder is developed similar to a stepwise advance agreement for this purpose. After the situations that increase risk of violence and the individual warning signs have been recorded, the next step is to construct a ladder. Typically, the first step of the ladder is characterised by nurses initiating the interventions to prevent violence. Step-by-step, the responsibility for initiating and carrying out the intervention is taken over by the patient (Bjørkly 2004). One of the assets of ProLad is that it is highly structured. The progression ladder may be used in the hospital or as an approach to the transition between hospital and the community. This strategy assists patients and caregivers in an organised way to plan and monitor patients’ behaviours according to the interventions that are described for each step of the ladder. The evaluation of the individual patient’s progression, if he or she has met the coping criteria for one step, is recorded immediately afterwards by the patient and the nurse.

Managing problematic anger (Jones & Hollin 2008) is a manualised structured cognitive behavioural treatment programme, in which the patient is invited to reveal and work with his or her own problematic anger. MPA focuses on patient involvement and self-management. The MPA involves individual and group sessions. ‘Managing problematic anger involves the patient in developing arousal reduction techniques, engaging in cognitive restructuring and acquiring behavioural skills to respond appropriately to cues that previously would have evoked an aggressive response’ (Jones & Hollin 2008, p. 201–202). Between the sessions, the patient and his or her nurse (mentor) or treatment team cooperate to develop and implement risk management strategies at the ward. The experience of this process is brought back to the sessions for evaluation.

Outcome

Efficacy of violence risk management strategies

In the case illustration of the ProLad approach (Bjørkly 2004), the challenges and progress of Tom, a forensic mental health patient, are detailed within two of a total of eight goal areas: coping with psychotic symptoms and physical nearness to others. Tom constructed a six-step progression ladder together with the nurses. After two years of training, Tom had achieved a stable functioning at steps 5 and 6. The criterion for reaching these steps was that he could use two different strategies to cope with psychotic symptoms. The ‘physical nearness’ ladder had 10 steps, but Tom’s progression was much faster in this ladder.

In the MPA study (Jones & Hollin 2008), all of the eight patients diagnosed with personality disorder and a history of violence completed the 36-week programme with an average of 33 sessions. The study used psychometric scales and behavioural ratings to measure baseline data and post-treatment results. MPA showed overall positive results in all domains measured: cognitive domain, arousal domain, behavioural domain, provocation. Also, using the aggression questionnaire, there was a reduction regarding all four components: physical aggression, verbal aggression, anger and hostility. The frequency of anger-related behaviours gradually decreased from 103 pretreatment incidents to 27 incidents after treatment (Jones & Hollin 2008).

In the ERM study (Fluttert et al. 2010), the outcome variables were rates of seclusions and severity of occurred aggressive behaviour, measured with the staff observation aggression scale - revised (SOAS-R) (Nijman & Palmstierna 2002). All patients (n = 189) in a forensic psychiatric hospital were investigated over a 30-month period. The results showed a significant decrease in the use of seclusion from 219–104 episodes. The severity of aggression decreased significantly, too. Patients with schizophrenia and patients with antisocial personality disorder had the best results in the study (Fluttert et al. 2010). Overall, the effect sizes were small; however, a medium effect size was found for a subgroup of patients with substance abuse problems.
Discussion

Only three articles were included in the review (Bjørkly 2004, Jones & Hollin 2008, Fluttert et al. 2010). This is a rather disappointing result given the increased focus on violence risk management (Duxbury & Whittington 2005, Fluttert et al. 2008) and on user involvement in mental health services (Faulkner & Morris 2003, Cleary et al. 2012). Our findings are in line with Faulkner and Morris (2003) who found little evidence of user involvement in forensic mental health research in their study. The authors concluded that research involving service users was limited in forensic services. They suggested that this was due to difficulties in recruiting service users who were motivated to participate in research and practical problems such as confidentiality. Carlin et al. (2005) studied service users’ satisfaction on initial assessment and care planning, in a medium-secure setting. Only 42% of the service users reported satisfaction with treatment choices having been discussed at admission, and only 44% felt involved in initial assessment and treatment planning.

The findings from our review suggest that there might be some agreement on what is best practice. Interventions based on principles from CBT seem to be dominant concerning user involvement in violence risk management approaches. This concurs with findings from other investigations of interventions and programmes for reducing violent recidivism in mentally ill offenders (Yates et al. 2005, Haddock et al. 2010).

Martin and Street (2003) studied forensic psychiatric nurses’ therapeutic relationship to patients. They found that in the early stage of the relationship, the nurses’ therapeutic goal was to develop mutual trust and respect, while striving to achieve desired patient outcome. Stringer et al. (2008) conducted a systematic literature review on the effects of user involvement in shared decision-making processes and the methods available to psychiatric nurses to measure and encourage user involvement. They found that many studies suggested that increased involvement of service users leads to better care, better treatment compliance, improved health outcomes and higher levels of patient satisfaction. They also stated that nurses should be trained to become more capable to shape user involvement in daily practice (Stringer et al. 2008).

ProLad (Bjørkly 2004), MPA (Jones & Hollin 2008) and ERM (Fluttert et al. 2010) are violence risk management strategies aiming at patient’s self-management of violent behaviours. Studies on the use of both MPA and ERM showed a decrease in the intensity of patients’ anger and of aggressive incidents. The interventions emphasise personalised, collaborative and individualised perspectives, with a special focus on the early warning signs and triggers for anger and aggression. The strategies are outlined in a precisely described, stepwise structured management approach. In ERM, nurse and patient observe, monitor, record and evaluate the patient’s behaviours as established in the intervention plan. The clear and systematic instructions to applying the method assist nurses in their risk management endeavours. In the Best Practice in Managing Risk – principles and evidence for assessment and management of risk to self and others in mental health services, it is stated that ‘Risk management must always be based on awareness of the capacity for the service user’s risk level to change over time, and recognition that each service user requires a consistent and individualised approach’ (Department of Health 2007, p. 6).

Findings of limited staff–patient interaction during an average day on a high-secure ward indicate that there is a need for more structured interaction approaches (Whittington & McLaughlin 2000). The structure and predictability in ERM (Fluttert et al. 2010) and ProLad (Bjørkly 2004) provide a flexible and dynamic approach in clinical practice, and the effectiveness of these risk management interventions is less dependent on extensive staffing and resources. When nurses and patients explore the early warning signs of violence risk together, it may contribute to enhanced insight into the process of violence escalation and finally contribute to decreased inpatient violence (Fluttert et al. 2010). The MPA (Jones & Hollin 2008) has structured sessions where patients contribute to problem identification, goal setting and self-evaluation. During the MPA sessions and as ‘homework’ at the ward, the patients and their mentors use the MPA principles to assist in gradual development of problem-solving techniques and skills. Two decades ago, Mullen (1993) suggested that to minimise risk of relapse, the bridge from inpatient to outpatient treatment should be gradual and not a sudden plunge. Both ERM and ProLad are designed to enable the continuation of the strategy in the transfer from inpatient to outpatient settings.

Structured risk management strategies, such as ProLad (Bjørkly 2004), MPA (Jones & Hollin 2008) and ERM (Fluttert et al. 2010), may contribute to further development of the nursing discipline by introducing a systematic, well-organised approach to patients’ violence and aggression as an alternative to ad hoc responses (Wright et al. 2002). These strategies can also contribute to changing nurses’ focus from intervening on behalf of the patient to a
stronger emphasis on collaboration with the patient in shared decision-making concerning patient progress towards self-management (Drake et al. 2009). Moreover, violence risk management strategies based on early intervention principles have the potential of reducing violence and subsequent use of coercive measures, such as seclusion (Fluttert et al. 2010). The ultimate aim is patients’ self-management, in the sense that patients become able to recognise early onset of escalation towards aggression.

Overall, the main concerns of nurses working in forensic facilities are ‘security vs. therapy’ and ‘assessment and management of violence’ (e.g. Mason et al. 2009). Nurses fulfil a prominent role in preventing patients causing dangerous situations, such as threatening or abusing others (Mason et al. 2008). The quality of the working alliance between nurses and patients is a major determinant of the successful application of risk assessment and management strategies in forensic care (Rask & Brunt 2006). Such management strategies are more likely to be successful when patients feel accepted and involved in a mutual relationship (Meehan et al. 2006). In a recent study of forensic mental health patients’ perceptions of the treatment planning process, some patients reported that they were involved in their treatment plans; others felt that their involvement was limited and usually occurred after the plan had been completed by the staff (Livingstone & Nijdam-Jones 2013). The users emphasised that this in fact strengthened their feeling of exclusion and anxiety. In our opinion, the treatment alliance may be weakened if the user is involved in discussions concerning, for example, medication, unaccompanied leaves or other parts of treatment when the final decision actually already has been taken by the staff. We suggest that further nursing practice and research may want to develop and test out more flexible models that differentiate user involvement according to the present capacity of the individual service user and the phase of illness and development he or she is in. This concurs with the basic idea of the ProLad approach, involvement and responsibility must be based on and framed as a mutual and dynamic interaction between nurses and users. Patients’ (self)-management of aggression, that is, actions patients initiate to control their aggressive impulses, should be an important issue during treatment. (Self)-management of patient aggression may be enhanced through the development of collaboration strategies for nurses and patients pertaining to risk assessment and management.

Therefore, future research may want to focus on important determinants for the development of a good working alliance between nurses and patients, specifically related to risk management strategies. Ideally, this research should be performed by observing how user involvement is carried out in practice, but interviews and surveys of how user involvement is perceived by the participants and possible suggestions for improvement are also called upon. Some further suggestions for future research may be:

1. To conduct basic descriptive research of the state of the art concerning user involvement in forensic mental health nursing:
   a. Is it an integrated part of nursing practice in forensic psychiatry? How is it carried out?
   b. What are the experiences like, so far?

2. To investigate user involvement in the context of two potentially conflicting nursing roles: provision of care vs. control and protection of society.

3. To develop and validate different approaches to meet disagreement between service user and nurse in user involved processes.

4. To develop and validate different models for user involvement.

Conclusion

Clinicians and researchers agree on the importance of developing structured violence risk management programmes that focus on user involvement and collaboration. However, this review has shown that empirical research regarding this topic is scarce. The papers included in this review describe individualised violence risk management interventions. Further research and development are required. Our review of the literature indicates that there is still a long way to go. Further research on violence risk management strategies with user involvement in forensic mental health nursing is called for.

Relevance to clinical practice

The research and practice gap about effective means of engaging service users in forensic facilities pertain to organisational, educational and treatment issues. First, one must consider limitations to the feasibility of user involvement in this special context. We have suggested the need for developing a differentiated model for organising this work. A paramount issue is what kind of decisions the patient actually can be involved in at his/her present stage of development. ‘Premetings’ where staff comes to decisions about care and treatment before the patient is involved may be counterproductive for the treatment alliance and for the user’s motivation to collaborate with caregivers. This calls for a process of increasing awareness of how we structure and organise this work. According to
Disclosures

The authors have confirmed that all authors meet the ICMJE criteria for authorship credit (www.icmje.org/ethical_author.html), as follows: (1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content and (3) final approval of the version to be published.

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Review

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