Abstract

Purpose: To relate nurses' self-rated perceptions of violence (emotional abuse, threat or actual violence) on medical/surgical units to the nursing working environment and to patient outcomes.

Design: Cross sectional collection of data by surveys and primary data collection for one week periods on 94 nursing wards in 21 hospitals in two states of Australia.

Methods: Nursing Work Index-Revised (NWI-R); Environmental Complexity Scale (ECS) PRN-80 (a measure of patient acuity); and a nursing survey with three questions on workplace violence; combined with primary data collection for staffing, skill mix and patient outcomes (falls, medication errors).

Findings: About one third of nurses participating (N=2487, 80.3% response rate) perceived emotional abuse during the last 5 shifts. Reports of threats (14%) or actual violence (20%) were lower but there was great variation among nursing units with some unit rates as high as 65%. Reported violence was associated with increased ward instability (lack of leadership; difficult MD/RN relationships). Violence was associated with unit operations: unanticipated changes in patient mix; proportion of patients awaiting placement; the discrepancy between nursing resources required from acuity measurement and those supplied; more tasks delayed; and increases in medication errors. Higher skill mix (%RN) and % BSNs were associated with fewer reported perceptions of violence at the ward level. Intent to leave the present position was associated with perceptions of emotional violence but not with threat or actual assault.

Conclusion: Violence is a fact of working life for nurses. Perceptions of violence were related to adverse patient outcomes through unstable or negative qualities of the working environment. Perceptions of violence affect job satisfaction.

Clinical relevance: In order to manage effectively the delivery of nursing care in hospitals, it is essential to understand the complexity of the nursing work environment including the relationship of violence to patient outcomes.

Violence toward Nurses, the Work Environment, and Patient Outcomes

The popular press provide a picture of a decline in basic societal civility. Bullying is discovered in primary schools and on the Internet and rudeness is all too often the order of the day in service negotiations. Front-line service professions such as policing, teaching and nursing are especially targets for interpersonal violence. Violence can take many forms including verbal and emotional abuse; physical assault; threats of physical violence; unwanted sexual advances; and harassment. In nursing, it can arise from patients, patients' families, visitors, or colleagues. Nurses in emergency departments, inpatient psychiatric units and nursing homes have been thought to be particularly vulnerable.

An unsafe working environment is detrimental to nurses' ability to deliver safe, quality care. This paper reports data on nurses' perceptions of violence in inpatient medical/surgical nursing settings in 94 nursing wards in 21 hospitals in Australia. Violence in inpatient medical/surgical settings, which is where the majority of nurses work, has not been widely studied, nor has the perception of violence among nurses been linked to variables in the working environment or patient outcomes.

Review of Literature

The World Health Organization (WHO) has defined violence as '*…the intentional use of physical force or power, threatened or actual, against oneself, another person or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation*' (World Health Organisation, 2002 p. 5). WHO has produced guidelines for dealing with violence in the workplace (Wiskow, 2003).

Violence from relatives and friends of patients may occur as a result of frustration with a perceived lack of care or communication. For example, Lyneham (2001) discussed how relatives waiting with their loved one to be seen in Emergency Departments may initiate this behavior. Pain, anxiety, loss of control, powerlessness and disorientation may result in aggressive incidents from patients to nurses (Ferns, 2007). Sometimes the tasks nurses must do may initiate or exacerbate these feelings and precipitate violent outbursts. Some have observed that experienced nurses are more likely

to pre-empt situations that may lead to violence (Ferns, 2007; Royal College of Psychiatrists, 1998). For example, offering regular pain relief medication can avoid deterioration and discomfort that may manifest as aggression. Specialized nurses may have learned how to predict violence, especially in patients with brain injuries or those with psychiatric problems (Royal College of Psychiatrists, 1998). In the USA, some hospitals have implemented a "code" for violence that evokes a response like that of a Rapid Response Team (RRT) (Jacobson, 2007).

Kingma (2001) proposed that the societal tolerance of violence towards nurses might extend to nurses themselves who may feel that a degree of violence is 'part of the job'. Duxbury (2003) found that nurses attributed patient-related violence to patients' treatment states. Nurses who felt that their managers were not able to improve the situation felt powerless (Chambers, 1998). The effects of violence can spread distress among staff, patients, family and friends and if there is no active management of the incident, there can be lasting damage (WorkSafe Western Australia Commission, 1999).

Rowe and Sherlock (2005) studied verbal abuse in nursing -- "eating our young." They conclude that bullying of this form is costly to the individual nurse, erupting as job stress, job dissatisfaction, missed work and perhaps decreased quality of patient care. Farrell (1997), in a qualitative study of 29 nurses' experiences of aggression, found that 'horizontal violence' was more distressing to nurses than physical assault from patients. SANE (the national mental health charity in England) (2004) suggested that some health professionals who are perpetrators of this aggression may themselves be suffering from a mental illness. Dellasega's (2009) review of bullying in nursing notes that most of the bullying literature comes from non-USA studies. She provides new strategies for management and for individual nurses. The cost of violence in the workplace is important as it can lead to a deterioration in staff health (Grenyer, et al., 2004; Rees & Lehane, 1996), and an increased nurse turnover rate (Jackson, Clare, & Mannix, 2002; Stevens, 2002). A UK report (National Audit Office, 2003) estimated that workplace violence cost the National Health Service (NHS) £69 million a year (US$98). In the United States it is

difficult to calculate an accurate cost as only 20% of private industry and only up to 36% of government establishments track the cost of incidents related to violence (Bureau of Labor Statistics, 2005). In Australia, the government estimated the figure for workplace violence at $6-13 billion nationwide per year (Queensland Government, 2002). This figure would include all kinds of workplace violence not just that associated with nursing. In the UK, up to 37% of sick leave costs were related to violence and aggression (Rose, 1997).

There is an alarming reluctance of nurses to report violence in the workplace. Lyneham (2000) reported over 70% of incidents in New South Wales (NSW, Australia) hospital emergency departments were not referred to authorities. In the UK this phenomenon has led to change management strategies to improve the work environment (Ferns & Chojnacka, 2005). In Ireland, Rose (1997) reported that 29% of nurses had not reported their latest physical assault, and most verbal abuse was not reported at all. It was suggested that nurses felt reporting was an empty gesture, with a general lack of support for the nurse victims. Nurses may not access support for violent incidents in the workplace because they feel it is wrong to be seen to need support, which is interpreted as professional failure (Paterson, Leadbetter, & Bowie, 1999). In certain areas of practice such as mental health, lack of reporting can occur because nurses may become complacent when faced with verbal abuse – it's just part of the job (Royal College of Psychiatrists, 2007). Grenyer et al. (2004) found that staff became more confident in dealing with aggressive behavior after attending aggression minimisation in-service programs. The submission from the Council of Deans of Nursing and Midwifery (Australia and New Zealand) to the Australian Government Productivity Commission Health Workforce Study (2005) stated that inadequate managerial care after violent incidents may lead to a reduction in nurses' proficiency, which then has negative implications for patient care.

Evidence of the consequences to health care professionals who report incompetent, unethical, or illegal practices in the workplace (whistleblowers), is limited. A survey of nurses in Western Australia found that nurses who reported incompetence or illegal practice suffered consequences such as official

reprimands, demotion, and referral to a psychiatrist, together with personal threats and pressure to resign (McDonald & Aherne, 2000). Of the many theories suggesting why violence is underreported in the workplace (Farrell, 2001), one interpretation is that nurses do not wish to be disloyal to colleagues. Regardless, a lack of reporting contributes to the issue remaining poorly recognised (Hockley, 2000).

Epidemiology of Violence Toward Nurses

The majority of the literature on violence in nursing deals with emergency departments, psychiatric settings or nursing homes, all thought to have higher rates of violence than other types of practice environments. The literature reviewed here is where possible that which relates to our focus on medical/surgical settings.

In a study of policy implications and recent trends in the international migration of nurses, Buchan, Kingma and Lorenzo (2005) reported that nurses are three times more likely to be the victims of violence than other health personnel. Foster, Bowers and Nijman (2007) calculated that in any given 12-month period, nurses working in acute psychiatric units in the UK had a 1 in 10 chance of receiving an injury as a result of patient aggression while Wells and Bowers (2002) also in the UK found a similar rate of violence (with or without injury) against general nurses. In addition, one NHS Trust found that nurses caring for the elderly were more likely (65% vs 42%) to experience an incident of violence or aggression than occupational therapists or physiotherapists (Mullan & Badger, 2007).

The Royal College of Nursing, Australia stated that violence, bullying and harassment in the workplace are "major concerns" to nurses in that country (Rumsey, Foley, & Dakin, 2007 p. 2), and that there is an underestimated psychological and economic impact on nurses. The International Council of Nurses (2008) described the problem as a 'world-wide epidemic'.

In Australia, 40% of nurses in metropolitan emergency departments (ED) and 30% in rural hospital EDs in NSW experienced some type of violence or assault each month (Lyneham, 2001). Lyneham (2000) found this was almost a daily occurrence in emergency departments and that nurses had concerns about their safety relating to the workplace layout, lack of security equipment and staff. In

Tasmania, Australia, 64% of 6326 nurses working in all settings responding to the Scoping Workplace Aggression in Nursing (SWAN) Study reported experiencing some form of physical or verbal abuse and believed it affected the quality and productivity of their work (Farrell & Bobrowski, 2003). Benveniste, Hibbert and Runciman (2005) used data from the Australian Incident Monitoring System (AIMS) and found that 9% of all patient safety related incidents involved patients and physical violence or violent verbal exchange.

A survey of 233 nurses in Turkey reported that 80% had been verbally abused in the previous year, with the highest rates being in ICU and outpatient clinics (Oztunc, 2006). There was no formal system for reporting abuse. Hegney, Eley, Plank, Buikstra and Parker (2006) surveyed 3,000 nurses in Queensland, Australia in 2001 and 2004. The comparison between surveys showed increasing levels of workplace violence, and although nurses were aware of workplace policies that supposedly dealt with violent incidents, they were thought to be inadequate. In Japan, severe psychological distress was reported when nurses in psychiatric units were exposed to violence and verbal abuse (Inoue, Tsukano, Muraoka, Kaneko, & Okamura, 2006). An underestimation of the level of sexual harassment nurses face in Japan has also been reported (Hibino, Ogino, & Inagaki, 2006). In Iraq, a small descriptive exploratory study showed 42% of nurses had been physically attacked, mostly by relatives of patients, and 14.3% of attacks were with a lethal weapon (AbuAlRub, Khalifa, & Habbib, 2007). In Canada, a study of pediatric nurses showed that 94% experienced verbal abuse in the previous three months; yelling was the most common form (Pejic, 2005). Also in Canada, a rare study that linked perceptions of violence with practice outcomes (O'Brien-Pallas, et al., 2004) found a higher incidence of delayed nursing interventions when individual nurses experienced violence or when there was a high incidence of violence on the unit. In a small Australian qualitative study, Farrell (1997) found that relatives and doctors were more likely to be aggressive towards nurses than patients, and that nurses were more distressed by abuse from peers. A quantitative follow-up study with a much larger sample (N=270) confirmed these findings (Farrell, 1999).

It is difficult to determine the actual incidence and prevalence of violence toward nurses because there are many different definitions of "violence" and even more ways of collecting data from self reports to secondary analysis of workers' compensation claims. Differences in reporting periods are common. Further, it has been in the interest of some professional organizations and labor unions to highlight violence in the workplace as a way to argue for their role in protecting their members (Genovese, 2003), which may produce inflated rates.

There has been no concentrated attention to violence on general medical/surgical inpatient wards nor has violence toward nurses been examined for its relationship to qualities of the working environment or patient care outcomes.

Overview of the Study

The present report is a secondary analysis of data collected in two large studies (Duffield, et al., 2009; Duffield, et al., 2007). The conceptual framework included concepts of nursing resources, workload, the working environment and patient outcomes without predictions of specific links. Violence in the workplace was one of the concepts measured in the "working environment" context.

Staffing and patient data were collected on 94 randomly selected medical and surgical wards in 21 public hospitals across two Australian states between 2004 and 2006. A medical/surgical unit could have been exclusively medical or surgical or a combination of both. ED, ICU's, pediatric, obstetric and psychiatric units were excluded. Data were collected for seven consecutive days on each unit.

All nurses (full-time, part-time, and agency) on the selected wards in both geographic locations were asked to complete a survey (a total of 3099 potential consenting respondents; overall response rate 80.3%). Nurses included in the study were clinical nurse specialists (CNS)[i]; registered nurses (RN), enrolled nurses (EN)[ii]; and assistants in nursing (AIN)[iii]. Trainee enrolled nurse (TEN)[iv] data were also collected. Ethics approval was gained from the University, participating health services and respective state Health Departments (18 committees in total).

Data collected for the study included 2 self-reported surveys: individual nurse data from the Nurse Survey comprising the 49-item Nursing Work Index-Revised [NWI-R] (Aiken, et al., 2001; Estabrooks, et al., 2002; Sochalski, Estabrooks, & Humphrey, 1999); job satisfaction; nurses' intention to leave their present position; and three questions about perception of violence over their five most recent shifts

Shift data were captured using a survey that included the Environmental Complexity Scale [ECS] (O'Brien-Pallas, Irvine, Peereboom, & Murray, 1997; O'Brien-Pallas, et al., 2004), and 11 questions on nursing interventions delayed, or left undone at the end of each shift. Comprehensive staffing data including skill mix were obtained from the ward roster/schedule records, and adverse events (falls, medication errors with and without consequences) were obtained from concurrent medical records, or, where available, by examination of data produced by the ward adverse events reporting mechanism. Permission to use all instruments was obtained from the original investigators.

The NWI-R identifies organizational attributes that have been associated with higher patient satisfaction, lower mortality, lower nurse emotional exhaustion and lower incidence of needle stick injuries (Aiken & Fagin, 1997). We used the 49 item scale and five sub-scales (autonomy, leadership, resource adequacy, control over practice and nurse-physician relations) (O'Brien-Pallas, et al., 2004). Cronbach's alpha for subscales in the present study ranged from 0.63 to 0.83. The ECS measures tensions nurses experience in providing care (O'Brien-Pallas, et al., 1997). It has 22 items and taps three domains: unanticipated delays in response to others leading to resequencing of work; unanticipated delays due to change in patient acuity; and delays due to the characteristics and composition of the caregiver team. Cronbach's alpha for these subscales in the present study ranged from 0.56 to 0.82.

Trained nurse data collectors collected patient and staffing data daily on each unit for seven days. The PRN-80 measure of nursing acuity (Chagnon, Audette, Lebrun, & Tilquin, 1978a, 1978b; Tilquin, Carle, Saulnier, & Lambert, 1981) was completed from concurrent medical records by data

collectors. A measure of nursing supply/demand was calculated as the difference between the caregiver hours required by patients on the PRN-80 and the hours of staffing supplied. Data collectors also gathered data on patient adverse events as falls and medication errors..

Data were analysed using SPSS version 16 (SPSS Inc., 2007). Missing data were imputed as the ward mean, or where more than 10% of data were missing, that variable was not used in analyses. Individual nurse and ward descriptive statistics were first obtained on the data. These were then aggregated to the ward as the common level at which patient and nurse data could be compared. Categorical variables were transformed into the proportion of X per ward (e.g., the proportion of nurses with Bachelor degree or higher). Continuous variables such as the subscales of the NWI-R and ECS were calculated as the ward mean. Explanatory variables were added to statistical models in sequence and the properties of each newly expanded model was compared to the previous one (using the -2 Log Likelihood value). The order of entry of variables into the statistical modelling was consistent with the conceptual framework noted earlier. Following aggregation, Poisson regression models were conducted in the case of low event counts of patient outcomes. Complete staffing data were not available on four wards and they were excluded from correlation and regression analyses. The final sample for regression and correlation analyses was therefore 90 wards. Only variables with statistically significant relationships are presented here.

Findings

Respondents to the Nurse Survey were predominantly registered nurses (72.3%), including nursing unit managers (NUM) and a small number (16) of clinical nurse educators (CNE) or clinical nurse consultants (CNC, equivalent to Clinical Nurse Specialists in the USA), with 533 ENs (21.5%), 75 TENs (3%) and 63 AINs (2.5%). Overall response rate was 80.3%.

As part of the Nurse Survey, nurses were asked about their experience of violence: *"In the last 5 shifts you worked, have you experienced any of the following while carrying out your responsibilities as*

a nurse". The response was "yes" or "no" to physical assault, threat of assault, or emotional abuse (Table 1).

TABLE 1 *NURSES EXPERIENCING VIOLENCE IN THE LAST 5 SHIFTS*

	Frequency	Percent
Physical violence	356	14.4%
Threat of violence	515	20.8%
Emotional abuse	947	38.2%
N	2478	

When calculated as a percentage of responding nurses per ward, up to 50% of nurses perceived physical violence; up to 66%, threat of violence; and up to 65%, emotional abuse. In contrast, 11 wards showed no perceptions of physical violence and 6 no threats. The lowest rate for perceptions of emotional abuse was 5%.

Respondents were also asked to choose the source of perceptions of violence from a provided list. Patients and families were responsible for most physical assaults and threats of assault. The majority of emotional abuse was also from patients and their families but up to a fifth was reported from co-workers (Table 2).

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TABLE 2 *SOURCE OF VIOLENCE TOWARDS NURSES*

	Physical Violence %[a]	Threat of Violence %[a]	Emotional Abuse %[a]
Patient	88.4	77.6	39.6
Patient + family/visitor	6.8	10.2	16.1
Family/visitor	2.5	8.3	14.7
Nursing co-worker	1.1	2.0	14.7
Patient + nursing co-worker	0.6	0.2	4.1
Physician	0.0	0.2	1.0
Combinations of the above	0.6	1.6	9.8
Number of nurses [b]	356	515	947

[a] Percentage of nurses reporting violence who experienced each category

[b] N = 2478

Correlation analysis suggested a number of associations between variables (Table 3). Perceptions of violence correlated with sub-scales of both the Nursing Work Index (NWI-R) and the Environmental Complexity Scale (ECS) but in different patterns. Emotional abuse was lower when leadership and nurse autonomy were higher. As there were more unanticipated changes in patient acuity, emotional abuse was increased. As emotional abuse increased, so did the amount of additional time required to complete nursing work per shift, and the number of delayed tasks. Positive relationships between nurses and doctors were negatively correlated with the threat of violence. The number of nursing tasks not completed each shift was associated with increased levels of all types of violence. As the difference between the amount of nursing care required by patients and the amount of care available increased, the rates of both physical violence and threats increased. A richer skill mix (% RN) was also linked to fewer instances of perceptions of physical or threatened violence, and the proportion of nurses with a Bachelor degree or higher was associated with less perceived physical violence. There was no relationship between the response rate of the ward and perceptions of violence.

There were also operational considerations. As the proportion of patients on the ward waiting for a care facility increased, the proportion of nurses experiencing physical violence or the threat of violence also increased. Conversely, as the proportion of planned admissions increased, physical

violence and the threat of violence decreased. Finally, emotional abuse correlated positively with the

nurses' intent to leave the current position.

TABLE 3 *CORRELATION OF WARD ENVIRONMENT FACTORS PER WARD AND PROPORTION OF NURSES EXPERIENCING VIOLENCE*

	Physical violence	Threat of violence	Emotional abuse
Autonomy[b]	-0.10	-0.01	-0.26*
Nurse-doctor relations[b]	-0.18	-0.27**	-0.18
Leadership[b]	-0.01	0.04	-0.24*
Unanticipated changes in acuity[a]	0.21	0.32**	0.07
Amount more time needed to complete work per shift[a]	0.14	0.27**	-0.02
Tasks delayed per shift[a]	0.17	0.26*	0.24*
Tasks not done per shift[a]	0.32**	0.34**	0.27*
Nursing demand/supply[c]	0.24*	0.24*	0.12
Percentage RN hours per ward	-0.27*	-0.22*	0.08
Percentage EN hours per ward	0.28**	0.24*	-0.08
Percentage nurses with Bachelor degree or higher	-0.22*	-0.10	0.05
Percentage patients with a planned admission	-0.29**	-0.37**	-0.07
Percentage patients waiting for a care facility	0.45**	0.44**	0.07
Percentage of nurses intending to leave current job	-0.14	-0.21*b	-0.21*

**p≤ .01 (2-tailed) and *p≤ .05 (2-tailed)

[a] Environmental Complexity Scale: Unanticipated changes in patient acuity

[b] Nursing Work Index –Revised: Autonomy; Nurse-doctor relations; Leadership

[c] Nursing hours of care required per patient / nurse hours per patient day

Correlation analysis of violence and patient adverse events found several positive associations.

Physical violence was associated with falls, medication errors, and late administration of medications.

Threats of violence were linked to both falls and medication errors (Table 4).

TABLE 4 *CORRELATION OF PATIENT ADVERSE EVENTS PER WARD & NURSES EXPERIENCING VIOLENCE*

	Physical violence	Threat of violence
Falls	.21**	0.19*
Medication errors	.22**	0.22**
Delayed administration of medication	.15*	0.10

**p≤ .01 (2-tailed) and *p≤ .05 (2-tailed)

Although these associations must be viewed with caution due to the low rates for adverse events, some correlations were supported by Poisson regression analyses specific to outcome measures with low rates. All types of violence were linked to late administration of medication, and the threat of violence was associated with falls and medication errors (Table 5).

TABLE 5 *POISSON REGRESSION OF VIOLENCE ON PATIENT ADVERSE EVENTS*

	Physical Violence	Threat of Violence	Emotional Abuse
Falls	--	1.02 (1.01-1.03)[a]	--
Medication errors	--	1.02 (1.01-1.02)	--
Late administration of medication	1.02 (1.01-1.02)	1.02 (1.01-1.02)	1.01 (1.01-1.02)

[a] Incidence Rate Ratio: For a one unit increase in threat of violence, the rate ratio for falls would be expected to increase by a factor of 1.02.
Note Confidence interval in parentheses. All ratios are significant at p≤ .05

Structural variables of hospital or unit size, rural or urban location were never significant in statistical models.

Discussion

The incidence of self-reported violence toward nurses averaged 30% per nursing unit for emotional abuse and about half that for threats or actual assault. However, there was a very wide range across units, suggesting that violence is related less to patient populations than it is to unit circumstances. Since all units in this study were medical/surgical units, clearly violence is not restricted to psychiatric or emergency departments, where it has been most studied.

The analyses suggest that as ward environments become less stable (fewer registered nurses, increased workload and unanticipated changes in patient needs, decreased perception of nurse leadership, lower nurse autonomy, poorer relations with doctors, more patients awaiting placement), perceived violence increases. Nurses are more likely not to deliver medications on time or commit (self-reported) medication errors, and the tension in the work environment is associated with increased patient falls, perhaps because nurses' surveillance of potentially troublesome patients decreases.

The difference between perceptions of emotional abuse and threatened actual or physical assault are intriguing. Emotional abuse did not correlate well with measures of the working environment nor with patient outcomes, but it does correlate with intent to leave the present position. One interpretation might be that nurses tolerate emotional abuse in contemporary highly charged clinical environments but intend to move out when they can. Emotional abuse does not seem to disturb nursing practice as much as physical assault or threat thereof.

Still, the extent of emotional abuse, threats of physical violence and actual assault are not well known either in nursing or in larger public forums. Studies to quantify the prevalence of secondary psychiatric diagnoses including alcohol, substance and tobacco use disorder on medical/surgical units would shed light on this aspect of nursing workload. The American Nurses' Association NDNQI (Nursing Database for Nursing Quality Indicators™) collects data on patient assaults but only for psychiatric units (American Nurses Association, 2007). The data collection requirements would be an additional burden on med/surg units not used to assessing patients for assault potential. The negative relationship between the proportion of BSN staff and violence found could suggest, as the literature hints, that violence can be managed, given appropriately educated staff.

Hegney et al. (2006) report an increase in workplace violence in Queensland (Australia) between 2001-2004 and while the majority of perpetrators were clients/patients, the authors acknowledge that the data were not collected at the ward level so it was impossible to identify violent 'hotspots'. The prevalence of violence and threat in the present study is higher than that in the studies by Hegney et al.

(2006) and O'Brien-Pallas et al. (2004). Hegney et al. (2006) offer two reasons for the rates. The privacy guidelines and legislation in their State, similar to those in most States in Australia (and HIPAA in the US), meant that staff were less able to provide information to relatives, resulting in increased rates of violence from relatives and visitors. There are programs underway that address issues of violence towards health professionals (Forster, Petty, Schleiger, & Walters, 2005; Grenyer, et al., 2004). Some educate staff in aggression minimisation strategies (Beech, 2001; Cowin, et al., 2003; Korow, 2008). Some construct tools for identifying violent patients (Anderson, Bell, Powell, Williamson, & Blount, 2004; Garrett & Rowe, 2004; Kling, et al., 2006; Lamberg, 2007; Lomas, 2007). Some deal with culture-changing interventions that encourage reporting of incidents and management support strategies (Kitchener, Sykes, & McEwan, 2004). Most of this work is in mental health or emergency settings. The medical/surgical setting as studied here presents particular problems that may be unattended because it is hard to believe sick patients and their families would ever be abusive towards nurses. The adequacy of workplace policies to deal with violence are often variable, indicating there is potential for improvement in some facilities (Hegney, et al., 2006).

Finally, The Center for American Nurses (2008) has recently issued a policy statement on bullying. The Joint Commission on the Accreditation of Healthcare Organizations (TJC or JCAHO, 2002) in the US has implemented standards that apply to all settings including home care and urgent care centers to focus attention on security issues including workplace violence. The standard requires accredited agencies to address disruptive behaviour by any employee or participating physician.

Limitations

The study is limited by self-reports of both violence and measures of tasks not done or delayed and intent to leave the present position. Unit level primary data collection was constrained by a 7 day data collection period and may have missed some instances of falls or medication errors that occurred before or after patient stays during the data collection period. Patient adverse outcome rates were very

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low which limited statistical power. While all of the units studied were medical/surgical, data on what the exact mix of case types by unit were not analysed.

Conclusion

Violence in the medical/surgical workplace is related to deficiencies in nursing practice and negative patient outcomes. The data presented here suggest that perceptions of violence are less associated with patient populations than with qualities of the working environment. That, along with hints that a better prepared nursing staff (% RN and % BSN) can moderate violence suggests that violence does not have to be "just a part of the job" for nursing, but can actually be managed.

Clinical Resources

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[i] CNS: a personal grade awarded to individual nurses on the basis of expertise in a specialty demonstrated by qualifications and/or experience (NSW Health, 2005)

[ii] EN: requires one year paid vocational training incorporating 15 weeks at a technical college for theoretical training and the balance in clinical units, and is equivalent to LVN/LPN

[iii] AIN: equivalent to patient care assistants (PCA)

[iv] TEN: trainee enrolled nurse, employed by the hospital for vocational training following technical college