Nursing and aggression in the workplace: a systematic review

Karen-leigh Edward, Karen Ousey, Philip Warelow and Steve Lui

Abstract

Personal experiences of aggression or violence in the workplace lead to serious consequences for nurses, their patients, patient care and the organisation as a whole. 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 PsycINFO) were searched, resulting in 1543 titles and abstracts. After removal of duplicates and non-relevant titles, 137 papers were read in full. Physical aggression was found to be 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

Aggression towards 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 the 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, 2014).

A personal or vicarious experience of aggression or violence in the workplace leads to serious consequences for health professionals, patients, 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 and retention, and may manifest as exhaustion (Fisher, 2002; Reininghaus et al, 2007; Kamchuchat et al, 2008). Additionally, it may lead to 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 to agression with absenteeism from work, changing jobs, or leaving the nursing profession altogether. The potential for workplace aggression and violence towards healthcare 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 identifies types of aggression encountered as well as those individuals perceived to be most at risk. It also presents 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 are clear with regards to the recognition of triggers for aggressive behaviour in others and potential coping interventions in managing this often under-reported phenomenon.

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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:

- To systematically search, critically appraise and summarise research that examines occupational anxiety related to actual or potential aggression in the workplace
- To identify the types of aggression encountered by nurses in the workplace
- To evaluate the potential adverse effects of the healthcare professional that has experienced an aggressive encounter in the workplace
- To evaluate coping after aggressive encounters by nurses.

Design and search methods

Type of participants

The design used was that of a systematic review, which included studies of any nurse in any healthcare setting

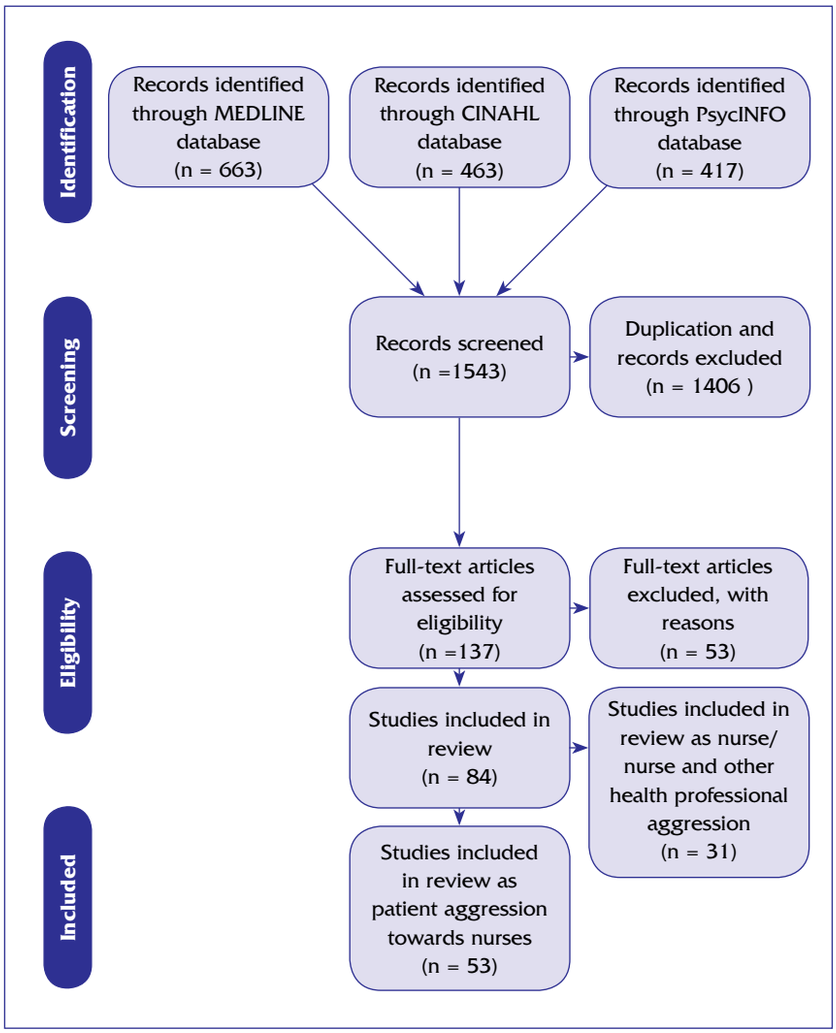

Figure 1. Search outcome of systematic review

who experienced occupational anxiety related to actual or potential aggression in the workplace. Each study must have reported, at a minimum, one of the primary or secondary outcome measures identified by the authors. Primary outcomes of interest were the expression of nurses' anxiety related to actual or potential aggression in the workplace such as incidence of aggression in the workplace; type of aggression, e.g. physical assault, threatened behaviour and verbal aggression; or expression of anxiety, e.g. stress. The secondary outcome for this review was the availability of social support.

Inclusion (and exclusion) criteria

Research papers written in English, published up to 2013, pertaining to health professionals and relating to aggression and occupational anxiety were included in this review. Papers not written in English, or that were literature reviews or commentaries, were excluded.

The term healthcare professional was used in an attempt to ensure that all papers that examined aggression and occupational anxiety in nursing were located. The databases MEDLINE (1966 to January 2013), CINAHL (1982 to January 2013) and PsycINFO (1920 to January 2013) were searched for papers using the search terms:

- Violence
- Threatened behaviour
- Verbal aggression
- Anxiety
- Coping
- Depersonalisation
- Healthcare professional.

Quality appraisal

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

Data extraction and synthesis

Data extraction was completed independently by the lead and the third review author using an extraction tool designed for the project. Extracted data were then collated by the second and the fourth author with any disagreements being discussed among the review team and data included if there was consensus. Data were synthesised by the lead, second and third authors, and analysis included cross tabulating quantitative findings and thematic analysis of qualitative research findings.

Results

Databases (MEDLINE, CINAHL and PsycINFO) were searched resulting in 1543 titles and abstracts. After removal of duplicates and non-relevant titles, 137 papers remained and were read in full. Of these, 53 papers were then excluded as a result of the inclusion criteria specified above 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 professionals, and 31 papers explored and reported on aggression between nurses, as well as between nurses and other health professionals. This is referred to as horizontal aggression (Becher and Visovsky, 2012).

Discussion

This review has highlighted important considerations associated with aggression towards nurses in the workplace. 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; type of aggression (physical assault and verbal abuse); the impact on the nurse (post aggressive/violent incident in the workplace); and the availability of social support.

In this review, the countries represented in the evidence included Australia, Turkey, Taiwan, UK, USA, 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 (or mixed) methods, with only 18 using a qualitative approach.

Table 1. 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 five 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 two hospitals (one university; one general)	578	9.24	8.93

Gender and professional factors

This review revealed that younger and less experienced nurses were more at risk of violence in the workplace when compared with older nurses and more experienced registered nurses (Ito et al, 2001; Estryn-Behar et al, 2008; Sakellaropoulos et al, 2011). Additionally, in most settings, male nurses were more likely to encounter physical assaults (*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 with 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 the student nurse population, females were more likely targets for aggression in the workplace (Lash et al, 2006; Çelebioglu et al, 2010).

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 (Murray and Snyder, 1991; Badger and Mullan, 2004; Deans, 2004a; Lawoko et al, 2004; Spector et al, 2007; McKinnon and Cross, 2008). The higher incidence of violence or aggression towards nurses when compared with 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 with nurses and how this relates to their care and treatment options, communication style and misinformation. The review results also suggest that a nurse who had previously experienced aggression or a violent act in their personal lives 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 in any other health professional relationship (Manderino and Berkey, 1997; O'Connell et al, 2000; Anderson, 2002; Deans, 2004b; Yıldırım, 2009). Some reports indicated nurse-to-nurse aggression being as high as 32% within clinical areas and physician-to-nurse aggression, even higher at approximately 42% of occurrences within 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 (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 characterised 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 (Curtis et al, 2007; Walrath et al, 2010; Castellón, 2011). 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=0.46; p=0.01), and depersonalisation (r=0.33; 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 any setting. High incidences of verbal abuse from patients 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 (Crabbe et al, 2002; Fisher, 2002; Chen et al, 2005; Pejic, 2005; Bilgin and Buzlu, 2006; Çelik et al, 2007; Foster et al, 2007; Chen et al, 2009; Franz et al, 2010; Hahn et al, 2010; Pazvantoğlu et al, 2011; Kitaneh and Hamdan, 2012). Generally, the rate of verbal abuse compared with 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, this included attacks about 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). The literature suggests that 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 by Turkish nurses (Bilgin and Buzlu, 2006) and 82% of ED nurses in the USA (Erickson and Williams-Evans, 2000). Common physical violent acts experienced by nurses from patients included being spat on, being hit, being pushed/shoved, scratched and kicked, and are perpetrated usually by patients receiving direct care. The review has also suggested physical violence was associated with patients' alcohol use/intoxication and miscommunication between nurses and patients (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; Reininghaus et al, 2007; Kamchuchat et al, 2008). In EDs, 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 the profession (O'Connell et al, 2000; Kamchuchat et al, 2008; 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, and 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 (McKinnon and Cross, 2008; Kitaneh and Hamdan, 2012; 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
- Fear of adverse occupational consequences, such as being perceived as not coping and not being able to engage well with patients (McKinnon and Cross, 2008; Kitaneh and Hamdan, 2012; Kowalenko et al, 2012).

Alarmingly, in some cases, there was up to 80% of non-reporting of these incidents from clinical staff to managers (Pinar and Ucmak, 2011) and there was also evidence of non-action from management post aggressive incident towards nurses from patients or their families/carers (Campbell, 2011; Pai and Lee, 2011). Interestingly, when provided with the opportunity to discuss the incident with management, only half would take it up (Whittington, 2002). This may be due to a lack of training and education related to management of aggressive incidents, staff feeling that they have not adequately managed the situations that led to the aggressive incident, or staff simply not wishing to relive the incident.

Poor reporting was also seen in cases of horizontal violence and lack of action or appropriate training (on the part of managers and staff) in the management of aggressive behaviour was identified by some research (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 in the form of 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 backdrop 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. Using members of staff as an official form of support appears to be a resource which remains untapped by organisations in the management of aggression in the workplace towards nurses. Organisations within this review 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

Owing 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 organisations and management staff within them in identifying ways in which reporting of incidents can be improved, as well as identifying types of support (including training) related to aggression events, which can be offered to nurses.

The available evidence demonstrated a range of research methodologies that investigated this area. However, in the quantitative areas, self-report was often used (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 were collected and examined using a number of methods, including descriptive and exploratory, phenomenology, ground theory and ethnography. Future research should be such that bias is minimised and generalisability of findings is possible with links between variables identified.

Conclusions

While the findings of this review are generally not new, they do offer an illustration of the types and contexts of aggression in the workplace towards nurses, including the type of nurse that is more likely to be targeted. More specifically, physical aggression was most frequent in mental health facilities, 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 most likely recipients of aggression in health care when compared with other healthcare 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 owing to potential or actual organisational barriers (i.e. poor management response, no clear policy for workplace aggression management pre incident, during the incident and/or post incident) and personal barriers (i.e. fear of stigma and/or vote of no confidence from peers and managers, previous experience of no action from management, normalising the event). Nurses would, however, use (informal) support from other members of the staff 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 meetings that specifically allow 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 employees' 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 with 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, level of responsibility of the healthcare worker (scope of practice) and cultural background. Assessment, feedback and training on communication styles when working with people who are demonstrating challenging behaviours are considerations in the ongoing management of potential aggression in health care. 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 those on the receiving end of aggressive behaviour within the workplace. BJN

Conflict of interest: none.

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KEY POINTS

- Aggression or violence in the workplace can lead to serious consequences for nurses
- To date, no review is available that identifies types of aggression encountered, individuals perceived to be most at risk and coping strategies for victims
- Verbal aggression towards nurses is most common in most settings (a rate of 3:1 when compared with physical violence)
- Male nurses are more likely to encounter physical violence
- Key triggers for aggression towards nurses include time pressures, burnout, lower levels of experience and miscommunication
- This review identified high levels of non-reporting of aggressive incidents by nurses