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ABSTRACT

Personal experiences of aggression or violence in the workplace leads to serious consequences for nurses, the patient, patient care and the organisation. While there is a plethora of research on this topic no review is available that identifies types of aggression encountered, individuals perceived to be most at risk and coping strategies for victims. The aim of this systematic review was to examine occupational anxiety related to actual aggression in the workplace for nurses. Databases (Medline, CINAHL and Psyinfo) were searched resulting 1543 titles and abstracts. After removal of duplicates and non-relevant titles, 137 papers were read in full. The major findings of the review were that physical aggression was most frequent in mental health, nursing homes and emergency departments while verbal aggression was more commonly experienced by general nurses. Nurses exposed to verbal or physical abuse often experienced a negative psychological impact post incident.

Key Words

Aggression; anxiety; coping; nurses; patient aggression; stress;

Conflicts of interest – None to declare.

INTRODUCTION

Aggression toward nurses can arise from many sources: patient to nurse, relatives to nurse, nurse to nurse, and doctor/allied health professional to nurse. The origins of the word aggression are from early 17th century from Latin *aggressio (n*), from *aggredi* 'to attack'. The definition of the word aggression for the purposes of this review is behaviour that harms regardless of the intention of the aggressor (Richardson & Hammock, 2011). A personal or vicarious experience of aggression or violence in the workplace leads to serious consequences for the healthcare professionals, the patient, patient care and the organisation. Exposure to traumatic experiences over a career of nursing, and a lack of control over these experiences, contributes to poor recruitment, poor retention, and may manifest as exhaustion (Fisher, 2002, Kamchuchat et al., 2008, Reininghaus et al., 2007). Additionally it may lead to a sense of being physically run down, feeling anger, being cynical and negative, or a sense of being under siege, which could lead to other complications such as depression and anxiety.

The nurse may also respond by absenteeism from work, changing jobs, or leaving nursing altogether. The potential for workplace aggression and violence towards health care workers leading to occupational anxiety is not a new phenomenon; it has been reported as being quite frequent and widespread (Warren, 2011) especially in mental health care, emergency departments and other emergency services (Magnavita and Heponiemi, 2012). In these cases, the most common type of occupational violence reported is that of patient aggression against healthcare workers (Taylor and Rew, 2011). There is also evidence that identifies the risk of workplace aggression or workplace violence between healthcare employees themselves (Gates et al., 2011).

Although there is a plethora of information relating to workplace violence and aggression, types of perpetrators and systems for managing violence and aggression, there is presently no comprehensive systematic review of these papers. This review will identify types of aggression encountered; those individuals perceived to be most at risk and will present coping activities that victims of aggression and violence use to manage their anxiety related to these events. The benefits of such a review of the current evidence relates to the recognition of triggers for aggressive behaviour in others and potential coping interventions in managing this often under reported phenomenon.

AIMS AND OBJECTIVES

The aim of this systematic review was to examine occupational anxiety related to actual or potential aggression in the workplace for nurses. The objectives of the systematic review were fourfold; (1) to systematically search, critically appraise and summarise research that examines occupational anxiety related to actual or potential aggression in the workplace; (2) to identify the types of aggression encountered by nurses in the workplace; (3) to evaluate the potential adverse effects of the health care professional that has experienced an aggressive encounter in the workplace; and (4) to evaluate coping after aggressive encounters by nurses.

DESIGN

Systematic review

SEARCH METHODS

Type of participants

This review included any nurse in any health care setting who experienced occupational anxiety related to actual or potential aggression in the workplace

Each study must have reported, at a minimum, one of the following outcome measures:

Primary outcomes of interest were the expression of nurses' anxiety related to actual or potential aggression in the workplace that included: Incidence of aggression in the workplace; Type of aggression such as physical assault, threatened behaviour and verbal aggression; expression of anxiety, such as stress.

Secondary outcomes for this review were the availability of social support.

Inclusion and Exclusion Criteria

The following inclusion criteria were used in this review - Papers written in English; Papers published up to 2013; Health care professionals; Aggression and Occupational Anxiety. Exclusion criteria comprised the following - Papers not written in English, literature reviews and commentaries. The term health care professional was used in an attempt to ensure that all papers that examined aggression and occupational anxiety in nursing were located. The databases of Medline (1966 to January 2013), CINAHL (1982 to January 2013) and PsychInfo (1920 to January 2013) were searched for papers. The search terms used were - Violence; Threatened behaviour; Verbal aggression; Anxiety; Coping and Depersonalisation.

QUALITY APPRAISAL

Quality of the research was with reference to the Critical Appraisal Skills Program (CASP) research checklist (Taylor et al., 2000).

DATA EXTRACTION

Data extraction was completed independently by 2 review authors (KLE,PW) using an extraction tool designed for the project.

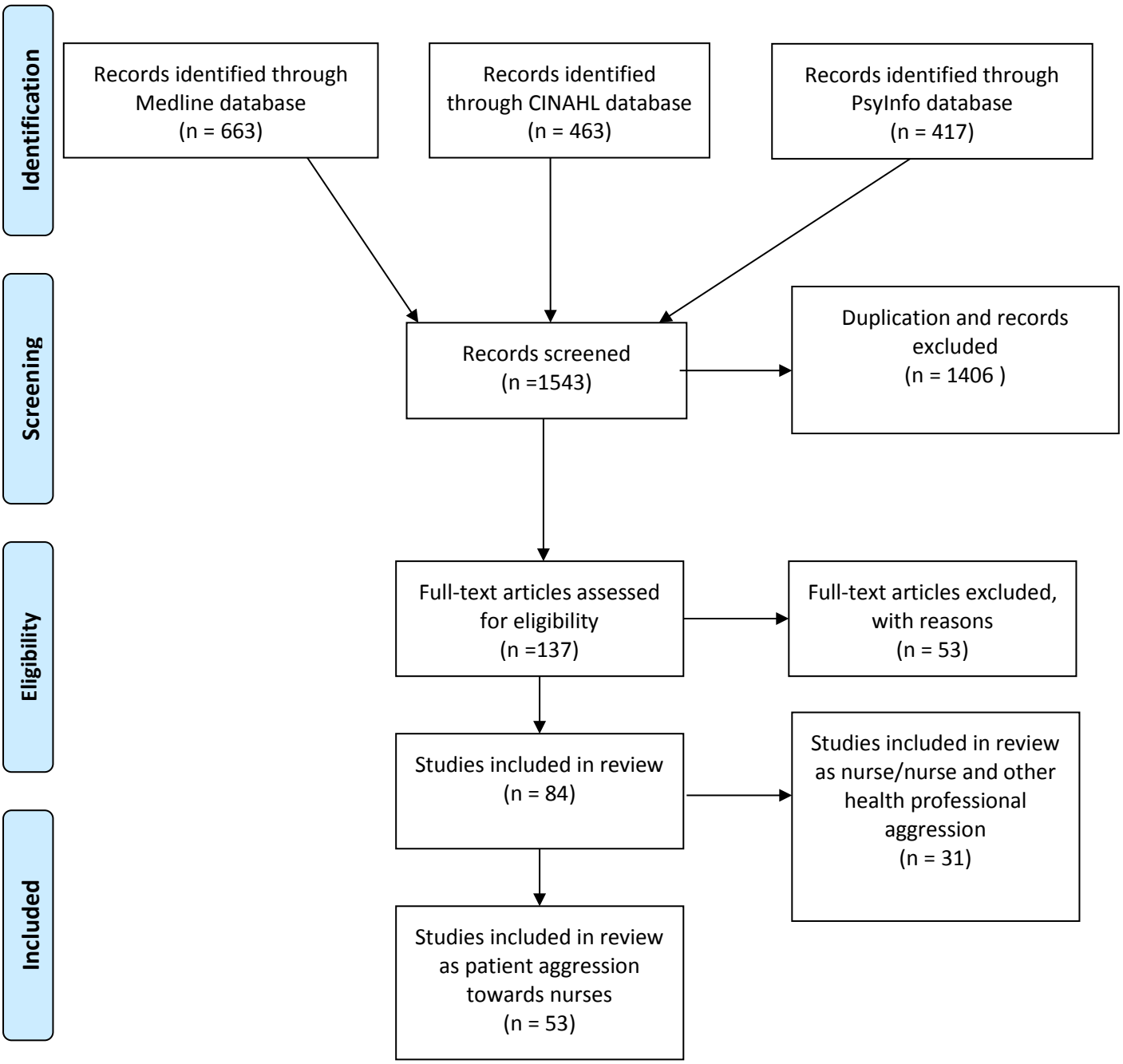
SYNTHESIS

Extracted data were collated by 2 reviewers (SL, KO) with any disagreements being discussed between the review team and data included if there was consensus. Data were then synthesised by three reviewers (KLE, PW, KO). Analysis of the data included cross tabulating quantitative findings and thematic analysis of qualitative research findings.

RESULTS

Databases (Medline, CINAHL and Psychinfo) were searched resulting in 1543 titles and abstracts. After removal of duplicates and non-relevant titles, 137 papers were read in full. 53 papers were excluded due to the inclusion criteria not being met (i.e. literature review, commentary or not focusing upon aggression)(see search outcome in figure 1). Of those remaining (n=84), 53 papers explored patient aggression towards nurses and other health care professionals, and 31 papers explored and reported on aggression between nurses and nurses and nurses and other health care professionals referred to as horizontal aggression (Becher & Visovsky,2012).

Figure 1: Search Outcome PRISMA Flowchart



DISCUSSION

This review has highlighted important considerations associated to aggression towards nurses in the work place. These considerations relate to the international nature of the problem of aggression towards nurses, gender specific considerations particularly in relation to location of work/employment and incidence of aggression, incidence and type of aggression (physical assault and verbal abuse), the impact on the nurse (post aggressive/violent incident in the workplace) and finally the availability of social support .

In this review the countries represented in the evidence included Australia, Turkey, Taiwan, UK (including Northern Ireland), US, Sweden, Germany, Switzerland, Japan, Palestine, Italy, Brazil, Canada, and Israel. The findings from these studies were remarkably similar with regards to type of aggression commonly experienced, the locations where aggression were most likely to occur and in which context, and common problems for both the organisation and the individual involved post incident. The majority of the papers included in the review used quantitative methods (or mixed) with only 18 included using a qualitative approach of these 18 papers two used a mixed methods approach.

Gender and professional factors

This review revealed that younger and less experienced nurses were more at risk of violence in the workplace when compared to older nurses and more experienced registered nurses (Estryn-Behar et al., 2008, Ito et al., 2001, Sakellaropoulos et al., 2011). Additionally in most settings male nurses were more likely to encounter physical assaults (see table 1). The evidence also suggests night shift nurses and weekend nursing staff were more at risk of workplace aggression (Gacki-Smith et al., 2009, Shiao et al., 2010). In part, this may be attributed to the relative isolation in which these nurses are working and lower staffing

levels during these 'quieter' times. In the mental health setting male nurses were once again identified as more likely to experience an aggressive encounter when compared to female staff (1.7 times more likely), and similarly to the generalist areas, younger and less experienced staff were more likely to encounter verbal abuse (Kitaneh and Hamdan, 2012). However, when considering student nurse population, females were more likely targets for aggression in the workplace (Çelebioğlu et al., 2010, Lash et al., 2006).

Table 1: study characteristics of studies providing physical assault data by gender

Study	Main author	Location	Sample	Total sample size	Physical Assault (%) in males	Physical Assault (%) in females
1	Kitaneh	Israel	Physicians and nurses recruited from several departments in 5 public hospitals	142	25.9	17.4
2	Lawoko	GB/Sweden	Psychiatric nurses and psychiatrists recruited from general psychiatric clinics	1426	78.1	73.1
3	McKinnon	Australia	Nurses recruited from two adult acute psychiatric in-patient units and community-based teams	56	100	83.7
4	Morgan	Canada	Nursing aides recruited from rural nursing homes with and without dementia special care units	355	6.67	7.00
5	Sakellaropoulos	USA	Randomly selected members of American Association of Nurse Anaesthetists	184	78.3	85.5
6	Zampieron	Italy	Nurses recruited from several departments in 2 hospitals (one University; one general)	578	9.24	8.93

Verbal abuse was the most frequently encountered experience of aggression across most areas in health and more nurses than physicians were exposed to violence throughout their careers (McKinnon and Cross, 2008, Murray and Snyder, 1991, Lawoko et al., 2004, Badger and Mullan, 2004, Deans, 2004a, Spector et al., 2007). The higher incidence of violence or aggression towards nurses when compared to physicians may be attributed to a number of factors including length of time spent with the patient, perceived senior authority of doctors by patients when compared to nurses and how this relates to their care and treatment options, communication style and misinformation. The review results also suggest a nurse who had previously experienced aggression or a violent act heightened the potential of experiencing such acts in the workplace(Oliveira and D'Oliveira, 2008).

Not surprisingly collegial aggression appeared high in the returned papers with higher reports of physician to nurse abuse/aggression than any other healthcare professionals (Manderino and Berkey, 1997, Deans, 2004b, O'Connell et al., 2000, Anderson, 2002, Yıldırım, 2009). Some reports indicated nurse to nurse aggression being as high as 32% within clinical areas and physician to nurse higher at approximately 42% of occurrences within the clinical areas (O'Connell et al., 2000, Anderson, 2002). An Australian study showed much higher frequencies of aggressive behaviour towards nurses with 71% from physicians and 61% from nursing colleagues (n=380) (Deans, 2004a). One study reported similar frequencies of aggressive behaviour from physicians (74%) and other nurses (75%) towards clinical colleagues (Michelle Rowe and Sherlock, 2005). Interestingly, there are no significant differences between male and female nurses regarding frequency and severity related to collegial aggression (Oweis and Mousa Diabat, 2005). Hostile actions between colleagues are characterized as being hidden, reiterated, persistent over time and

comprising the personal and professional aspects of the victim, mostly related to verbal insults, incivility and rumours about their personal life (Castellón, 2011, Curtis et al., 2007, Walrath et al., 2010). Exposure to workplace aggression in the form of bullying also resulted in poor levels of commitment to the role/organisation possibly impacting on retention (Demir and Rodwell, 2012).Bullying was correlated positively with the symptoms of burnout, emotional exhaustion (r = .46, p = 0.01), and depersonalization (r=.33, p=0.01) (Sa and Fleming, 2008).

Types of aggression

Verbal abuse

Verbal abuse was the most commonly experienced form of aggression by nurses in the any setting. High incidences of verbal abuse from patient or their relatives were evident in Canada (94%) (Pejic, 2005), Turkey (91%) (Çelik et al., 2007) and in the UK (over 90%) (Crabbe et al., 2002). The rates of verbal abuse reported by nurses ranged from 94% to 17% experienced by nurses (Bilgin and Buzlu, 2006, Çelik et al., 2007, Chen et al., 2005, Chen et al., 2009, Crabbe et al., 2002, Fisher, 2002, Foster et al., 2007, Franz et al., 2010, Hahn et al., 2010, Kitaneh and Hamdan, 2012, Pejic, 2005, Pazvantoğlu et al., 2011). Generally the rate of verbal abuse compared to physical assault was about 3:1 (Chen et al., 2009). Common types of verbal abuse against nurses included yelling, being cursed at, being intimidated, and being harassed with sexual language and innuendo. In the case of aggression such as bullying and verbal abuse included competence issues with physicians making derogatory comments regarding nurse education(Lash et al., 2006).

Physical assaults

In a study across 10 European countries (n=39,894) violent episodes /physical assaults were identified as more prevalent in mental health settings, geriatrics, long term care and nursing homes than in general clinical environments (Estryn-Behar et al., 2008). Literature suggests emergency department (ED) nurses experienced relatively high levels of physical assault in the workplace, where this could possibly be attributed to the acuity, mental state and/or level of consciousness of the presenting patients to the ED (Bin Abdullah et al., 2000).Additionally working under time pressures, feeling burnt-out in the caring role, and being young all heightened the potential for physical assaults (Estryn-Behar et al., 2008, Isaksson et al., 2008). The incidence of physical assault ranged from as low as 20.8% in a cohort of Palestine nurses (Kitaneh and Hamdan, 2012) to as high as 54.9% experienced in Turkish nurses (Bilgin and Buzlu, 2006) and 82% of ED nurses in the United States (Erickson and Williams-Evans, 2000). Common physical violent acts from patients against nurses included being spat on, being hit, being pushed/ shoved, scratched and kicked, and are perpetrated usually by patients who were being cared for. It has also suggested physical violence was associated with patients alcohol use/intoxication and due to miscommunication (Kamchuchat et al., 2008).

Experiences of nurses post aggressive incident

Frequently nurses reported experiencing sadness, shock, confusion, anger and embarrassment following an aggressive incident (Fisher, 2002, Kamchuchat et al., 2008, Reininghaus et al., 2007). In Emergency Departments up to 94% of nurses had at least one stress symptom following a violent event and being on guard following the incident (Gates et al., 2011). The longer term impacts of experiencing workplace aggression are reported to

be loss of confidence, absence from work, loss of good working relationships with colleagues and avoidance of the workplace (reported to be as high as 60%), self-medication (including drugs and alcohol) and leaving the organisation or even leaving the profession (Kamchuchat et al., 2008, O'Connell et al., 2000, AbuAlRub and Al-Asmar, 2011). In terms of physical assaults, these were significantly associated with stress at work, perceived dangerousness of the hospital and seeking support (Reininghaus et al., 2007). Nurses who ignored the incident did not have improved post incident experiences, with over 50% remaining concerned about their safety at work after the event (Bilgin and Buzlu, 2006). Where physician aggression was experienced by nurses (commonly reported in the operating room environment) the effects of verbal abuse include feelings of having no respect and no support from colleagues, feelings of hopelessness, regret, and isolation (Cook et al., 2001, Higgins and MacIntosh, 2010).

Social Support

The returned evidence revealed a high level of *non-reporting* by nurses after aggressive incidents (both verbal and physical). Non-reporting continues to be an organisational concern, and potential barriers were identified as contributing to the lack of reporting by nurses who experienced aggression in the workplace (Kitaneh and Hamdan, 2012, McKinnon and Cross, 2008, Kowalenko et al., 2012). These barriers to reporting included – a lack of (or unclear) incident reporting policy/procedure; poor or absent management support for the individual post incident; nurses having had a previous experience of *non action* post aggressive incident and opting to ignore the incident; and fear of adverse occupational consequences such as being perceived as not coping and not being able to engage well with patients (Kitaneh and Hamdan, 2012, McKinnon and Cross, 2008,

Kowalenko et al., 2012). Alarmingly, in some cases there was up to 80% of non-reporting (Pinar and Ucmak, 2011) and there was also evidence of non-action from management post aggression incident towards nurses from patients or their family/carer (Pai and Lee, 2011, Campbell, 2011).Interestingly, when provided the opportunity to discuss the incident with management only half would take up the opportunity (Whittington, 2002).

Poor reporting was also seen in cases of horizontal violence and no action or lack of appropriate training in the management of aggressive behaviour was identified by some researches (Anderson, 2011). Furthermore victims were seen as being *oversensitive*, or *misinterpreting a colleague's motives and actions* which were not intended to be personal. The perpetrators of these misinterpreted actions were thus considered not to be bullies (Curtis et al., 2006).In addition, bullying was common against nursing students and in this case the student may feel powerless or compromised opting for none reporting (Lash et al., 2006). Management of aggression as horizontal violence was often poor without adequate support structures in place (Farrell, 1997) and remains more of a concern in some cases over aggression potential from other sources (Farrell, 1999).

In the back drop of the evidence presented here not surprisingly support was sought mainly from other members of staff and not through the formal channels of the organisation. Utilising members of staff as support appears to be a resource which remains un-tapped by organisations in the management of aggression in the workplace towards nurses. Organisations tended to select training in aggression management for staff, with reports of training being effective in reducing the chance of being a victim of aggression in the workplace (Kamchuchat et al., 2008).

Limitations of the review

Due to time constraints only a selection of resources and English language publications were used to search for evidence, however this review has produced a comprehensive and international perspective on aggression towards nurses within the workplace. No trial studies were found for this important topic; and while the authors acknowledge that a randomised controlled trial would be difficult to undertake in this area, a meta-regression analysis could provide further evidence regarding the overall prevalence for physical assaults and verbal abuse towards nurses. Organisational and management support for nurses who are victims of aggression seemed erratic, and further research will benefit both the organisation and management in identifying ways in which reporting of incidents can be improved and identify types of supports (including training) for nurses related to aggression events.

The available evidence demonstrated a range of research methodologies that investigated this area, however in the quantitative areas self-report was often use (introducing the potential for bias), small sample sizes were obtained (affecting generalisability) and cross sectional designs employed (not allowing for causal links to be identified). Qualitatively data was collected and examined using a number of methods including descriptive exploratory, phenomenology, ground theory and ethnography. Future research should be such that bias is minimized and generalisability of findings is possible with links between variables being identified.

CONCLUSIONS

While the findings of the review are generally not new, the findings do offer an illustration of the type, and context for, aggression in the workplace towards nurses including the likely type of nurse that may be targeted. More specifically, physical aggression was most frequent in mental health, nursing homes and emergency departments while verbal aggression was more commonly experienced by general nurses. Nurses who were exposed to verbal or physical abuse often experienced a psychological impact post incident. The most common time for aggression occurrence in the workplace towards nurses was when the nurse was providing direct care to patients. Importantly, nurses felt less safe than other healthcare staff and in light of the available evidence it would seem that nurses were the highest recipients of aggression in healthcare when compared to other health care workers. The most common perpetrators of verbal abuse or physical assault towards nurses were patients or their relatives followed by collegial aggression (physician to nurse and nurse to nurse).

Disturbingly, nurses tended not to report incidents due to potential or actual organisational barriers (ie: poor management response, no clear policy for workplace aggression management pre incident, during the incident and post incident) and personal barriers (ie: fear of stigma and/or vote of no confidence from peers and managers, previous experience of no action from management, normalizing the event). Nurses would however utilise support from other members of the staff (informal supports) rather than formal support structures where they existed. Significantly, this appears to be an untapped resource within organisations. The review identified that many nurses did not report these situations as they did not feel confident they would be supported in a formal manner. There is a real need for staff to feel safe and supported when they have encountered an aggressive situation. This

can be achieved through formalised support programmes including clinical supervision, mentoring, having regular and recurring agenda items in staff meeting's that specifically allows team discussion about aggressive incidents (potential or actual) in the workplace and immediate debriefing systems following the incident. Additionally exit interviews with staff will allow for employers to understand reasons for leaving and detect any areas for concern that may include issues relating to aggressive behaviours. It is essential that organisations promote and inform staff of training opportunities that are available to manage both verbal and physical aggression. These cost effective and readily accessible initiatives can provide the team, the time and space to seek and receive support from other staff.

Miscommunication was identified as a potential trigger for aggressive incidents towards nurses from patients. Communication style of staff can be impacted by age, experience, level of burnout, time pressures, cognitive level of the patient, and level of responsibility of the health care worker (scope of practice). Communication style (an assessment or feedback provided of staff style) and training in communication style when working with people who are demonstrating challenging behaviours are considerations in the on-going management of aggression potential in healthcare. While the findings of this review are not surprising, this systematic review provides a synthesis of available evidence not available previously that identifies types of aggression encountered, individuals perceived to be most at risk and coping strategies for victims.

Key Points

1. Aggression or violence in the workplace leads to serious consequences for the nurses.
2. To date no review is available that identifies types of aggression encountered, individuals perceived to be most at risk and coping strategies for victims.

3. Verbal aggression towards nurses is most common in most settings (a rate of 3:1 when compared to physical violence).
4. Male nurses are more likely to encounter physical violence.
5. Key triggers for aggression towards nurses include – time pressures, nurses being burnt out, less experienced, using miscommunication and being misunderstood.
6. There were high levels of non-reporting of aggressive incidents by nurses.

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