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Violence Risk Identification, Assessment and Management Practices in Inpatient Psychiatry

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Abstract

Serious mental illness is a major risk factor for violence. Research suggests that many committed psychiatric inpatients have perpetrated violence before, during, and after hospitalization. Despite the prevalence and implications of violence among committed psychiatric patients, the responsibility of health care professionals to identify, assess and manage violence risk, and the development of identification and assessment tools to assist health care professionals in discharging their responsibility, little is actually known about what practices are being used to identify, assess and manage violence in inpatient psychiatry units. The purpose of this study is to obtain a better understanding of violence risk identification, assessment and management practices used by inpatient psychiatric units. Specifically, this study involved semi-structured interviews with key informants from 13 inpatient psychiatry units in the largest health region in Western Canada. Every inpatient psychiatry unit that was invited to take part in this study agreed to participate. Data were analyzed using frequency and content analysis. The analysis revealed limited use of formal identification and assessment instruments for violence and diversity with respect to strategies used to manage violence. These findings have implications for highlighting promising practices that are currently being used and identifying potential areas for future improvement.

Keywords: risk identification, risk assessment, risk management, inpatient psychiatry, violence

Violence Risk Identification, Assessment and Management Practices in Inpatient Psychiatry

Although the majority of individuals with mental illness do not commit violence, serious mental illness is a major risk factor for violence (Brennan, Mednick, & Hodgins, 2000). Research suggests that many committed psychiatric inpatients have perpetrated violence before, during and after hospitalization. A 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). Additional studies focusing on a large psychiatric hospital in Western Canada indicate that 46% of committed psychiatric inpatients engage in violence while hospitalized, and up to 38% commit violence in the community within two years of their release from hospital (Douglas, Ogloff, Nicholls, & Grant, 1999; Nicholls, Ogloff, & Douglas, 2004). Furthermore, one study of the prevalence of violence among patients admitted to an emergency psychiatry unit within the largest health region in Western Canada illustrates that 42% of patients were violent prior to admission and 31% of patients were violent during admission (Watt, Levy, & Hart, 2009). 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).

Due to the complex nature of violence, one of the many factors that accounts for the varying rates of violence across studies is how violence is defined. There are virtually dozens of definitions of violence used in research and practice that will have implications for what is "counted" as violence. The wide range of definitions reflects differences with respect to the nature of the act, the intent of the perpetrator, and the consequence for the victim (Hart, 2009). For instance, broader definitions of violence may include aggression to property (e.g., hitting, kicking, throwing, or burning objects) and aggression to persons (e.g., yelling at, swearing at, or

insulting people). Alternatively, narrower definitions of violence may be restricted to those that constitute a breach of criminal law and result in a criminal arrest, charge or convictions (e.g., threats, assault, or forcible confinement). For the purposes of this paper, violence is defined as the actual, attempted, or threatened physical harm of another person that is deliberate and nonconsensual, which is a well-accepted definition of violence used in research, practice, and law (Douglas, Hart, Webster & Belfrage, 2013).

Violence perpetrated by individuals with serious mental illness has major implications for the victim, perpetrator, and community. The consequences for victims of violence are the same whether the perpetrator has mental illness or does not have mental illness. However, the consequences for victims of violence perpetrated by those with mental illness are often minimized and accepted when the victims are health care professionals which may compound the psychological harm (Watt et al., 2009). The first implication is that victims of violence often suffer from physical injury and psychological trauma that may extend over long periods of time (Flannery, 1996; Gerberich et al., 2004; Krug, Dahlberg, Mercy, Zwi, & Lozana, 2002). Physical injuries range in severity from bruises and abrasions to permanent disability and death. Psychological harm may result in symptoms of anxiety and depression, such as intrusive recollections, avoidance of daily activities, hyper-vigilance, exaggerated startle response, irritability and anger, sleep disturbance, and sadness (Flannery, 1996; Gerberich et al., 2004; Krug et al., 2002). When these symptoms persist over time, increase in severity, and impair functioning, they can lead to major depressive disorder, acute stress disorder, or post-traumatic stress disorder (Brewin, Andrews, Rose, & Kirk, 1999).

Second, perpetrators of violence with serious mental illness may face increased stigma that reinforces myths that all people with mental illnesses are dangerous and should be detained

in hospital or incarcerated in order to maintain community safety (Hodgins et al., 2007). Lack of understanding of the dynamic nature of violence, risk factors associated with violence, and the possibility of managing violence risk further exacerbates the stigma. This may lead to a greater emphasis on punishment and containment rather than treatment and rehabilitation across the health care and criminal justice systems. The compounded stigma associated with individuals with mental illness who perpetrate violence often results in serious problems in relationships, employment, housing, and social functioning (Friedman, 2006). It may also contribute to limited access to existing inpatient services, reluctance to develop new outpatient services, and decreased quality of care (Duncan et al., 2001; Hodgins et al., 2007; Kingma, 2001).

Third, violence perpetrated by individuals with serious mental illness results in a financial burden to criminal justice, social service, and health systems. For instance, violent incidents may increase costs for health care settings due to the impact on staff such as reduced morale, decreased productivity, increased absences, and high turnover (Fernandes et al., 1999; Jackson, Clare, & Mannix, 2002). Additional costs may result from hiring and training expenditures needed to compensate for the decline in performance and loss of staff as well as from resources necessary to combat negative media accounts and restore a settings reputation (Kling et al., 2005). Experts have argued that the financial costs that occur following a violent incident could be significantly reduced by increasing resources dedicated to the prevention of future violent incidents (Harvey, 2009). Not surprisingly, many health care settings devote more time, attention, and energy responding to violence then preventing violence.

Due to the potential costs associate with violence, it is a major concern to mental health professionals. In fact, identifying, assessing and managing violent ideation and behaviour is considered one of the core competencies for practicing clinicians, such as psychologists and

psychiatrists (Simon & Tardiff, 2008). Mental health professionals are obliged under statutory law (e.g., Occupational Health and Safety Legislation, Freedom of Information and Protection of Privacy Legislation), common law, and professional codes of ethics to assess for and respond appropriately to obvious signs of violence risk. For instance, the Canadian Code of Ethics for Psychologists states that psychologists should "share confidential information with others only with the informed consent of those involved, or in a manner that the persons involved cannot be identified, except as required or justified by law, or in circumstances of actual or possible serious physical harm or death", suggesting that all psychologist should know how to identify risk of serious physical harm. In addition, under common law in Canada and the United States, mental health professionals who determine that a patient is at imminent risk of serious violence towards an identifiable person or group have a duty to protect them by warning the person or group, by informing the police, or by implementing management strategies (Welfel, Werth, & Benjamin, 2009). Professionals who take care to recognize obvious signs of violence risk and to respond appropriately to them significantly decrease their exposure to legal liability. However, a finding of professional negligence could result from actions that did not meet professional standards and resulted in harm to others. This is a significant burden for mental health professionals to bear and as a consequence various instruments have been developed to assist them in discharging their responsibility of identifying, assessing and managing risk for violence in a way that benefits the patient, public, and primary care providers.

Assessing Violence Risk

Violence Risk Identification. In most settings and for most purposes mental health professionals need to identify those at risk of violence (Guy, Douglas, & Hart, 2015). The process of violence risk identification has been referred to as selection, sorting, prioritization,

screening, and triaging (Guy et al., 2015). The increased focus on identification tools for inpatient violence in recent years is largely due to the recognition of the prevalent nature of this problem and profound impact on patients, staff, unit functioning, and mental health services (Daffern, 2007). Some important characteristics of effective violence risk identification include being accessible to all mental health professionals, measuring easily observable behaviours, and being accomplished quickly and easily (Ogloff & Daffern, 2006).

Violence risk identification generally fall into the three following types (for full discussion see Guy et al., 2015). The first approach is called *tracking or surveillance* and involves systematically monitoring of patients who have been referred or will be referred for a violence risk assessment (Guy et al., 2015). If monitoring detects the presence of specific risk factors then cases are escalated for assessment and management. The Brøset Violence Checklist (BVC; Almvik, Woods, & Rasmussen, 2000), is a good example of a tool that is used to track cases in inpatient psychiatry units. The second approach is called *screening* and is an abbreviated risk assessment consisting of a limited number of risk factors that can be easily coded from records and is often actuarial in nature (Guy et al., 2015). Ratings are often summed and cases that exceed a certain number are referred for a violence risk assessment. The Dynamic Appraisal of Situational Aggression: Inpatient Version (DASA: IV; Ogloff & Daffern, 2006), the Violence Screening Checklist-Revised (VSC-R; McNiel & Binder, 1994), and most recently the Fordham Risk Screening Tool (FRST; Rosenfeld et al., 2017) are examples of violence screening tools for inpatient psychiatry units. The third approach is called *triage* which refers to the process of sorting cases into a small number of categories (typically three or four) based on markers of seriousness rather than the detection of the outcome itself or on the risk for the outcome (Guy et al., 2015). This approach has frequently been used in medicine and the Violence Risk Triage has

been developed for use in mental health settings to assist professionals in identifying what warning signs to look for related to violence risk and what immediate actions to take related to follow up and documentation (Watt & Hart, 2013). Against the advice of experts in identification and assessing violence risk and despite considerable support for the validity of established identification instruments, in most inpatient psychiatry settings violence risk identification involves a combination of unstructured professional judgment and locally derived checklists (Ogloff & Daffern, 2006).

Research suggests that tools that have been developed for violence risk identification may have the potential of aiding with both the identification of patients who are at risk of future violence and the implementation of immediate actions to prevent violence (Ogloff & Daffern, 2006). For instance, the ALERT System, a locally derived identification tool developed at Vancouver General Hospital, has been found to have moderate sensitivity for identifying risk for aggression or violence (Kling et al., 2005). In addition, the Brøset Violence Checklist, the Dynamic Appraisal of Situational Aggression: Inpatient Version, and the Violence Screening Checklist, all formal tracking or screening tools, have been found to have satisfactory psychometric properties and to be predictive of imminent violence (Daffern, 2006; McNiel, Gregory, Lam, Sullivan, & Binder, 2003; Woods & Almvik, 2002). Other systems that have been developed to flag for and communicate about violence risk have demonstrated a significant increase in management strategies and subsequent reduction in violent incidents (Drummond, Sparr, & Gordon, 1989). Importantly, this research has consistently illustrated that risk identification tools have the potential to improve upon unstructured professional judgment in both predicting and managing short-term risk for violence (Ogloff & Daffern, 2006).

Violence Risk Assessment. Only when there are reasonable grounds to believe that a violence risk exists and is significant is a comprehensive violence risk assessment required (Hart, 2004). Violence risk assessment is the process of evaluating people to characterize the risk that they will commit violence in the future (e.g., the nature, severity, imminence, frequency, and likelihood of future violence), as well as identify the steps that could be taken to minimize those risks (Hart, 2004). Several important characteristics of violence risk assessments include preventing violence by guiding the development of risk management plans, maximizing accountability by improving the transparency and consistency of decisions, and decreasing liability by providing legal protection to the patient and professionals (Douglas et al., 2013; Hart, Kropp, & Laws, 2003). Unstructured professional judgment is the most commonly used procedure for assessing violence risk in inpatient psychiatry units despite the fact that there is little empirical evidence that intuitive decisions are consistent across professionals, accurate in estimating risk for violence, or helpful in preventing violence (Ogloff & Daffern, 2006). Two major approaches that have been developed to address the limitations of unstructured professional judgment in assessing and managing violence risk, actuarial risk assessment and structured professional judgment. One of the most important distinctions between these approaches is with respect to how information is weighted and combined (Dawes, Faust, & Meehl, 1989; Hart, 2001; Menzies, Webster, & Hart, 1995).

In the first approach, actuarial risk assessment, discretion is not used when reaching a decision about violence risk. Clinical judgment is replaced by information that is weighted and combined according to fixed and explicit rules. In fact, proponents of this approach recommend that the only role clinical judgment should play is in the compilation of relevant information and the computation of an actuarial score (Harris, Rice, & Quinsey, 1993). Actuarial violence risk

assessment instruments provide a list of items that have been selected rationally (on the basis of theory or experience) or empirically (on the basis of association with violence in test construction research) and are combined according to an algorithm to yield a decision about the risk of future violence, most commonly the likelihood of violence over some period of time (Kropp, Hart, & Lyon, 2008). The sole purpose of actuarial violence risk assessment instruments is to predict future violence. Some advantages of actuarial risk assessment instruments are that they facilitate the transparency and consistency of the decision-making process (Hart et al., 2003). Some disadvantages are that they may lose meaning when used to estimate an individual's risk for violence and are of limited use in planning management strategies to prevent future violence (Hart et al., 2003; Hart, Michie, & Cooke, 2007). The Violence Risk Appraisal Guide-Revised (VRAG-R; Rice, Harris, & Lang, 2013) is an example of an actuarial risk assessment instrument that was designed for males apprehended for criminal violence but that has been implemented in inpatient psychiatric settings.

In the second approach, structured professional judgment, discretion is used when reaching a decision about violence risk. Clinical judgment is assisted by guidelines that are based on current scientific knowledge and professional practice. Such guidelines - also referred to as clinical guidelines, practice guidelines, consensus guidelines, clinical practice parameters, or aides mémoire - are used increasingly in psychiatry and psychology practice (Addis, 2002; APA, 2002a; Kapp & Mossman, 1996; Reed, McLaughlin, & Newman, 2002). Structured professional judgment guidelines define the risk being considered; discuss needed qualifications for conducting an assessment; recommend what information should be considered as part of the evaluation and how it should be gathered; and identify a set of core risk factors that, according to the scientific and professional literature, should be considered as part of any reasonably

comprehensive assessment (Kropp et al., 2008). The primary goal of structured professional judgment guidelines is to prevent future violence. Some advantages of structured professional judgment guidelines are that they help to improve the consistency and transparency of decisions and facilitate the development of case specific management strategies (Hart et al., 2003). Some evaluators dislike this approach either because it lacks the freedom of unstructured professional judgment or because it lacks the objectivity of actuarial risk assessment instruments (Hart et al., 2003). The Historical Clinical Risk Management-20 Version 3 (HCR-20 ^{V3}; Douglas et al., 2013) is an example of a structured professional judgment guideline that was designed for use with patients with mental illnesses and personality disorders in both civil and forensic psychiatric settings and which has been used in inpatient psychiatric units.

Both actuarial violence risk assessment instruments and structured professional judgment instruments have been the focus of hundreds of independent empirical studies across diverse samples, settings, and countries (Guy, 2008). Overall, research suggests that these tools have satisfactory psychometric properties. For instance, reviews of research examining the original Violence Risk Appraisal Guide (VRAG; Quinsey, Rice, Harris, & Cormier, 1998) suggests that generally this instrument tends to have good to excellent inter-rater reliability and moderate to strong predictive validity (e.g., Rice, Harris, & Hilton, 2010). Similarly, research examining the HCR-20 ^{V3} and its predecessor the Historical Clinical Risk Management-20 (Webster, Douglas, Eaves, & Hart, 1997) suggests that generally this instrument tends to have high internal consistency, good to excellent inter-rater reliability for scale scores, total scores, and summary risk ratings, and moderate to strong predictive validity for total scores and summary risk ratings (e.g., Douglas & Reeves, 2010; Strub, Douglas, & Nicholls, 2014). As previously mentioned, unlike actuarial violence risk assessment instruments, predicting future violence is not a primary

goal of structured professional judgment guidelines. However, the predictive validity has consistently been found to be comparable across both types of violence risk assessments instruments, and to significantly improve upon unstructured professional judgment (Douglas & Reeves, 2010; Guy, 2008; Singh, Grann, & Fazel, 2011).

Current Study

In light of the prevalence of violence among committed psychiatric patients, the responsibility of heath care professionals to assess for and respond to signs of violence risk, and the development of identification and assessment tools to assist them in discharging their responsibility, it would be expected that inpatient psychiatry units would use standard practices to identify, assess and manage violence. However, the few studies that have been conducted to date suggest that there has been little consensus regarding what violence risk identification and assessment practices should be used (Binder & McNiel, 1999; Higgins, Watts, Bindman, Slade, & Thornicroft, 2005) and that mental health professions primarily rely on unstructured professional judgment (Ogloff & Daffern, 2006). Although several review articles have recommended the use of violence identification instruments and violence risk assessments to assist with identifying, assessing and managing risk for violence (e.g., Borum, 1996; Daffern, 2007; Haggard-Grann, 2007), it is unknown if or how these approaches are being applied in contemporary practice in inpatient psychiatry units. Therefore, the purpose of this study is to obtain a better understanding of violence risk identification, assessment and management practices used in inpatient psychiatric units within the largest health region in Western Canada. This study uses qualitative methods to obtain detailed information about everyday practices and assumptions related to assessing and managing risk for violence (Neuman, 2002). The hope is that the findings of the study will have implications for informing the practices of inpatient

psychiatry units in this area as well as for highlighting how the field of threat assessment and management could support these units to build upon their strengths and address their needs.

Method

Participants

This study examined the violence risk identification, assessment and management practices of 13 inpatient psychiatry units within the largest health region in Western Canada during July and August 2009. Specifically, these settings represented all of the inpatient psychiatry units within this region. All 13 units that were invited to take part in this study agreed to participate. The study received ethical approval from the Health Authority and the affiliated University. The number of beds per unit, average length of stay, and number of patients admitted per year varied across inpatient psychiatry units. Specifically, the number of beds per unit ranged between 4 and 100 (Mdn = 15 beds). It was difficult to obtain a precise estimate of the average length of stay of patients admitted and the number of patients admitted per year to each unit due to differences in data collection and analysis across sites. However, for the fiscal year of 2008 to 2009 the average length of stay for the units ranged roughly between 1 and 85 days (Mdn = 12 days), and the number of patients admitted to each unit ranged roughly between 34 and 887 patients (Mdn = 245 patients).

The study explored the responses of 11 key informants representing their respective inpatient psychiatry unit. At least one staff member who was familiar with the violence risk assessment and management practices of their inpatient psychiatry unit was asked to take part in the study. No limitations were placed on the number of staff who took part in the interview, the position they held on the unit, or their professional affiliation. In some cases, the same staff member served as the key informant for more than one unit due to their involvement in and

familiarity with these units. All key informants were in management positions and represented the following professions: nursing (64%), psychiatry (27%), and social work (9%).

Procedures

Recruitment. A list of all of the inpatient psychiatric units within the health region and the medical managers and patient services coordinators of these units was obtained from the Administrative Assistant for the Director of Mental Health and Addictions Services for the health region. The medical manager and patient services coordinators of each inpatient psychiatry unit in the health region was sent a letter via email by the investigators 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 answer any questions they may have. If they were willing to have their unit take part in the study, they were asked to identify the name, profession, position, email address, and telephone number of a key informant who is most familiar with the violence risk identification, assessment and management practices of their inpatient psychiatry unit to take part in an interview.

The key informant identified by the medical manager and patient services coordinator was then sent a letter via email by the investigators of the study informing them about the purpose and nature of the study, describing what their participation would involve, and requesting their participation. One week after sending the letter, the key informant was contacted by phone and invited to participate in the study. If the key informant was willing to take part in the study, they were asked to set a date and time for their interview. Due to financial and travel constraints, interviews were conducted in person for units near to where the investigators were

based, and via telephone for units at all other hospitals in the region. A copy of the informed consent outlining the purpose and nature of the study and reminding participants of the time of their interview was sent to each key informant prior to the interview. The informed consent also was also discussed with the key informant at the time of the interview.

Measures. A semi-structured interview was conducted with key informants from each inpatient psychiatry unit who consented to take part in the study. The purpose of the interview was to obtain a better understanding of violence risk identification, assessment and management practices used across the health region. The interviews lasted approximately one hour and consisted of seven major sections. Specifically, key informants were asked questions about policies and procedures related to violence risk, identifying and assessing for violence risk, practices for managing violence risk, standard communication about violence risk, knowledge and attitudes about violence risk assessment and management in their unit, and strengths and weaknesses of their unit's approach to identifying, assessing, and managing violence risk. Although questions were open-ended, potential response options were developed in advance to assist with probing during the interview and to facilitate future coding. Questions were formed based on a relevant review of research articles and consultation with experts in the field of violence risk assessment and management.

Analysis

A combination of quantitative and qualitative analys~~i~~es w~~as~~ere used to examine the results of the semi-structured interview. Specifically, frequency analysis was used to examine the response options that had been developed in advance to assist with probing during the interview and to facilitate future coding. Frequency analysis involves the calculation of the frequency or proportion with which something occurs. For this study, this process involved coding all the

response options that had been developed in advance and entering the data into~~using~~ SPSS, a data analysis program.

Content analysis was used to examine common themes about future needs based on the participant~~'~~s' answers to the open-ended questions. Content analysis refers to the process in which messages are systematically analyzed to uncover common themes (Berg, 2004). Applied to this study, this process involved reviewing all participant~~'~~s' answers to open ended questions and creating a set of themes that captured the range of categories related to each of the seven major sections. When the initial set of themes was too numerous or redundant, a second set of themes was created which more parsimoniously captured the data. For instance, different types violence risk identification that had emerged (e.g., tracking, screening and triage) were collapsed into a single category.

Results

Policies and Procedures

None of the inpatient psychiatry units reported having any policies or procedures related to accepting patients with a history of violence or who pose a risk of violence. Units reported that they often accepted patients who had a history of violence or who posed a risk of violence and this was not a criterion they used to deny admission to their units. However, if a patient engaged in violence once admitted to their unit, many inpatient psychiatry units reported that this might lead a patient to be transferred to a higher security unit or to be arrested by police and brought to jail.

Violence Risk Identification

All inpatient psychiatry units reported some form or violence risk identification upon admission to their units. However, units varied in the extent to which the identification process

was systematic and consistent across assessors and led to communication about violence risk varied across units. Fifteen percent of units (n = 2) reported systematically and consistently using a formal screening instrument that led to communication about violence risk. Seventy percent of units (n = 9) reported asking routine questions about violent behaviour or ideation (e.g., history of violence, homicidal ideation) or documenting observations about aggressive and violent behaviour (e.g., verbal aggression, physical injuries) but these questions did not clearly or directly lead to communication about violence risk. The remaining two units (15%) used unstructured clinical judgment to identify violence risk, and it was not systematically or consistently applied. See Table 1 for a summary of the presence and quality of violence risk identification across units.

Violence Risk Assessment

Thirty-one percent of units (n = 4) reported conducting violence risk assessments during a patient's stay on their unit. However, the profession of the key informant may have influenced the answer to this question. For almost all of the units that responded affirmatively to this question, psychiatrists participated in the key informant interview. Since the burden of responsibility for conducting violence risk assessments has typically fallen to psychiatrists in inpatient psychiatry units, it is assumed that the majority of units would have reported they were conducting these assessments had a psychiatrist taken part in the interviews. However, of the units that reported conducting violence risk assessments, the assessments were primarily conducted using unstructured professional judgment except for one unit that had begun implementing structured professional judgment instruments over the last year as part of the units' efforts to improve risk assessment and management procedures. See Table 1 for a summary of the presence and quality of violence risk assessment across units.

Violence Risk Management

Inpatient psychiatry units reported using many strategies to manage short-term risk for violence during a patient's stay on their unit. Units reported using an average of 6.54 short-term strategies during a patient's stay (SD = 1.45) and a range of between 5 and 9 different short-term strategies. The specific strategies used included talking to the patient (46%, n = 6), increasing observation (69%, n = 9), removing nearby objects that could be used as a weapon (23%, n = 3), reducing stimulation (77%, n = 10), conducting further assessment (31%, n = 4), increasing the number of staff (15%, n = 2), administering medication (100%, n = 13), using seclusion rooms (92%, n = 12), applying restraints (46%, n =6), calling security (92%, n = 12), calling police (39%, n = 5), or transferring the patient (23%, n = 3). In general, restrictive management strategies that were reactive in nature (e.g., medication, seclusion, restraints, security) were used more frequently than nonrestrictive management strategies that tended 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. Some units believed that doing so went beyond their professional capability or responsibility. Units reported using an average of 1.92 long-term strategies during a patient's stay (SD = 1.32) and a range of between 1 and 5 different long-term strategies. Most commonly, units reported communicating generally with other professionals about the patient's risk for violence (100%, n = 13). Less commonly, units reported recommending management strategies for violence risk including that the patient be monitored (23%, n = 3), treated (23%, n = 3), and supervised (39%, n = 5) by other professionals. Monitoring was defined as observing symptoms and warning signs (e.g., frequent outpatient appointments), treatment was defined as intervention or rehabilitation strategies (e.g.,

administering psychotropic medication), and supervision was defined as surveillance strategies or restrictions of freedom (e.g., extended leave or police escort). Only one unit (8%) reported engaging in safety planning with potential victims of future violence to enhance their security.

Mode of Violence Risk Communication

All units reported that they routinely used both verbal (e.g., in rounds or huddles) and written (e.g., chart documentation) modes of communication when sharing information with staff on their unit and with other mental health professionals about patients who had a history of violence or who posed a risk of violence. A few units (23%, $n = 3$) also reported that they shared this information with staff on their unit and with other mental health professionals through electronic (e.g., Patient Care Information System) or visual means (e.g., stickers, signs, and armbands). However, many units were against using visual means to identify patients at risk of violence due to concerns that this would increase the stigma associated with those patients and create problems between patients. Units were less likely to communicate with family members or care providers about patients who had a history of violence or who posed a risk of violence. When such information was shared it was primarily done verbally. Units that did not communicate with family members routinely reported that they did not do so because they believed that family members were already aware of the patient's history of violence or that as mental health professionals that they were not permitted to do so due to patient confidentiality. Most units reported that they would break confidentiality and communicate with family members if they believed that the patient posed a risk to the family's safety. See Table 2 for a summary of the mode of violence risk communication broken down by the recipient of the communication.

Content of Violence Risk Communication

When communicating with staff on their unit, other mental health professionals, and family members or care providers about patients with a history of violence or who pose a risk of violence, units reported that they were most likely to share information about recent history of violence, risk factors for violence (e.g., substance abuse, mental illness), and to a lesser extent to share information about recommended management strategies (e.g., monitoring, treatment, supervision), and general statements of the risks posed. None of the inpatient psychiatry units reported communicating about their clinical formulation of violence, plausible scenarios of future violence, or specific summary judgments (e.g., level of intervention required, risk of serious violence, risk of imminent violence), all of which are considered important components of comprehensive violence risk assessments that inform the development of appropriate and effective management strategies for the prevention of future violence. However, there were few guidelines instructing staff about what they should routinely consider when documenting violent incidents or management plans. For instance, standard practice suggests that professionals should consistently document about when (time), what (nature of harm), who (identity of and relationship to victim), why (motivation, precipitants, goals), and where (location) when describing violent incidents (Hart, 2004). See Table 3 for a summary of the presence and content of violence risk communication.

Knowledge and Attitudes

Research suggests that between 17% and 50% of committed psychiatric inpatients have a history of violence. When asked what proportion of patients admitted to their units have a history of actual, attempted, or threatened physical violence, four units (31%) estimated between 0% and 10%, four units (31%) estimated between 11% and 20%, one unit (8%) estimated between 21% and 30%, three units (23%) estimated between 41% and 50%, and one unit (8%) estimated

between 91% and 100%. The median range estimated was between 11% and 20%. Therefore, in comparison to previous local and national research, inpatient psychiatry units tended to slightly underestimate the percentage of patients admitted to their units that had a history of violence.

The vast majority of units (85%, $n = 11$) reported having access to training related to violence risk identification, assessment, and management. Most of the training described involved learning de-escalation techniques to reduce the risk of aggression and violence (e.g., the Nonviolent Crisis Intervention Training) that was offered by the Health Care Authority. Some units also reported receiving training on specific screening tools for violence (e.g., the Violence and Aggression Screening Tool) that had been locally derived. All units reported that identifying, assessing and managing risk for violence should play an important role in mental health care settings. Units believed that training they received about these strategies helped them to increase their awareness of patients who are at risk of violence and implement management strategies to increase staff safety and patient care.

Discussion

Summary of Findings

The findings from this study indicate that inpatient psychiatry units employed diverse approaches for identifying, assessing and managing risk for violence. Units reported using a combination of formal instruments, routine observations and questions, and unstructured professional judgment when identifying and assessing violence risk. Units also reported using both restrictive and nonrestrictive strategies to manage short-term and long-term risk for violence. With respect to communicating about risk for violence, inpatient psychiatry units used a variety of different means of communication and shared a range of information. The majority of inpatient psychiatry units reported valuing the training they had received in the past related to

identifying, assessing and managing violence risk and believing that these skills should play an important role in mental health care settings. The following will describe the results of the study in greater detail with an emphasis on highlighting both current promising practices and areas for future improvement. In light of the methodological limitations of this study, the implications of the findings for informing future research will be discussed.

Current Promising Practices

Several promising practices emerged out of the diverse approaches being used by inpatient psychiatry units to identify, assess and manage risk for violence. Although all units reported viewing risk assessment and management as an important part of their work and described taking steps to carry out this responsibility, some units reported carrying out practices that were consistent with and even exceeded standard practice. The following will provide some illustrations of promising practices in the areas of violence risk identification, assessment, management and communication that are currently being used by some of the inpatient psychiatry units

Violence risk identification. One unit described a process of violence risk identification that involved conducting a formal screening for violence upon admission to their unit, reviewing the screening every few days to monitor change over time, and conducting staff huddles on a daily basis to discuss safety issues (Unit 1). The practices used by this unit illustrate a very comprehensive approach to violence risk identification that places a strong emphasis on systematic identification, communication with others, and short-term management of patients. It is remarkably similar to practices used for screening for violence risk that have been associated with the reduction of violence on other inpatient psychiatry units (Needham et al., 2004). For instance, as part of their research design, Needham and colleagues (2004), required nurses to

complete the BVC upon patient admission and twice daily during a patient's stay. The scores of the patients on the BVC triggered different preventative measures, de-escalation techniques, and immediate actions based on multi-disciplinary discussion.

Violence risk assessment. One unit reported that they recently implemented violence risk assessments using structured professional judgment guidelines for patients who had been identified as posing a potential risk of serious or imminent violence based on a routine violence risk triage during morning rounds (Unit 7). Structured professional judgment is consistent with both standard and recommended practice for violence risk assessment and assists with identifying risk factors, characterizing risks posed, and developing management strategies (Douglas et al., 2013; Hart et al., 2003). Although comprehensive violence risk assessments have rarely been implemented in civil psychiatric settings, they are commonly used in forensic psychiatric settings where they are viewed as critical for informing decisions related to the assessment and management of violence (Singh et al., 2014; Douglas, Ogloff, & Hart, 2003).

Violence risk management. Several promising practices were also evident with respect to managing both short-term and long-term risk for violence. Mental health professionals are encouraged to use the least restrictive alternative when managing violence risk and to consider case specific management strategies. In general, mental health professionals are encouraged to restraints and seclusion as a last resort and only used temporarily in behavioural emergencies (Emanuel et al., 2013). Therefore, the fact that most inpatient psychiatry units reported routinely using a wide range of nonrestrictive strategies suggests that mental health professions may be applying these principles when managing risk for violence. For instance, four units discussed the importance of observing patients for verbal and nonverbal signs of escalation, talking to patients about how they were feeling and what they were thinking, removing nearby objects that could be

used as a weapon, and placing patients in a less stimulating environment (Units 1, 7, 8, 11). Further, these units enforced the utility of using nonrestrictive strategies before using restrictive strategies (e.g., medication, restraints, seclusion, and security) as a means of preventing violence from occurring. Most units appeared to recognize the importance of matching the restrictive nature of the management strategy with the level of violence risk posed.

Although inpatient psychiatry units reported using few strategies to manage long-term risk for violence following a patient’s stay on their unit, one unit stood out from the rest with respect to how it approached management of long-term risk for violence (Unit 7). Specifically, this unit reported considering long-term risk management strategies for all patients that had been identified as posing a potential risk of serious or imminent violence based on a violence risk assessment using a structured professional judgment instrument. Given that prevention of future violence is the primary goal of structured professional judgment approaches to violence risk assessment, consideration of long-term risk management is an essential part of this process. The unit routinely considered how monitoring (observing symptoms and warning signs), treating (implementing intervention or rehabilitation strategies), and supervising (applying surveillance strategies or restrictions of freedom) could be used to manage a patient’s long-term risk for violence and how safety planning strategies could be put in place to protect potential victims of future violence. It is worth noting that this was an emergency psychiatry unit that had recently created a unique position for the assessment and management of violence risk, which was viewed as critical in order to devote the resources required for this task.

Violence risk communication. Several promising practices emerged around violence risk communication. The first promising practice concerns the means used to communicate about violence risk. Specifically, all inpatient psychiatry units reported using multiple modes to

communicate with unit staff members and other mental health professionals about violence risk. Units reported routinely sharing information verbally during rounds and in writing via chart documentation. A few units also reported sharing information electronically through information systems and visually with stickers, signs and armbands. Using multiple means to communicate about violence risk is generally recommended in order to increase the likelihood that such information is shared with other health care professionals (Hart, 2011). Chart documentation is a particularly important means of communication, given that most mental health care professionals will have access to this information. Furthermore, chart documentation is critical for indicating that identifying or assessing for violence risk has been completed and for communicating about the nature of the violence risk and the steps needed to manage violence risk. However, when violence risk is imminent other means such as oral reports or visual cues should be made in addition to written documentation (Hart, 2011).

The second promising practice concerns who information about violence risk was communicated with. Most units reported that they often communicated about violence risk with other mental health professionals who would be providing care for the patient upon transfer or discharge. In addition to communicating with other mental health professionals, two units reported that they routinely communicated with a police mental health liaison officer who was based within the local police department when they were concerned about risk of violence towards others (Units 8, 9). Similar to other initiatives that have been developed across Canada over the last ten years, the position of police mental health liaison officer emerged as a consequence of the recognition of the significant amount of contact that individuals with mental illness have with the criminal justice system. Many complex issues around privacy and safety arise when someone is involved in both the criminal justice and mental health systems. The

inpatient psychiatry units reported that the creation of this liaison position has led to significant improvements in collaboration, coordination, and communication between the criminal justice and mental health systems.

Areas for Future Improvement

Although several promising practices were being used by inpatient psychiatry units to identify, assess and manage violence risk, there are important ways that units could improve upon their practice in this area. Units were using diverse approaches to identify, assess, and manage risk for violence, however, they were not always using standard practices to do so. The following will outline limitations of current practices and suggestions for future improvements in the areas of violence risk identification, assessment, management and communication that inpatient psychiatry units may wish to consider implementing.

Violence risk identification and assessment. When identifying and assessing for violence risk, inpatient psychiatry units primarily relied on routine observations and questions or unstructured professional judgment to reach decisions about violence risk as opposed to using formal identification and assessment instruments specifically designed for these purposes. The use of routine observations and questions or unstructured professional judgment is unsurprising, given that these practices are consistent with those used by many other inpatient psychiatry units to identify and assess for violence risk (Ogloff & Daffern, 2006). There are significant limitations of these approaches in that they often contribute to inconsistent decisions across professionals, inaccurate estimations of violence risk, and ineffective management of future violence (Ogloff & Daffern, 2006). In contrast, there is considerable support for evidence-based instruments for identifying, assessing and managing risk for violence to address these concerns (Ogloff & Daffern, 2006).

Therefore, it is recommended that formal instruments are used for identifying and assessing violence risk in inpatient psychiatric settings. Specifically, inpatient psychiatry units would benefit from the implementation of violence risk identification tools (tracking, screening or triage) to assist them with systematically and consistently identifying patients who may be at risk of violence and for assisting with the development of immediate actions to prevent violence. Research has demonstrated that routine use of violence risk identification tools has been associated with a reduction in violence on inpatient psychiatry units (Needham et al., 2004). Therefore, implementing violence risk identification tools would be particularly helpful for facilitating communication about risk to others and informing short-term management strategies. In addition, inpatient psychiatry units would benefit from the implementation of violence risk assessment instruments such as the Historical Clinical Risk Management-20 Version 3 (HCR-20^{V3}; Douglas et al., 2013). Research has shown that structured professional judgment guidelines have assisted professionals in making risk management decisions that have led to the reduction of violence in the community (Belfrage, Strand, Storey, Kropp, & Hart, 2012; Kropp & Gibas, 2009). Consequently, structured professional judgment guidelines would assist health care professionals in characterizing the risks of future violence and implementing long-term management strategies to minimize these risks.

Violence risk management. Although inpatient psychiatry units used a wide range of strategies to manage short-term risk for violence during a patient's admission, they reported a tendency to emphasize restrictive strategies that tend to be reactive in nature (e.g., medication, seclusion, restraints, security) over nonrestrictive strategies that tend to be preventative in nature (talking, observation, object removal, reducing stimulation). This finding may be a consequence of under reporting of nonrestrictive strategies that health care professionals use routinely to

manage short-term risk for violence. However, this finding also raises the possibility that health care professionals may be spending less time using de-escalation strategies to prevent violence and as a consequence spending more time using coercive measures in response to violence. In comparison to strategies to manage short-term risk for violence during a patient's admission, inpatient psychiatry units used fewer strategies to manage long-term risk for violence following a patient's admission. This finding may be attributed in part to beliefs of some health care professionals that management of long-term risk goes beyond their professional capability or responsibility. However, identifying, assessing and managing violent ideation and behaviour are core competencies for mental health professionals and mental health professionals are obliged to assess for and respond appropriately to obvious signs of violence risk in the hospital and the community (Simon & Tardiff, 2008).

Importantly, the reported emphasis on restrictive over non-restrictive strategies conflicts with current training for the prevention and management of violence the health region (e.g., Nonviolent Crisis Intervention Training) which pays a great deal of attention to non-restrictive strategies and relatively little attention to restrictive strategies. Therefore, future evaluations of this training should investigate what skills are being taught and how these skills are being translated into practice. For instance, it will be important to determine what strategies are being implemented prior to an act of aggression or violence, whether strategies are being implemented appropriately to manage aggression or violence, and which strategies are most effective in de-escalating aggression and reducing risk of violence. In addition, it is recommended that future training for the prevention and management of violence be expanded beyond short-term management to include long-term management given the importance of these strategies for reducing risk of violence both in the hospital and the community. Specifically, health care

professionals should be encouraged to consider management strategies that they could put in place for monitoring, treating, and supervising patients as well as safety plans they could develop for potential victims of future violence. A potential reason for the lack of focus on long-term management in inpatient settings may be the divide between managing inpatient aggression and discharge planning that can occur and which would need to be addressed on a unit or systems level.

Violence risk communication. When communicating about risk for violence, inpatient psychiatry units were more likely to communicate with other mental health professionals than with primary care providers, who are commonly at risk of being the victims of future violence. Some units reported that they did not routinely share information with family members about violence risk because they believed that family were already aware of the patient's history of violence. However, even when a family is aware of a patient's history of violence, they may not appreciate the risks posed to themselves or understand how to manage those risks. Other units reported that they did not routinely share information with family members about violence risk because they did not believe they were permitted to do so due to patient confidentiality. In fact, the law states that under continuity of care when a family member is the primary care provider, health care professionals have a responsibility to share information about violence risk with family members. Furthermore, when mental health professionals become concerned that the risk of violence may be serious or imminent and directed towards family members they have a duty to protect those individuals (Welfel et al., 2009).

Regardless of the recipient of communication about risk for violence, the content of communication tended to be more general or descriptive in nature as opposed to more specific or interpretive in nature, often missing information considered important for the development of

management strategies and the prevention of future violence. For instance, staff members were most likely to document descriptive information about recent violent behaviour and current risk factors and least likely to document interpretive information about clinical formulation which specifies how risk factors contribute to violence, such as by motivating, disinhibiting, or destabilizing the patient. In addition, staff members tended to document general statements about violence as opposed to specific scenarios about violence risk that characterize the nature, severity, imminence, frequency/duration, and likelihood of future behaviour. This is problematic as these are considered important components of comprehensive violence risk assessments that inform the development of appropriate and effective management strategies for the prevention of future violence.

In light of the problems evidenced with violence risk communication, health care professionals should be provided with training and guidelines about the communication and documentation of violent risk assessments and management plans. For instance, mental health professionals would benefit from education about information sharing with primary care providers and other service providers where a patient poses a risk for future violence. Such information and education is likely to be offered by Risk Management Offices or Information Privacy Offices. In addition, guidelines should be developed for mental health professionals about the documentation of risk for violence. For instance, when identifying violence risk using a screening or triage, both negative and positive outcomes should be documented as evidence that screening or triage was conducted. This is particularly important for protection against liability, given that in the legal context if something is not written down it did not happen (Packman, Andalibian, Eudy, Howard, & Bongar, 2009). Where a screen or triage for violence is positive, mental health professionals should document (a) the grounds for concluding that violence risk

exists; (b) opinions concerning the imminence and severity of risk; and (c) any immediate actions that are being taken to manage violence risk, including referral, intervention, and warning (Hart, 2004).

Research Limitations

Although the current study increases understanding of the practices used by inpatient psychiatry units to identify, assess and manage risk for violence, there are some limitations that are important to recognize. First, this study relied on information provided by one or two staff members from each inpatient psychiatry unit about the practices used by all staff members working in that unit. Gaining the perspectives of additional staff members from each inpatient psychiatry unit may have provided different information about the violence risk identification, assessment and management practices used. Specifically, the profession of the key informant may have influenced descriptions of identification, assessment and management practices given that the practices used by each profession may differ based on the type of training received and the nature of work carried out. For instance, given their prominence in their field of violence risk identifying, assessment and management, psychologists may have reported different practices. Second, this study was based on the self-report of staff members as opposed to file review of patient’s charts. Key informants may have had a tendency to portray the risk identification, assessment and management practices of their units in a positive light whereas file review may have revealed less positive practices. However, efforts were made to mitigate this natural tendency of respondents by requiring a high level of detail in the responses given. Further, the findings did not appear to reflect a positive response bias on the part of the key informants.

Implications for Research

In light of the methodological strengths and limitations of this study, the findings can be

used to inform future research about risk identification, assessment and management practices in inpatient psychiatry settings or other health care settings. First, research could build on the findings of this study by examining the extent to which the implementation of strategies for identifying and assessing violence risk improve upon clinical practice. Specifically, it will be important to establish whether violence risk identification instruments enhance the identification of patients who are at risk of violence, and whether comprehensive risk assessments guided by instruments lead to better management of the patients at risk for future violence in the hospital and the community. Second, additional research could examine what strategies are being used to manage both short-term and long-term risk for violence as well as the relative effectiveness of those management strategies. For instance, a review of chart documentation may be a particularly important way of examining how specific cases are being managed, particularly if forms are implemented to assist staff in documenting their management decision, such as the Staff Observation Aggression Scale-Revised (SOAS-R; Nijman et al., 1999). Finally, given the critical importance of violence risk communication and documentation, future research should examine whether training and guidelines focused on these skills lead to improvements in communication and documentation and ultimately the prevention of future violence.

Conclusions

Despite the fact that identifying, assessing and managing violence risk are considered to be core competencies for practicing clinicians, the findings from this study indicate that inpatient psychiatry units rarely relied on standard practices available to identify, assess and manage risk for violence. While several units were engaging in promising practices related to identifying, assessing, managing and communicating about violence risk, improvements are needed in this area. Between the established instruments developed to identify, assess, and manage risk, and the

skills, experience, and training of professionals who specialize in violence risk assessment and management, the field of threat assessment is in a good position to provide support to inpatient psychiatry units to build upon their strengths and address their needs.

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Table 1

Presence and Quality of Violence Risk Identification and Violence Risk Assessment

Inpatient Psychiatry Unit	Violence Risk Identification	Violence Risk Assessment
Unit 1	Y	N
Unit 2	N	N
Unit 3	P	N
Unit 4	P	N
Unit 5	P	N
Unit 6	P	N
Unit 7	Y	Y
Unit 8	P	N
Unit 9	P	N
Unit 10	P	P
Unit 11	P	N
Unit 12	N	P
Unit 13	P	P

Y = Definite Violence Risk Identification/Violence Risk Assessment

P = Partial Violence Risk Identification/Violence Risk Assessment

N = No Violence Risk Identification/Violence Risk Assessment

Table 2

Mode of Violence Risk Communication across Recipients

Mode of Communication	Inpatient Psychiatry Unit Staff	Other Mental Health Professionals	Family Members or Care Providers
Verbal	100%	100%	100%
Written	100%	100%	8%
Electronic	15%	8%	0%
Visual	15%	8%	0%

Table 3

Content of Violence Risk Communication across Recipients

Type of Communication	Inpatient Psychiatry Unit Staff	Other Mental Health Professionals	Family Members or Care Providers
Violence History	100%	100%	39%
Risk Factors	85%	69%	39%
Management Strategies	77%	69%	46%
Risks Posed	54%	31%	69%
Violence Formulation	0%	0%	0%
Scenario Planning	0%	0%	0%
Summary Judgments	0%	0%	0%