Occupational Violence and Aggression Experienced by Nursing and Caring Professionals

Tracey Shea, PhD, M App Sci(Applied Statistics)[1], Cathy Sheehan, PhD, B.Com(Hons), Grad Dip Ed[2], Ross Donohue, PhD, B App Psych(Hons), Registered Psychologist, MAPS[3], Brian Cooper, PhD, MA(Social Research & Policy)[4], & Helen De Cieri, PhD, MA(Applied Psychology)[5]

1 Senior Research Fellow, Monash Business School, Monash University, Caulfield East, VIC, Australia
2 Associate Professor, Monash Business School, Monash University, Caulfield East, VIC, Australia
3 Senior Lecturer, Monash Business School, Monash University, Caulfield East, VIC, Australia
4 Associate Professor, Monash Business School, Monash University, Caulfield East, VIC, Australia
5 Professor, Monash Business School, Monash University, Caulfield East, VIC, Australia

Abstract

Purpose: To examine the extent and source of occupational violence and aggression (OVA) experienced by nursing and caring professionals. This study also examines the relative contributions of demographic characteristics and workplace and individual safety factors in predicting OVA.

Design: A cross-sectional study design with data collected using an on-line survey of employees in the nursing and caring professions in Victoria, Australia.

Methods: Survey data collected from 4,891 members of the Australian Nursing and Midwifery Federation (Victorian branch) were analyzed using logistic regression.

Findings: Sixty-seven percent of respondents reported experiencing OVA in the preceding 12 months, with nearly 20% experiencing OVA on a weekly or daily basis. The dominant sources of OVA were patients (79%) or relatives of patients (48%). Logistic regression analysis revealed that respondents working in public hospitals and aged care facilities were more likely to experience OVA, compared to those working in other workplaces. While higher levels of safety compliance reduced the likelihood of experiencing OVA, role overload and workplace safety factors such as prioritization of employee safety and leading indicators of occupational health and safety were stronger predictors.

Conclusions: The likelihood of healthcare workers experiencing OVA varies across demographic and workplace characteristics. While some demographic characteristics and individual safety factors were significant predictors, our results suggest that a greater reduction in OVA could be achieved by improving workplace safety.

Clinical Relevance: The study's outcomes identify workforce segments that are most vulnerable to OVA. The study also highlights workplace safety factors such as the prioritization of employee safety that might assist in the reduction of OVA.

Occupational violence and aggression (OVA) is an increasing global phenomenon, with healthcare workers being a particularly vulnerable group (Cashmore, Indig, Hampton, Hegney, & Jalaludin, 2012; Opie et al., 2010).

While there is no consensus on what constitutes OVA (Victorian Auditor General's Office, 2015), the definition we use is: "any incident where an employee is abused, threatened or assaulted in circumstances arising out of,

or in the course of, their employment" (Department of Health, 2011, p. 8). Healthcare workers play a critical role in community care, but the nature of this community role exposes them to considerable risk of OVA (Victorian Auditor General's Office, 2015). A review by Spector, Zhou, and Che (2014) reported that worldwide 36% of nurses had been exposed to physical violence at work and 66% had been exposed to nonphysical violence. Among the 13 occupations studied by LeBlanc and Kelloway (2002), the second highest risk exposure and second highest violence prevalence rates occurred for nurses; police officers were the only occupational group found to experience higher levels of OVA.

OVA is an important area of research in the field of occupational health and safety (OHS), not only because of societal expectations of safety and dignity at work, but also because OVA has been reported to have flow on effects beyond the initial physical or emotional impact of a violent or aggressive incident. Individual responses to exposure to physical violence and verbal aggression include increased absenteeism and turnover and reduced productivity (Schat & Kelloway, 2005). Lanctôt and Guay's (2014) systematic review identified several categories of detrimental consequences of OVA, including physical, psychological, emotional, and work functioning, as well as social and financial well-being and diminished patient care. These consequences highlight the direct and indirect costs of OVA to individuals, patients, workplaces, and society in general.

Comparisons across world regions undertaken by Spector et al. (2014) showed that the highest rate of exposure to OVA among nurses was in the Anglo region (i.e., Australia, New Zealand, England, Ireland, Scotland, Canada, and United States), where patients were the dominant source of physical violence. Within Australia, several studies have reported high rates of exposure to OVA in the healthcare sector (e.g., Farrell, Shafiei, & Chan, 2014; Roche, Diers, Duffield, & Catling-Paull, 2010) and, consistent with other countries, patients were the main perpetrators of violence towards nurses. However, the prevalence of OVA in the healthcare industry is unclear and requires clarification (Victorian Auditor General's Office, 2015). In response, the first aim of our study is to determine the extent and source of OVA experienced by nursing and caring professionals in the healthcare industry.

Along with the call for greater understanding of the extent of the problem, Farrell et al. (2014) emphasized the need to understand the factors that protect staff and reduce risk. Research has focused on the workplace context and has shown that factors such as role overload, work demands or job strain (Magnavita, 2014; Rodwell, Demir, & Flower, 2013), poor staffing levels (Farrell & Shafiei,

2012), lack of leadership (Roche et al., 2010), and lack of social support (Magnavita, 2014) increase the likelihood of OVA.

Viewing the OVA research in the context of the broader safety literature and consistent with Clissold, Buttigieg, and De Cieri (2012), we apply Bandura's (1986) social cognitive theory to understand the context for OVA. The premise of social cognitive theory is that people are considered to be completely driven by neither external stimuli nor internal factors, but rather a combination of the environment, the person, and his or her behavior. Clissold et al. (2012) argued that a triadic framework encompassing the environment, the person, and the behavior could guide research in workplace safety.

As noted above, much of the OVA risk prevention research has focused on the workplace context, but there has been limited investigation of the relative contribution of workplace (environmental) and personal and behavioral (individual) factors in predicting OVA. One exception has been the work of Chang, Eatough, Spector, and Kessler (2012), which, within a broader model, showed that a poor psychological violence prevention climate was associated with reduced personal motivation that, in turn, was related to prevention behaviors. The idea of a climate means that there are particular meaningful patterns of behavior and interaction among people within organizations (Schneider, Bowen, Ehrhart, & Holcombe, 2000). A positive safety climate exists when management commits attention and resources to workers' safety, for example, by discussing safety, having safety policies that are enforced, and offering safety training. Such efforts are apparent to employees who perceive the climate as one that encourages safety, and it leads to behavior that minimizes the likelihood of work-related injuries. Chang et al. (2012) showed that clear workplace policies prompt management responses to assaults and prioritizing safety led to increases in employee motivation and behaviors aimed at preventing OVA.

While it would be difficult to control all of the circumstances to which healthcare workers are exposed, following Clissold et al.'s (2012) argument based on social cognitive theory, that workplace initiatives aimed to improve OHS must encompass the environment and the person, the second aim of the current study is to analyze OVA risk at two levels: the workplace and the individual level. Specifically, the workplace focus is on the role senior managers and supervisors perform in proactively committing to a safe working environment by implementing positive OHS policies and practices (also known as leading indicators of OHS), encouraging supportive supervisor behavior, and prioritizing staff safety. At the individual level, the study considers the person and his or her behaviors via personal safety motivation

and the behaviors of safety compliance and safety participation.

In summary, this article examines the following questions: What is the prevalence of OVA experienced by members of the nursing and caring professions? What are the dominant sources of OVA, in general, and by demographic group (gender, age, job role, and workplace type)? Finally, after controlling for demographic factors and role overload, what is the relative contribution of individual safety factors (safety motivation, safety compliance, and safety participation) compared with workplace safety factors (leading indicators of OHS, the prioritization of employee safety, supervisor support for safety) in predicting the likelihood that employees will experience OVA?

Methods

Sample and Procedure

All members of the Australian Nursing and Midwifery Federation branch in Victoria, Australia, were invited to participate in an OHS survey. The survey was conducted online, and two reminder emails were sent 2 weeks and 4 weeks after the initial email invitation. Overall, 69,927 members had the opportunity to participate in the survey. Responses were received from 4,891 members (7% response rate), comprising 3,273 registered nurses (67%), 1,055 enrolled nurses (22%), 407 midwives (8%), and 156 personal carers (3%). The project was approved by the university's Human Research Ethics Committee, and all respondents were assured of confidentiality and anonymity.

Measures

The survey included demographic questions for gender, age, job role (e.g., registered nurse), and workplace type (e.g., public hospital). Respondents also answered questions about their experience of OVA, role overload, individual safety factors (safety motivation, safety compliance, and safety participation), and workplace safety factors (leading indicators of OHS, prioritization of employee safety, and supervisor support for safety).

Occupational violence and aggression. We included two single-item measures to examine respondent experiences of OVA adapted from Hegney, Plank, and Parker (2003). Initially, respondents were asked, "have you experienced occupational violence and/or aggression at your workplace during the last 12 months? (1 yes daily, 2 yes weekly, 3 yes monthly, 4 yes a few times, 5 no, never)." Respondents who answered "yes" to this item were then asked a follow-up question: "From whom have

you experienced occupational violence and/or aggression at your workplace during the last 12 months? (Please select all that apply: supervisors/colleagues/subordinates, patients, relatives of patients, visitors of patients, other members of the public)."

Role overload. We also included a measure of role overload, the quantitative workload inventory developed by Spector and Jex (1998), as a covariate. The measure is a five-item scale that assesses both the volume and pace of employee workload using a 5-point frequency scale ranging from *less than once per month* (1) to *several times per day* (5) ($\alpha = .90$). This measure has been widely used in organizational behavior and safety research and has been shown to have sound psychometric properties. Cronbach's alpha for this scale was .90, which is consistent with earlier studies (e.g., Jensen, Patel, & Messersmith, 2013).

Individual safety factors. Individual safety factors were measured using three scales: safety motivation, safety compliance, and safety participation (Neal & Griffin, 2006). Each measure contains three items (e.g., "I use the correct safety procedures for carrying out my job"), which are rated on a 5-point scale from *strongly disagree* (1) to *strongly agree* (5). The safety motivation, safety compliance, and safety participation scales are widely used by safety researchers and have been shown to have sound psychometric properties (see Christian, Bradley, Wallace, & Burke, 2009). All three measures displayed very good reliability, with Cronbach alphas ranging from .86 to .90, and this is consistent with earlier studies (e.g., Shea, De Cieri, Donohue, Cooper, & Sheehan, 2016).

Workplace safety factors. The measures for workplace safety factors included the Organizational Performance Metric-Monash University (OPM-MU; Shea et al., 2016), a measure of supervisor support for safety (Lauver, Lester, & Le, 2009), and a measure of prioritization of employee safety that was developed by the authors.

The OPM-MU (Shea et al., 2016) is an adaptation of the Institute for Work and Health Organizational Performance Metric (IWH-OPM; IWH, 2011) and contains eight items measuring leading indicators of OHS (e.g., "everyone has the tools and/or equipment they need to complete their work safely"). The items are rated on a 5-point scale from *strongly disagree* (1) to *strongly agree* (5). The study by Shea et al. (2016) showed this scale to be a valid and reliable measure of OHS leading indicators. Consistent with that study, we found the OPM-MU to have excellent reliability ($\alpha = .91$).

The supervisor support for safety scale is a three-item measure rated on a 5-point frequency scale from *not at all* (1) to *a great extent* (5). The three items that comprise this scale were subjected to exploratory factor analysis (principal axis factoring), which revealed a single factor structure (explaining 88% of the common variance) and excellent reliability ($\alpha = .96$).

The three items of the prioritization of employee safety scale were rated on a 5-point scale ranging from *strongly disagree* (1) to *strongly agree* (5). Exploratory factor analysis (principal axis factoring) of the three items revealed a single factor structure (explaining 94% of the common variance) and the measure was also found to be reliable ($\alpha = .97$).

Statistical Analysis

We used summary statistics to examine the prevalence and sources of OVA across demographic groups. A hierarchical logistic regression was conducted with the experience of OVA as the criterion and categorized as a dichotomous variable (coded 1 = *yes*, 0 = *no*). The first stage included a continuous (role overload) and four categorical (gender, age, job role, and workplace type) predictors. In the second stage, three predictors were added measuring individual safety factors (safety motivation, safety compliance, and safety participation), and the third stage included three predictors measuring workplace safety factors (leading indicators of OHS, prioritization of employee safety, and supervisor support for safety).

Results

Characteristics of the Respondents and Their Workplaces

Table 1 summarizes characteristics of the respondents and their workplaces. Nearly all respondents were female and between the ages of 46 and 65 years. Most had been employed in the nursing and caring profession for more than 10 years. More than half reported working as registered nurses and most worked in either public or private hospitals. Due to the anonymous nature of the survey, respondents could not be directly compared with nonrespondents. Nevertheless, the sample characteristics are highly consistent with national statistics on the nursing and midwifery workforce in Australia (Australian Institute for Health and Welfare, 2013).

Prevalence and Sources of OVA in the Nursing and Caring Profession

Overall, 67% of respondents indicated that they had experienced OVA in the preceding 12 months. Forty-four percent of respondents had experienced OVA a few times

Table 1. Characteristics of the Respondents and Their Workplaces

Demographic		n	%
Gender	Male	356	7
	Female	4,511	93
Age	18–25 years	191	4
	26–35 years	571	12
	36–45 years	881	18
	46–55 years	1,782	36
	56+ years	1,458	30
Job role	Registered nurse	3,273	67
	Enrolled nurse	1,055	22
	Midwife	407	8
	Personal carer	156	3
Workplace type	Hospital, public	2492	54
	Hospital, private	589	13
	Aged care facility	956	21
	General practice clinic	154	3
	Local government	77	2
	Community	341	7

in the past year, 6% had experienced OVA monthly, 11% had experienced OVA on a weekly basis, and 6% experienced OVA daily. Respondents who experienced OVA in the preceding 12 months indicated that the dominant source of OVA was patients (79%), followed by relatives of patients (48%), visitors of patients (26%), and members of the public (8%).

Table 2 displays the prevalence and source of OVA by demographic group. Statistically significant differences were observed for gender, χ^2 (1, $n = 4,572$) = 5.1, $p = .013$, job role, χ^2 (3, $n = 4,591$) = 17.5, $p = .001$, and workplace type, χ^2 (5, $n = 4,325$) = 165.7, $p < .001$. Compared to females, respondents who were male showed a higher prevalence of OVA in the preceding 12 months. Respondents who were employed as enrolled nurses or personal carers showed a higher prevalence of OVA, and respondents working in public hospitals or aged care facilities also showed a higher prevalence of OVA. No significant differences were observed across age groups ($p > .05$).

Some variations in the source of OVA were observed across job role; for example, midwives were more likely to experience OVA from patient relatives and visitors than patients themselves. In contrast, registered nurses, enrolled nurses, and personal carers were more likely to experience OVA from patients rather than patient relatives or visitors. Overall, patients and relatives of patients were the dominant sources of OVA.

OVA and Workplace Safety Factors

The results of the hierarchical logistic regression are displayed in **Table 3**. Each stage of the model, testing

Table 2. Prevalence and Source of Occupational Violence and Aggression by Respondent and Workplace Characteristics

Demographic		Overall	Colleagues	Patients	Patient relative	Patient visitor	Public
Gender	Male	72%	21%	87%	55%	36%	14%
	Female	66%	18%	78%	48%	25%	7%
Age	18–25 years	4%	9%	86%	58%	41%	4%
	26–35 years	12%	15%	84%	58%	34%	8%
	36–45 years	18%	19%	80%	50%	29%	6%
	46–55 years	37%	20%	78%	47%	24%	8%
	56+ years	30%	19%	77%	43%	21%	9%
Job role	Registered nurse	66%	19%	79%	50%	28%	9%
	Enrolled nurse	71%	16%	87%	38%	16%	5%
	Midwife	63%	21%	52%	69%	40%	6%
	Personal carer	76%	17%	87%	24%	10%	1%
Workplace	Hospital, public	73%	18%	79%	58%	35%	9%
	Hospital, private	54%	27%	69%	46%	23%	6%
	Aged care facility	74%	15%	87%	31%	11%	1%
	General practice clinic	53%	17%	83%	33%	6%	14%
	Local government	41%	39%	48%	29%	0%	6%
	Community	66%	17%	79%	48%	28%	8%

Note. Percentages across subgroups do not add up to 100% because respondents were asked to check all sources of occupational violence and aggression.

the relationship between predictor variables and the experience of OVA, was significant ($p < .001$), and the -2 log likelihood value reduced from 4,954.11 in model 1 to 4,710.79 in model 3.

The odds ratios (ORs) from model 3 showed that respondents in the oldest age group (56 or more years) were more likely than the youngest employees (18–25 years) to experience OVA from patients (OR = 1.61). The ORs for respondent role showed that midwives were less likely (OR = 0.67) than registered nurses to have experienced OVA in the past 12 months ($p < .01$). Respondents working in private hospitals (OR = 0.42), general medical practice clinics (OR = 0.47), local government (OR = 0.35), and community services (OR = 0.48) were less likely to experience OVA than those employed in public hospitals. No statistically significant differences were observed in the experience of OVA between respondents working in public hospitals and aged care facilities. Respondents who experienced greater levels of role overload were more likely (OR = 1.49) to have experienced OVA in the past 12 months.

Turning to individual safety factors, respondents with higher levels of safety compliance were less likely to experience OVA (OR = 0.76). However, those with higher levels of safety motivation (OR = 1.22) and safety participation (OR = 1.33) were more likely to experience OVA. Finally, with regard to workplace safety factors, those employed in workplaces with a greater focus on OHS leading indicators (OR = 0.69), a higher prioritization of employee safety (OR = 0.52), or with greater supervisor support for safety (OR = 0.89)

were less likely to have experienced OVA in the past 12 months.

Discussion

Addressing the first research question, the outcomes of this study indicate that the extent of OVA in the Victorian healthcare industry is substantial. Sixty-seven percent of respondents reported experiencing OVA at least once in the past 12 months, and nearly 20% reported experiencing OVA on a weekly or daily basis. These levels are higher than those reported in previous studies (Farrell & Shafiei, 2012; Farrell et al., 2014). However, it is difficult to compare our findings to earlier work due to the different time spans (1 week to 12 months) used to measure the extent of OVA in the nursing and caring profession.

Differences in the experience of OVA by demographic groups were observed. However, while a larger percentage of men reported having been exposed to OVA in the past 12 months compared to women, the logistic regression revealed that this was not statistically significant. The logistic regression also revealed that older respondents were more likely to have experienced OVA compared to younger respondents. Enrolled nurses and personal carers experienced higher rates of OVA compared to registered nurses and midwives, but these findings were not statistically significant in the logistic regression. Further, respondents in public hospitals and aged care facilities experienced OVA at greater rates than those in private hospitals, general practice clinics,

Table 3. Logistic Regression for Predicting the Likelihood of Experiencing Occupational Violence and Aggression

	Model 1		Model 2		Model 3	
	B (SE)	OR (95% CI)	B (SE)	OR (95% CI)	B (SE)	OR (95% CI)
Female	−0.19 (0.14)	0.83 (0.63–1.09)	−0.16 (0.14)	0.85 (0.65–1.12)	−0.10 (0.14)	0.91 (0.68–1.20)
18–25 years	Ref cat		Ref cat		Ref cat	
26–35 years	0.24 (0.19)	1.23 (0.87–1.85)	0.25 (0.19)	1.28 (0.88–1.87)	0.20 (0.20)	1.22 (0.83–1.80)
36–45 years	0.28 (0.18)	1.33 (0.93–1.90)	0.32 (0.19)	1.38 (0.96–1.98)	0.26 (0.19)	1.29 (0.89–1.87)
46–55 years	**0.36 (0.18)***	**1.44 (1.02–2.03)**	0.40 (0.18)	1.49 (1.05–2.10)	0.30 (0.18)	1.35 (0.95–1.92)
56+ years	**0.50 (0.18)****	**1.64 (1.16–2.33)**	**0.54 (0.18)****	**1.72 (1.21–2.45)**	**0.48 (0.18)****	**1.61 (1.12–2.31)**
Registered nurse	Ref cat		Ref cat		Ref cat	
Enrolled nurse	0.14 (0.10)	1.15 (0.95–1.38)	0.15 (0.10)	1.16 (0.97–1.40)	0.18 (0.10)	1.20 (0.99–1.45)
Midwife	**−0.30 (0.12)***	**0.74 (0.58–0.94)**	**−0.31 (0.12)***	**0.74 (0.58–0.94)**	**−0.40 (0.13)****	**0.67 (0.52–0.86)**
Personal carer	0.44 (0.23)	1.56 (0.99–2.44)	**0.46 (0.23)***	**1.59 (1.01–2.50)**	0.31 (0.24)	1.37 (0.86–2.17)
Hospital, public	Ref cat		Ref cat		Ref cat	
Hospital, private	**−0.84 (0.10)****	**0.43 (0.36–0.53)**	**−0.84 (0.10)****	**0.43 (0.35–0.53)**	**−0.87 (0.11)****	**0.42 (0.34–0.51)**
Aged care	−0.11 (0.11)	0.90 (0.73–1.10)	−0.08 (0.11)	0.93 (0.75–1.14)	−0.04 (0.11)	0.97 (0.78–1.20)
General practice	**−0.76 (0.19)****	**0.47 (0.33–0.68)**	**−0.76 (0.19)****	**0.47 (0.32–0.68)**	**−0.77 (0.20)****	**0.47 (0.32–0.68)**
Local government	**−1.17 (0.25)****	**0.31 (0.19–0.51)**	**−1.17 (0.26)****	**0.31 (0.19–0.51)**	**−1.06 (0.26)****	**0.35 (0.21–0.57)**
Community	**−0.80 (0.13)****	**0.45 (0.35–0.58)**	**−0.79 (0.13)****	**0.46 (0.35–0.59)**	**−0.74 (0.13)****	**0.46 (0.37–0.62)**
Role overload	**0.53 (0.04)****	**1.70 (1.59–1.82)**	**0.53 (0.04)****	**1.69 (1.58–1.82)**	**0.40 (0.04)****	**1.49 (1.38–1.60)**
Motivation			0.14 (0.09)	1.15 (0.97–1.37)	**0.20 (0.09)***	**1.22 (1.02–1.46)**
Compliance			**−0.36 (0.08)****	**0.70 (0.60–0.82)**	**−0.28 (0.08)****	**0.76 (0.64–0.89)**
Participation			0.07 (0.06)	1.07 (0.95–1.21)	**0.29 (0.07)****	**1.33 (1.16–1.52)**
OPM-MU					**−0.37 (0.07)****	**0.69 (0.61–0.79)**
Prioritization					**−0.65 (0.10)****	**0.52 (0.43–0.63)**
Supervisor					**−0.12 (0.05)***	**0.89 (0.80–0.98)**
Constant	−0.78 (0.40)	0.46	−0.75 (0.40)	0.47	**2.07 (0.47)****	7.92
χ^2 (df)	**411.58 (14)****		**435.01 (17)****		**654.91 (20)****	
Log likelihood	4954.11		4930.69		4710.79	
Nagelkerke R^2	.13		.14		.20	

Note. N = 4,273. Boldface values denote significant predictors. CI = confidence interval; OPM-MU = Organizational Performance Metric-Monash University; OR = odds ratio.
*p < .05; **p < .01.

local government, and community settings. Farrell et al. (2014) similarly reported higher levels of OVA for public sector nurses and suggested that this may be related to higher levels of patient acuity.

Addressing the second research question, the dominant source of OVA was patients; however, relatives of patients were also a major source of OVA, followed by patient visitors, colleagues, and, to a small degree, members of the public. This pattern is broadly consistent regardless of gender, age, job role, and workplace type, although some demographic subgroup differences exist. For example, registered and enrolled nurses were more likely to report OVA from patients, whereas midwives were more likely to report OVA from patient relatives.

With respect to the third research question, while a higher level of safety compliance was shown to reduce the likelihood of experiencing OVA, higher levels of both safety motivation and safety participation were shown to increase the likelihood of experiencing OVA. The relationship between motivation, participation, and the increased experience of OVA appears counterintuitive. One explanation may be that individuals with higher levels of personal safety motivation and willingness to engage in safety participation behavior may be more proactive and likely to step in to de-escalate OVA situations. Finally, our investigation reveals that workplace safety factors, particularly the prioritization of employee safety, were more important in reducing the likelihood of OVA than were individual safety factors.

These findings are important to the healthcare industry because they highlight ways in which policymakers, employers, and industry partners can address workplace violence. For example, strengthening workplace factors, particularly a greater prioritization of staff safety with respect to patient safety, will reduce the likelihood of violence against healthcare workers. This suggests that despite the external origins of workplace violence (i.e., patients and visitors), policies and practices can be developed and actions taken by the organization to protect its workers. Policymakers, such as departments

of health as well as safety regulators, could provide sectorwide leadership and education activities, as well as inspection or enforcement mechanisms to protect workers from OVA in the health sector. Violence at work is an important issue to resolve as it is a threat not just to worker health, safety, and mental well-being, but also to workers' dignity and sense of security (International Labor Organization [ILO], 2016). Occupational violence also has negative repercussions for the families of affected workers and incurs substantial costs to their workplace and society in general (ILO, 2016). Industry partners such as healthcare unions can offer additional resources for workers, such as campaigns to raise awareness of OVA and mechanisms for workers to report OVA incidents.

Limitations of the present study are the low response rate and the cross-sectional design. However, despite the low response rate, the sample is large and reasonably representative of the nursing and caring professions in Australia. As this was a cross-sectional survey, efforts were made to reduce common method variance by including measures that use different response anchors, which would reduce the likelihood of common method variance affecting the results.

In summary, a major contribution of the research is that it improves understanding of the extent and sources of OVA in the healthcare industry. The study also builds on Chang et al.'s (2012) research, which found links between violence prevention climate and employee motivation and behaviors. Our research extends this to show, consistent with social cognitive theory (Clissold et al., 2012), that while higher levels of safety compliance reduce the likelihood of experiencing OVA, role overload and workplace safety factors such as prioritization of employee safety and leading indicators of OHS are stronger predictors.

Conclusions

We found that the likelihood of healthcare workers experiencing OVA varies across demographic characteristics. Furthermore, those working in public hospitals and aged care facilities are also at greater risk of experiencing OVA, compared to those working in other clinical settings. Increasing levels of role overload also increase the likelihood of exposure to OVA. Some demographic characteristics and individual safety behaviors are significant predictors of the experience of OVA; this information could inform workplace initiatives such as programs to train healthcare professionals in de-escalation of situations that might lead to OVA. Further, our results indicate that a greater reduction in OVA could be achieved by initiatives that improve workplace safety. Consequently, while individual safety factors are important, our findings

indicate that employee safety must be led and supported at a higher level by proactive and preventive actions such as prioritization of employee safety, implementation of OHS leading indicators, and supervisor support for safety.

Acknowledgments

Clinical Resources

- Australian Nursing and Midwifery Federation (Victoria Branch). 10-point plan to end violence and aggression in our healthcare facilities: http://www.anmfvic.asn.au/campaigns/2016/07/21/occupational-violence-and-aggression
- Victorian Auditor General's Office. Report on violence in the healthcare industry by the Victorian Auditor General's Office: http://www.audit.vic.gov.au/reports_and_publications/latest_reports/2014-15/20150506-occ-violence.aspx

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