Violence committed against nursing staff by patients in psychiatric outpatient settings

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ABSTRACT

Violence against nurses has increased particularly in psychiatric outpatient settings as psychiatric care shifts from being inpatient-based to being outpatient-based. Violence is a complex phenomenon that must be explored in different psychiatric nursing environments and settings. Violence in psychiatric outpatient settings should especially be explored as violence in this context has scarcely been examined. The aim of this systematic review was to elucidate violence committed against nursing staff by patients in adult psychiatric outpatient settings, based on reports from previous studies. A literature search was conducted in the CINAHL (EBSCO), Ovid MEDLINE, and PsycARTICLES (Ovid) databases. Fourteen studies emerged after the selection and quality assessment process. These studies indicated that violence in psychiatric outpatient settings is a multidimensional phenomenon comprising the reasons for, forms of, and consequences of violence. Reasons for violence could be related to the patient as well as to nursing staff. In psychiatric outpatient settings, verbal violence was the most common form of violence, and violence most frequently led to psychological consequences for nursing staff. The findings of this review highlight the importance of nursing staff developing skills and interventions for managing different kinds of violent situations. Given the multidimensional consequences of violence, attention must be given to the occupational wellbeing and coping ability of nursing staff at work. Furthermore, it would be worthwhile to compare cultural and intercountry differences of violent exposures in psychiatric outpatient settings.

Key words:

violence, psychiatric nursing, outpatient setting, nursing staff,

INTRODUCTION

Violence against nurses has increased in healthcare settings (Choiniere et al. 2014, Gillespie et al. 2010) and particularly in psychiatric nursing (Maguire & Ryan 2007, Nolan et al. 2001). Incidents of violence are common in psychiatric inpatient settings (McTiernan & McDonald 2015) and have also increased in psychiatric outpatient settings (Maguire & Ryan 2007) as mental health services shift from being inpatient-based to being outpatient-based (Ward & Cowman 2007).

Violence may comprise physical, psychological, or verbal abuse aimed at hurting another person by causing physical injuries or psychological trauma (WHO 2002a). Inherited genes and social environments, physical and social factors, and personal characteristics all influence a person's violent behaviour (Allen et al. 2018). Biological, psychosocial, and environmental factors can cause violent behaviour (Allen et al. 2018, Rueve & Welton 2008), and psychotic and personality disorders increase the risk of violent behaviour (Rueve & Welton 2008).

Workplace violence is defined as an incident involving abuse, threat, or assault of staff in circumstances related to their work that aims to threaten their safety, wellbeing, or health (WHO 2002b). Healthcare professionals like nurses are potentially at high risk of workplace violence; this risk has increased and has become a global problem (WHO 2002b). An estimated 8-38% of nursing staff experiences some kind of violence during their career (WHO 2017). Female nursing staff are at especially increased risk of falling victim to violence (Gillespie et al. 2010, WHO 2002b). Employee's age, work experience,

and skills in managing violent situations influence the risk of falling victim to violence (Gillespie et al. 2010). Studies have also revealed cultural and intercountry differences between violent exposures (Camerino et al. 2008, Spector et al. 2014). One study suggests that organisational factors, like the type of workplace, can also influence the amount of exposure to violence (Shea et al. 2017). From the perspective of psychiatric nursing, nursing staff working in psychiatric outpatient settings may be at greater risk of workplace violence than staff working in psychiatric inpatient settings because work in outpatient settings is often independent and lonely (Nolan et al. 2001).

Previous studies report that psychiatric nurses are at greater risk of exposure to violence than nurses working in other nursing fields (Blando et al. 2013, Edward et al. 2016). Studies also highlight that exposure to violence has physical and psychological effects on victims (Maguire & Ryan 2007, Stevenson et al. 2015, Zeng et al. 201). Workplace violence is also associated with occupational quality of life and turnover intentions (Choi & Lee 2017). Workplace violence can also vicariously damage victim's family relationships (Najafi et al. 2017). According to studies, nursing staff require professional skills and the ability to use different kinds of preventive interventions to manage violent situations (Choiniere et al. 2014, Irwin 2006).

Violence is a complex phenomenon and must be explored in different psychiatric nursing environments and settings (Lanza et al. 2006, Otto 2000, Woods & Ashley 2007). Many studies of violence have been conducted from the perspective of the inpatient setting (Woods & Ashley 2007), but violence also occurs in psychiatric outpatient settings

(Lanza et al 2006). Since, the latter is the lesser examined setting, this systematic review focused on violence committed against nursing staff by patients in outpatient settings in adult psychiatry. This review consolidated knowledge about factors related to this phenomenon of interest. Research-based knowledge of this phenomenon is important because the high risk of violence against nurses is increasing (WHO 2002b), and psychiatric services are shifting toward outpatient-based services (European commission 2008).

AIM

The aim of this systematic review is to elucidate, based on previous studies, the violence committed against nursing staff by patients in outpatient settings in adult psychiatry. The research question was: what factors are associated with violence committed against nursing staff by patients in outpatient settings in adult psychiatry?

METHODS

Research method

This systematic review was conducted according to the guidelines of the Centre for Reviews and Dissemination (CRD 2009). The research question was set using the PICo model, where P (population) was the nursing staff, I (phenomenon of Interest) was the violence against nursing staff committed by patients, and C (context) comprised the outpatient settings in adult psychiatry.

Data collection

A literature search of the following databases was conducted: CINAHL (EBSCO), Ovid MEDLINE, and PsycARTICLES (Ovid). Search terms were (community mental health OR community care), (outpatient setting*), (mental health setting* OR mental health service*), (nurs* OR service*), (psychiatric nurs* OR mental health nurs*), (mental health* OR psychiatric*), (violen* OR aggress*), (adult*), (outpatient). Search terms were based on the research question and were clarified after a preliminary search with the help of an information skills specialist. The search was conducted using different combinations of these search terms. Figure 1 shows the study selection process.

The inclusion criteria for this systematic review were based on the research question and were as follows: English or Finnish language, full-text availability, and peer-reviewed original nursing science or medical research article related to outpatient settings in adult psychiatry, or outpatient and inpatient settings in adult psychiatry if results on the outpatient settings were reported separately. No limit for methodology was set because the purpose of data collection was to gather studies with diverse methodologies and

produce a heterogeneous dataset. A heterogeneous dataset enables versatility in examination of the investigated phenomenon (Aromataris & Pearson 2014). The time range was set from 1997 to 2017 because psychiatric outpatient settings have increased in number over the past twenty years (Maquire & Ryan 2007).

The critical appraisal was conducted according to the guidelines of the Joanna Briggs Institute (JBI 2014). The Qualitative Assessment Research Instrument (QARI), including ten assessment criteria, was used for quality assessment of qualitative studies and the Meta-Analysis of Statistics Assessment and Review Instrument (MAStARi), including nine assessment criteria, was used for quality assessment of quantitative studies (JBI 2014). Five or more points on a critical appraisal indicated good quality, because five points was half or more than half of the achievable points. Study selection and critical appraisal were both conducted by two researchers independently, who then communicated to reach agreement at the end of the processes. There was no disagreement between the two researchers after completion of study selection and critical appraisal. After critical appraisal, 14 studies remained for data analysis.

Data analysis

Data was extracted from the studies included (Table 1) to facilitate acquisition of the necessary information about study characteristics and findings (CRD 2009). Narrative synthesis, which aims to describe patterns across studies and analyze relationships between data, was chosen for data analysis because it is an appropriate synthesis method for clinically- or methodologically-diverse studies (CRD 2009). Narrative synthesis was conducted by first grouping the data into clusters and using colour-coding to develop a

preliminary synthesis. Similar clusters were then combined. The conceptual mapping technique, a visual and graphical method that organises and represents knowledge using content maps (CRD 2009), was used to explore relationships between studies. Finally, the robustness of analysis was evaluated with critical reflection. The analysis identified three main factors associated with violence and the relationships between them: reasons for violence, forms of violence, and consequences of violence.

RESULTS

Data was extracted from 14 studies. Six studies focused only on psychiatric outpatient settings and eight examined violence in both inpatient and outpatient psychiatric settings. In these latter eight studies, findings on outpatient and inpatient settings were reported separately. Study approaches included qualitative (n=1) and quantitative (n=11) methods and mixed methods (n=2), and studies were conducted in Australia (n=2), Japan (n=1), Sweden (n=2), and the United States of America (n=8). Participants were psychiatric nursing staff in seven studies, and psychiatric patients in seven studies.

Factors associated to violence

Violence in psychiatric outpatient settings is a multidimensional phenomenon. There can be recognized reasons of violence, forms of violence and consequences of violence.

Both patients and nursing staff contributed to the reasons for violence. According to the studies included in the systematic survey, the reasons for a patient's violent behaviour include the patient's young age, prior experiences with violence (Flannery et al. 2001a, Swanson et al. 1999), substance abuse (Flannery et al. 2001a, Swanson et al. 1999), and prior history of violent behaviour (Flannery & Walker 2001, Rao et al. 2007). Reasons for violent behaviour also include psychiatric diseases like schizophrenia (Flannery et al. 2001a, Rao et al. 2007) and personality disorders (Rao et al. 2007). Denial of services, acute psychosis, experiences with negative attitudes of the nursing staff, and medication noncompliance (Flannery et al. 2011), patient's romantic feelings toward nursing staff, and hallucinations (Flannery et al. 2001a, Flannery et al. 2011) were all reasons for

patient's violent behavior identified from the included studies. Moreover, feelings of being unsafe could increase the risk of violent behaviour (Flannery et al. 2001a).

The studies reported that males are at greater risk of committing violent behaviour than females (Flannery et al. 2001a) but, in practice, females more frequently commit most violent attacks, excluding sexual attacks (Flannery & Walker 2001). The patient was most often the perpetrator of violence (Tonso et al. 2016) but sometimes the perpetrator was also the patient's family member (Fujimoto et al. 2017).

Reasons one falls victim to violence from the perspective of nursing staff include: work conditions and work-environment-related physical and psychological factors such as the characteristics of the physical environment, number of staff supervisors, and work atmosphere (Soares et al. 2000). Staff member's age, duration of work experience, and staff member's views on quality of care and organisational factors like lack of resources and social support (Soares et al. 2000) all influenced the risk of falling victim to violence. Studies showed that males are at increased risk of attack by male patients, but females are at increased risk of attack by both male and female patients (Flannery et al. 2007, Flannery et al 2001b).

The most frequently-occurring form of violence was verbal violence (Flannery et al. 2001a, Fry et al. 2002, Fujimoto et al. 2017, Lewis & Dehn 1999, Tonso et al. 2016). Nursing staff experienced verbal sexual harassment (Flannery et al. 2001a, Flannery & Walker 2001, Fry et al. 2002, Tonso et al. 2016) and threats (Fry et al. 2002, Fujimoto et

al. 2017). Physical violence also occurred (Flannery et al. 2001a, Flannery & Walker 2001, Fry et al. 2002, Fujimoto et al. 2017) and sometimes involved some kind of weapon, like a knife (Fry et al. 2002, Lewis & Dehn 1999). Studies also reported property damage and destruction (Fry et al. 2002, Fujimoto et al. 2017).

The consequences of violence were either direct or indirect. Physical violence caused immediate consequences like physical injuries (Flannery & Walker 2001, Fry et al. 2002). Emotional reactions, like anxiety (Fry et al. 2002), emotional exhaustion (Fry et al. 2002, Tonso et al. 2016), feelings of vulnerability (Fry et al. 2002, Lewis & Dehn 1999) and violated psychological integrity (Fry et al. 2002), are indirect consequences of violence. Violent experiences led to increased concern of loved-ones for staff members' safety (Lewis & Dehn 1999), increased use of sick leave (Soares et al. 2000, Tonso et al. 2016), and increased risk of post-traumatic stress disorder (Fujimoto et al. 2017). Greater exposure to more forms of violence significantly increased psychological distress (Tonso et al. 2016). Sexual attacks, non-verbal intimidation, and verbal threats increased psychological fear (Flannery & Walker 2001). Due to violence, the perpetrator could end up in psychiatric hospital (Flannery et al. 2001a).

Relationships between factors associated with violence

Examination of the relationships between the factors associated with violence revealed that the factors are strongly connected and influence each other.

When violent situations occurred, reasons for violence, the forms of violence, and the consequences of violence were connected by place and time. Violent behaviour occurred in mental health centers (Fry et al. 2002, Swanson et al. 1999), at the perpetrator's home (Fry et al. 2002, Fujimoto et al. 2017, Swanson et al. 1999), and in other places like day centers (Fry et al. 2002). Comparisons of months, days of the week, and times of the day showed that the risk of violent behaviour increased in March, on Sunday, and during the morning time (Flannery et al. 2010).

Nursing-staff-related reasons for violent behaviour were also associated with forms of violence because females were at significantly higher risk of sexual attack, non-verbal threats, and verbal attack (Flannery & Walker 2001). On the other hand, longer durations of work experience were associated with increased risk of sexual harassment (Fujimoto et al. 2017). Longer durations of work experience and greater numbers of monthly visits were associated with increased risk of verbal violence (Fujimoto et al. 2017). Also, reactions of nursing staff members could influence violence and the threat of violence because their ability to be present and their skills in dialogue helped with constructive handling of violent situations (Carlsson et al. 2004). Nursing staff members' psychological absence, feelings of fear, and demonstrations of feelings of fear could all escalate a violent situation (Carlsson et al. 2004). Verbal communication and body language by nursing staff were also essential for handling violent situations (Carlsson et al. 2004).

No reported differences between aggressiveness, adherence, or compliance with treatment and patient history of violence were reported, considering the background variables associated with reasons for patient violent behaviour (Rao et al. 2007). Moreover, no differences between background variables and single factors associated with violence were reported (Flannery et al. 2011).

DISCUSSION

This systematic review confirmed that violence committed by patients against nursing staff in psychiatric outpatient settings is a multidimensional phenomenon comprising three factors: reasons for violence, forms of violence, and consequences of violence. The findings of this review also show that these factors are connected to each other and influence each other.

The findings of this review indicate that the usual reasons for patients' violent behaviour are male gender, young age, substance use, and prior history of violence combined with psychiatric disorders like schizophrenia or personality disorder. According to Ose et al. (2017), the risk of patient violent behaviour has increased in both psychiatric inpatient and outpatient settings. In their study, patient's young age, male gender, low economic and educational status, substance use, and schizophrenia increased the risk of violent behaviour (Ose et al. 2017). Ridenour et al. (2015) examined the risk factors of workplace violence and concluded that patients' personality disorders are related to increased risk of violent behaviour. Also, patient restriction, physical assistance, and medication were reasons for violent behaviour especially in inpatient settings (Ridenour et al. 2015). Ose et al. (2017) found that the risk of violent behaviour also increased among refugees and offered the impact of sociodemographic characteristics as an explanation for this finding.

The findings of this systematic review indicate that common reasons for falling victim to violence from the perspective of the nursing staff are female gender, young age, and short durations of work experience. Edward et al. (2016) compared physical and verbal

violence in a study and found that females are at increased risk of verbal violence while males are at increased risk of physical violence. On the other hand, Lawoko et al. (2004) highlighted in their study that physical strain derived from working conditions was associated with higher risk of being abused. Lawoko et al. (2004) also found that longer durations of work experience were associated with higher risk of being abused because staff who had worked longer had more exposure to violence.

Maquire and Ryan (2007) explored experiences with violence among nursing staff and found that education, duration of work experience, and age were associated with form of violence. For example, research managers and staff of equivalent grades reported more violent occurrences than staff nurses or students, and staff aged 40-44 years reported sexual harassment more frequently than staff aged 45 years and older or 39 years and under (Maquire and Ryan 2007). Ridenour et al. (2015) found that staff members employed at their current job for over a year experienced violence more frequently than those with less work experience. Also, Terkelsen and Larsen (2016) found that causes of violence in inpatient settings are most often related to gender, atmosphere, environment, and nursing staff members' stereotypical thinking. Najafi et al. (2017) denoted that nurses' weak communication skills and inappropriate professional communication might be antecedents of workplace aggression. The results of this systematic review also pointed out the importance of communication skills when handling violent situations.

The findings of this systematic review suggest that the reasons nursing staff fall victim to violence, from the perspective of nursing staff, may also be related to organisational

factors. Choiniere et al. (2014) demonstrated that increased workload, a changing work environment, and lack of resources increased emotional stress, and this emotional stress influenced nursing staff members' experiences with violence. Blando et al. (2013) and Shea et al. (2017) identified a link between the characteristics of the workplace and exposure to violence. Llor-Esteban et al. (2017) studied violence in various healthcare settings and found that physical violence most commonly occurred in psychiatric units and verbal violence most commonly occurred in emergency units. Lawoko et al. (2004) found that the physical and psychological work environments can be contextual stressors and can influence experiences with violence. Lawoko et al. (2004) also highlighted the differences between experiences with violence in Sweden and in England, which may arise from differences between service systems and nursing cultures in those countries. Stevenson et al. (2015) found that, in inpatient settings, the acceptance and allowance of violence is understood as a part of nursing culture, which influences reporting of exposure to violence.

The findings of this systematic review indicate that nurses can be exposed to violence in different circumstances, for example in mental health centers, at the perpetrator's home or in day centers. This is a considerable finding, because there are intercountry differences how psychiatric outpatient services are organised. According to WHO (2014), hospital outpatient departments, mental health outpatient clinics, community mental health centers and facilities like day-care centers are ways to provide psychiatric outpatient services. Income group of countries influences strongly the availability and utilisation of psychiatric outpatient services (WHO 2014). Lawoko et al. (2004) discussed impacts of differences between English and Swedish psychiatric services to violent exposures.

Lawoko et al. (2004) saw that team work in Sweden may protect against violence when isolated work in England increases the risk of violence. Nolan et al. (2001) discussed that in community settings nurses may even be in greater risk for violent exposures by patient's relatives because nurses collaborate more often with them. Maquire & Ryan (2007) found differences of violent experiences in relation to service settings and service location in Ireland.

This systematic review revealed that the most common form of violence in psychiatric outpatient settings is verbal violence. Choi and Lee (2017), in their study of workplace violence, found verbal violence the most common form of violence in the field of nursing. Maquire and Ryan (2007) also found that the most common forms of violence were non-threatening and threatening verbal violence. Nolan et al. (2001) found that the most common forms of violence in Sweden and England were verbal threats and aggressive behaviour. Physical violence, like biting, kicking, pushing, and slapping, were reported in the studies by Nolan et al. (2001), Maquire and Ryan (2007), Choi and Lee (2017), and Stevenson et al. (2015). Nolan et al. (2001) also included the possible use of weapons during violent incidents in their study. Ridenour et al. (2015) found no differences between days of the week with regards to violent occurrences. However, working the day shift increased the risk of exposure to verbal violence, and working the evening shift increased the risk of exposure to physical violence.

This systematic review identified physical and psychological consequences of violence for nursing staff. Lawoko et al. (2004) found that victims of violence reported

psychological problems and decreased quality of care, and also highlighted that female victims reported physical health problems more often than male victims. Zeng et al. (2013) reported findings like those by Lawoko et al. (2004) while addressing connections between exposure to violence and decreased quality of physical and psychological life among psychiatric nurses. Fujishiro et al. (2011) found connections between physical and verbal violence, work-related health problems, and increased use of sick leave while exploring nurses' wellbeing at work. Choi and Lee (2017) found that exposure to violence influenced burnout and turnover among nurses and demonstrated that experiences with multiple forms of violence were related to psychological trauma. Stevenson et al. (2015) found that nurses' experiences with their own vulnerability continued many days after exposure to violence while nurses questioned their own safety at work.

The results of this systematic review did not actually emphasize cultural or intercountry differences in violent exposures. Nevertheless, there is a need to pay attention to contextual differences in the field of psychiatric nursing. According to previous studies of workplace violence in nursing, Spector et al. (2014) found that rates of physical violence and sexual harassment were highest in Anglo region whereas rates of nonphysical violence and bullying were highest in Middle East region. Rates of bullying and sexual harassment were lowest in Europe (Spector et al. 2014). Furthermore, Camerino et al. (2008) found intercountry differences while comparing eight European countries. They found that violence from patient or relatives was most common in France and rarest in The Netherlands. Also, harassment by superior or colleagues was rarest in The Netherlands whereas it was most common in Poland (Camerino et al. 2008). Spector et al. (2014) denoted that patient was most often the perpetrator of violence in Anglo and

European regions and in Asia and Middle East regions the perpetrator was most often the patient's family member or friend. Spector et al. (2014) explained that these intercountry differences are derived from cultural taboos, values, and sensitivity.

LIMITATIONS

This systematic review has some limitations. First, the 'psychiatric outpatient setting' was a challenging concept because various expressions of this concept exist worldwide. For this review, search terms were selected based on previous research and a preliminary search, and with the help of an information specialist from the university library. Second, in the studies included, six had the same author and comprised studies based on the same data. This definite data was quite unique and small on global level because it represented appearance of violence only in one Western country. Nevertheless, this data was based on reported patient assaults on staff. Results of these six studies represented rather restricted data which was based mainly on one researcher's interests. These may impact to the results of this systematic review by giving a greater value for a single view about this phenomenon of interest and highlighting the appearance of violence in one country. Nevertheless, all these six articles examined the phenomenon of interest from different perspectives and fulfilled the inclusion criteria of this systematic review and the criteria of quality assessment. Third, data analysis was conducted by a single researcher. This may have threatened the trustworthiness of the analysis. However, the goal of this analysis process was to avoid potential bias by aiming for accuracy and transparency, and to increase trustworthiness. Nonetheless, study selection and critical appraisal were conducted by two independent researchers who reached agreement at the end of the selection and appraisal processes. No disagreement existed between the two researchers after study selection and critical appraisal.

Also, language bias, publication bias, and selection bias were observed in this systematic review. The language inclusion criterion was limited to English and Finnish because of the language skills of the study researchers. English is the most commonly used language in international publications. The literature search for this systematic review was conducted in diverse electronic databases to avoid publication bias. A manual literature search was omitted due to the assumption that an electronic literature search would be broad enough. The inclusion criteria were clearly and precisely defined to avoid selection bias. Also, selection of studies for inclusion in this systematic review was conducted independently by two researchers.

CONCLUSION

Relevance for clinical practice

Acknowledging the reasons for violence in psychiatric outpatient settings is important because it can improve anticipation of the start of violent situations and prevention and control of potential escalation of violent situations. Based on the findings of this systematic review, nursing staff require professional and personal skills and preparation for managing violent situations. For example, Terkelsen and Larsen (2016) found use of dialogue important for controlling violent situations because dialogue helped create patient-oriented interactions that increased the patient's trust and feelings of safety; verbalizing a situation through dialogue was also considered helpful. Irwin et al. (2006) found that a caregiver's self-knowledge and understanding of the uniqueness of patients and situations were important for handling violent situations. Developers of nursing education and continuing education, and nursing management must be challenged to develop interventions and training programmes to increase the skills of nursing staff in dialogue.

Violence against nursing staff in psychiatric outpatient settings is most often verbal violence but can also be physical violence. From this point on, it is important that nursing staff be ready to use multiple interventions, according to a given situation, to prevent and/or manage violence and to calm patients. For example, Stevenson et al. (2015) indicated the need for different kinds of interventions for prevention of violent behaviour, and Terkelsen and Larsen (2016) stated that not all tools used by nursing staff to calm patients were necessarily suitable for every patient.

For psychiatric outpatient settings, it is important to pay attention to the direct and indirect consequences of violence against nursing staff. Psychological consequences, in particular, influence quality of care, quality of life, occupational wellbeing, and coping at work. Physical injuries can also decrease one's physical ability to work. Choi and Lee (2017) highlighted the importance of noticing the connection between nursing staff experiences with violence and their coping with work and general quality of life. In addition, Najafi et al. (2017) highlighted the connection between experiences with violence and quality of care.

Future research examining how violence committed against nursing staff by patients occurs in different kinds of psychiatric outpatient settings and the experiences with violence encountered by nursing staff is important. Agreeing with Najafi et al. (2017), it would be important to compare cultural and intercountry differences of violent exposures. It would also be interesting to determine the meaning of the terms 'working environment' and 'working circumstances' for the occurrence of violence committed by patients against nursing staff in psychiatric outpatient settings. If possible, it would be fruitful to also examine how well and how often violent situations are reported in psychiatric outpatient settings because studies have shown that reporting may be deficient (Maquire and Ryan 2007, Stevenson et al. 2015).

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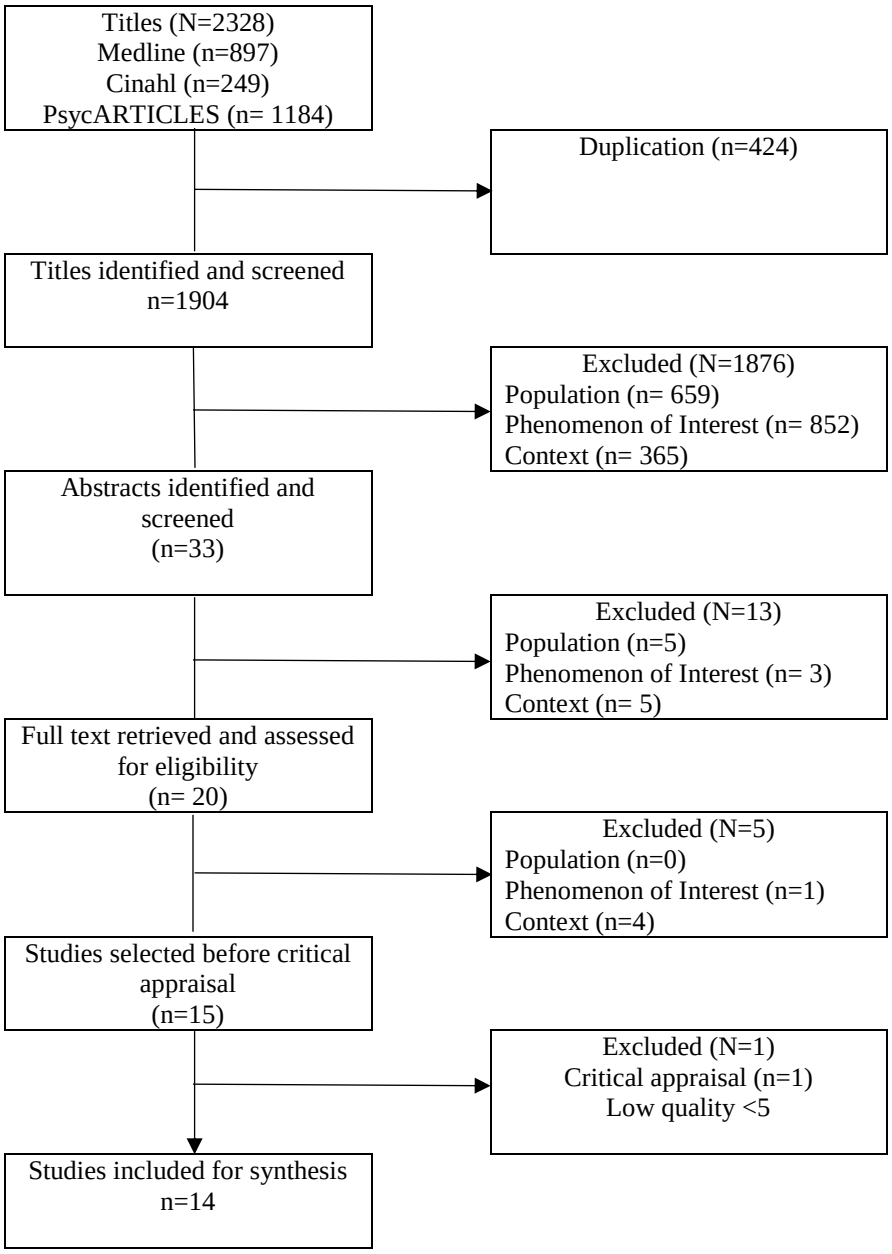
Titles (N=2328)
Medline (n=897)
Cinahl (n=249)
PsycARTICLES (n= 1184)
Duplication (n=424)
Titles identified and screened
n=1904
Excluded (N=1876)
Population (n= 659)
Phenomenon of Interest (n= 852)
Context (n= 365)
Abstracts identified and
screened
(n=33)
Excluded (N=13)
Population (n=5)
Phenomenon of Interest (n= 3)
Context (n= 5)
Full text retrieved and assessed
for eligibility
(n= 20)
Excluded (N=5)
Population (n=0)
Phenomenon of Interest (n=1)
Context (n=4)
Studies selected before critical
appraisal
(n=15)
Excluded (N=1)
Critical appraisal (n=1)
Low quality <5
Studies included for synthesis
n=14

Figure 1.

Table 1.

Original studies, country	Purpose	Participants	Methodology Data collection, Data analysis	Key findings	Quality assessment
Carlsson, G. Dahlberg, K. Lützen, K. Nystrom, M. (2004) Sweden	Deepen the preliminary understanding of caregivers' experiences with violent encounters in the context of psychiatric care. Deepen the understanding of how caregivers, when feeling threatened and experiencing fear, continue and manage the problematic violent encounter.	Informants N=12 from a psychiatric clinic and community health care (nurses n=2, nursing assistants n=10)	Phenomenological study design; Re-enactment interviewing; Phenomenological analysis	This study described the violent encounter as either positive or negative. The positive violent encounter was characterized by the caregivers' presence. The caregiver was capable of handling feelings of fear through inner dialogue. Dialogue gave caregivers enough courage and strength to stay in the situation and care for the patient in an appropriate benevolent way. Caregivers tried to understand each patient from the patient's perspective instead of operating by their own prior understanding. The negative violent encounter is characterized by the caregivers' absence due to feelings of fear before a violent encounter. Caregivers are unable to handle this fear, and the unsolved fear dominates the negative encounter. Caregivers who successfully encounter aggressive and violent patients are attentive to the patients' needs and desires. Caregivers can balance closeness to and distance from patients using verbal communication and body language.	MAStARI 9/10
Flannery, R.B. Fisher, W. Walker, A.P. Littlewood, K.B. Spillane, M.J. (2001a) USA	Provide a preliminary inquiry into the nature of assaultive community-residence patients discharged from one unit of Massachusetts state hospital where there had been no episodes of assault by these patients for two-and-half years prior to their discharge.	Clients residing in community-based housing N=32 (male n=14, female n=18)	Retrospective study design; Medical patient charts; Statistical analyses	During the first 12 months observed, 16 patients committed 42 assaults. Fifty-seven percent (57%) of the assaults were on other patients, and 43% on staff. Seventy-four percent (74%) of assaults were verbal, 12% sexual, 7% physical, and 7% non-verbal. Sixteen assaultive patients were primarily younger males with a diagnosis of schizophrenia and a history of violence, substance abuse, and personal victimization. The most frequently stated reasons for the assaultive behaviour included auditory hallucinations, feelings of being unsafe, alcohol use, and misperceived romantic dyads. Six of 9 repeatedly-assaultive patients were rehospitalized.	MAStARI 5/10
Flannery, R.B. Lizotte, D. Laudani, L. Staffieri, A.	Revisit the first Flannery inquiry into assaultive violence against female	Inpatient staff-victims N=465 (male n=250, female n=215)	Retrospective study design;	Community same-gender assaults were significantly higher than community different-gender assaults. A sub-analysis revealed no significant same-gender or different-gender assault ratios in community residences	MAStARI 6/10

Walker, A.P. (2001b) USA	staff in inpatient and community settings.	Community staff-victims N=241 (male n=121, female n=120)	Assaulted Staff Action Program- reports; Statistical analyses	or community inpatient settings. Female in-patient hospital staff were at increased risk of same-gender assaults, and female community-staff were at increased risk of different-gender assaults.	
Flannery, R.B. Walker, A.P (2001c) USA	Begin to address the possible differential characteristics of patient assailants and their staff victims in each of four assault categories.	Inpatients and community-based patients N= 515 (male n=252, female n=263)	Retrospective study design; Report forms from the Assaulted Patient Action Program; Statistical analyses	During a 6-year period, 529 patients committed 706 assaults. Of these assaults 66% were inpatient and 34% community-based. Prior history of violence, personal victimization, and substance use disorder were highly associated with subsequent assaults in each assaults category. Females committed a significantly greater number of assaults (sexual assaults excluded). Female staff victims were significantly more likely to fall victim to sexual assaults (70%), nonverbal intimidation (75%) and verbal assaults (67%). Physical assaults most frequently caused physical injuries (44%). Psychological fright was the most common consequence of sexual assault (45%), nonverbal intimidation (100%), and verbal threats (90%).	MAStARI 7/10
Flannery, R.B. Marks, L. Laudani, L. Walker, A.P. (2007) USA	Examine same-gender/different-gender assaults in one public health care system during a fifteen-year period.	Assaultive inpatients N=1572 (male n= 806, female n=766) Assaultive community patients N=531 (male n=241, female n=290)	Retrospective study design; Reports from the Assaulted Staff Action Program; Statistical analyses	There were reported totally 1071 male staff victims and 1049 female staff victims. Community settings reported 240 (45%) male and 290 (54%) female staff victims. In community settings there were 134 (56%) male patients assault against male staff and 105 (44%) male patients assault against female staff. Numbers for female patient assaults on male staff were 108 (37%) and 180 (67%) female staff. Same-gender assaults were significantly more frequent than different-gender assaults in both inpatient and community settings.	MAStARi 6/10
Flannery, R.B. Flannery, G.J. Walker, A.P. (2010) USA	Continue the inquiry into the temporal patterns of psychiatric patient assaults on staff during a 20-year period.	Assaultive patients N=2827 (assaultive inpatients n=2271, assaultive patients in community settings n= 556)	Retrospective study design; Medical charts, incident reports; Statistical analyses	Most assaults occurred in community settings in March (11%) and fewest in September (7%). Seasonal differences between quarters were not statistically significant. In community settings, 46% of assaults occurred during days 1 through 10. Sunday presented the highest risk for assaults in community settings. The hours of 10 AM and 11 AM were, in both settings, the hours of the most frequent assaults. The greatest risk of assault was presented during the first sift in both settings. Meal times also increased the risk of violent assault.	MAStARI 6/10

Flannery, R.B. Staffieri, A. Hildum, S. Walker, A. (2011) USA	Continue to examine both commonly-researched single precipitants and then multiple precipitants of the violence triad in their associative relationship with subsequent assault in a 16-year study of patient assaults in one public health sector's system of care.	Assaultive patients N=2501 (male n=1214, female n=1287)	Retrospective study design; Medical charts, discussions; Statistical analyses	During the 16-year period there were 564 (22%) community-based assaults and 2002 (78%) inpatient assaults on staff. Single precipitants were: denial of services (21%), acute psychosis (19%) excess sensory stimulation (12%), negative staff attitudes (7%), medication noncompliance (5%), commitment extension (2%), misdirected affection (1%) and other (18%). Clinical variables such as history of violence, personal victimization, and substance use disorder were significantly more frequently associated with subsequent assaults than any individual variable. Combinations of clinical variables and single precipitants were not statistically significant.	MAStARI 7/10
Fry, A.J. O'Riordan, D. Turner, M. Mills, K.L. (2002) Australia	Investigate the phenomenon of aggression against community mental health staff.	Community mental health staff N=92 (nurses n=45, receptionists n=18, psychologists n=7, occupational therapists n=7, social workers n=7, medical officers n=6, welfare officer n=1, not specified n=1)	Descriptive exploratory design; Self-report questionnaire; Statistical analyses, content analyses	Ninety-six percent (96%) of respondents had experienced some kind of aggression during the course of their work. Eighty-nine percent (89%) of abuse was verbal and occurred face-to-face and 81% occurred over the telephone. Fifty-six percent (56%) of respondents reported threats to property and 58% reported actual damage to property. Fifty-three percent (53%) of respondents reported threats against self and 18% were threatened with a weapon. Twenty-four percent (24%) of respondents reported physical assaults without injuries, and 7% reported physical injuries. Seven percent (7%) of respondents reported sexual assault and 11% were chased. Aggressive incidents occurred most frequently at the community centre (40%), in private homes (19%) or at another location (14%). Fifty-eight percent (58%) of incidents were not formally reported. Emotional reactions experienced by staff were: anxiety (44%), emotional distress (35%), feelings of vulnerability, and violated psychological integrity (9%).	MAStARI 5/10
Fujimoto, H. Hirota, M. Kodama, T. Greiner, C. Hashimoto, T. (2017) Japan	Clarify the experience of violence among psychiatric visiting nurses (PVNs) and identify who typically perpetrates the violence against PVNs during visits to people with mental disorders. Clarify what	Psychiatric visiting nurses n=94	Cross-sectional study design; Questionnaire; Statistical analyses	Forty-one percent (41%) of participants had experienced some form of violence during the previous 12 months. The most common forms of violence to which participants were exposed during the previous 12 months were: verbal abuse (29%), threatening behavior (14%), sexual harassment (11%), property damage (5%), and physical assault (4%). The reported frequency of exposure to violence per participant was 1-2	MAStARI 6/10

	characteristics and work situations among PVNs were associated with violence exposure. Clarify the resulting possible psychological effects of violence exposure.			times during the previous 12 months, except for verbal abuse which was experienced 3 or more times in the same time period. Reported violent incidents were committed by patients. In one case of verbal abuse and threatening behavior, the violence was committed by patient and family together. Statistically significant relationships were found between duration of experience as a nurse and sexual harassment, duration of experience as a psychiatric home visiting nurse and verbal abuse, and between number of visits per month and verbal abuse. A regression model showed that verbal abuse was associated with duration of career as a PVN and number of visits per month. Six percent (6%) of participants had a potentially high risk of post-traumatic stress disorder (PTSD).	
Lewis, M.L. Dehn, D.S. (1999) USA	Determine the incidence and severity of patient assault, physical assault, and verbal threats to nurses in outpatient mental health settings and examine the impact of assault on outpatient nurses.	Nurses in outpatient psychiatric/mental health facilities (n=72)	Descriptive study design; 25-item questionnaire; Statistical analyses	Seventeen percent (17%) of respondents reported a total of 20 physical attacks. Sixty percent (60%) of attacks occurred after 10 years of outpatient practice. Some kind of weapon was used in 20% of attacks. Physical injuries were caused in 8 attacks. The impacts of the assaults were: increased sense of vulnerability (58%), and increased concern of loved ones for nurses' safety (50%). Also, decreased emotional wellbeing, increased nightmares, and decreased motivation for nursing were reported. Over half of respondents were verbally threatened by a patient, and half of those were verbally threatened with physical attack. Some threats of physical attack were direct, some indirect. Assaulted or threatened nurses were more concerned about patients' violent or threatening behavior than non-assaulted or non-threatened nurses. All attacks were reported.	MAStARI 5/10
Rao, H. Luty, J. Trathen, B. (2007) United Kindom	Compare the characteristics of patient with and without a history of violence in a large sample of patients attending a community mental health service in South East England.	Phase I: in-patients (n=90), community mental health team patients (n=911), drug and alcohol service patients (n=231), psychiatric outpatients (n=576)	Descriptive study design; Semi-structured interviews including Quick Personality Assessment Schedule, Comprehensive Psychopathology	Patients' history of violence increased the rates of violence against health workers. Alcohol and drug-use were associated with history of violence and violent behavior. Thirty-three percent (33%) of patients with a history of violence had a severe mental disorder and severe substance use disorder. Schizophrenia and personality disorder increased the risk of violent behavior.	MAStARI 6/10

		Phase II: patients (n=373)	Rating Scale, Alcohol Use Disorder Identification test; Statistical analyses	Key workers reported no differences in aggression, engagement or adherence to care plan in those with a history of violence.	
Soares, J.J.F. Lawoko, S. Nolan, P. (2000) Sweden	Examine the extent and nature of violence experienced by psychiatric nurses and psychiatrics and its relationship such variables as work environment.	Mental health care personnel N=1051 (nurses n=731 psychiatrics=320), in in-patient settings (n=546), outpatient settings (n=381), integrated settings (n=60), emergency team (n=16), administration (n=25), other (n=9)	Cross-sectional study design; 14-page questionnaire; Statistical analyses	Eight-five percent (85%) of personnel reported exposure of violent act over their career and 57% were victim of violence during the previous year. Ninety-seven percent (97%) of assaults were caused by the patient. Victims of violence differed from non-victims in: demographics, work conditions and work environment, views on quality of care, organisational enhancement, and health.	MAStARI 6/10
Swanson, J. Borum, R. Swartz, M. Hiday, V. (1999) USA	Describe the prevalence, frequency, severity and selected contextual features in people with several mental illnesses.	Patients awaiting discharge on outpatient commitment N=331 (female n=152, male n= 179)	Descriptive, epidemiological study design; Extensive, structured interview, hospital records; Multivariable analyses	Risk of exposure to violence was significantly elevated among patients who were young, victims of crime, and had problems with alcohol or drugs co-occurring with psychiatric disorder. Two percent (2%) of respondents had fought with a mental health staff member or provider. The most common places for violence were: the home (46%) and the target's home (15%). Ten percent (10%) of violent occurrences occurred in hospitals and 6% in mental health centers.	MAStARI 7/10
Tonso, M.A. Prematunga, R.K. Norris, S.J. Williams, L. Sands, N. Elsom, S.J. (2016) Australia	Improve present understandings of workplace violence in Victoria's mental health settings. Evaluate the self-reported consequences of workplace violence for participants' health.	Mental health workers (n=394) in various settings (e.g. in-patient units, outpatient centers, community care units)	Exploratory descriptive study design; Cross-sectional survey (3 different questionnaires); Statistical analyses	Eighty-three percent (83%)of mental health workers reported exposure to at least one of five forms of violence listed in the questionnaire. Eighty percent (80%) of workers reported verbal abuse, 6% reported sexual harassment, and 13% reported racial harassment. Thirty-four percent (34%) of respondents were physically assaulted and 5% of those assaults involved weapon. The perpetrator was most frequently a patient/client for victims of physical (96%), verbal (69%), racial (73%), and sexual (75%) harassment or violence. Victims of violence usually reported multiple episodes of violence. Thirty-three percent (33%) of respondents reported psychological distress. Exposure to more forms of violence was significantly associated with reports of psychological distress. Exposures to violence increased the	MAStARI 7/10

				number of sick days used by workers compared to participants with no exposure to violence.	