



Violence in the emergency department: a survey of health care workers

Christopher M.B. Fernandes,* MD; France Bouthillette,‡ RN, DNS;
Janet M. Raboud,§¶ PhD; Linda Bullock,† RN, OHN;
Catherine F. Moore,* RN, MSA; James M. Christenson,* MD;
Eric Grafstein,* MD; Sandra Rae,§ MSc; Leisa Ouellet,* RN;
Clay Gillrie,* RN; Michele Way,* RN

Abstract

Background: Violence in the workplace is an ill-defined and underreported concern for health care workers. The objectives of this study were to examine perceived levels of violence in the emergency department, to obtain health care workers' definitions of violence, to determine the effect of violence on health care workers and to determine coping mechanisms and potential preventive strategies.

Methods: A retrospective written survey of all 163 emergency department employees working in 1996 at an urban inner-city tertiary care centre in Vancouver. The survey elicited demographic information, personal definition of violence, severity of violence, degree of stress as a result of violence and estimate of the number of encounters with violence in the workplace in 1996. The authors examined the effects of violence on job performance and job satisfaction, and reviewed coping and potential preventive strategies.

Results: Of the 163 staff, 106 (65%) completed the survey. A total of 68% (70/103) reported an increased frequency of violence over time, and 60% (64/106) reported an increased severity. Most of the respondents felt that violence included witnessing verbal abuse (76%) and witnessing physical threats or assaults (86%). Sixty respondents (57%) were physically assaulted in 1996. Overall, 51 respondents (48%) reported impaired job performance for the rest of the shift or the rest of the week after an incident of violence. Seventy-seven respondents (73%) were afraid of patients as a result of violence, almost half (49%) hid their identities from patients, and 78 (74%) had reduced job satisfaction. Over one-fourth of the respondents (27/101) took days off because of violence. Of the 18 respondents no longer working in the emergency department, 12 (67%) reported that they had left the job at least partly owing to violence. Twenty-four-hour security and a workshop on violence prevention strategies were felt to be the most useful potential interventions. Physical exercise, sleep and the company of family and friends were the most frequent coping strategies.

Interpretation: Violence in the emergency department is frequent and has a substantial effect on staff well-being and job satisfaction.

Violence in the workplace is a well-recognized concern for health care workers,¹⁻³ with most perpetrated by patients and, to a lesser extent, visitors.^{4,7} Substance abuse and psychiatric disorders are among the main factors contributing to violence in the emergency department.^{2,7,8}

Although the emergency department is recognized as a particularly violent environment,^{3-5,9} the true incidence of significant episodes of violence is unknown, since violence in this setting is underreported.^{2,8,10,11} In addition, definitions of violence vary. Although verbal abuse is often not included,⁶ most studies show consistently that verbal abuse, threats and assaults are common.^{4,7,8} For instance, in a survey of emergency department nurses in Pennsylvania hospitals, nearly all reported verbal abuse (97%) and physical threats (94%), and a majority (66%) had been physically assaulted.⁶

Evidence

Études

From the Departments of
*Emergency Medicine and
†Occupational Health and
Safety, and ‡Nursing
Research, St. Paul's Hospital,
Vancouver, BC; §the
Canadian HIV Trials
Network, Vancouver, BC; and
¶the Department of Health
Care and Epidemiology,
University of British
Columbia, Vancouver, BC

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Violent incidents have a significant long-lasting effect on health care workers. Lower morale, anger, loss of confidence, burnout, time off work, disability and change in job status have been reported.^{6,8,12,13} The consequences may be underestimated, since each incident affects a number of staff.

We carried out a survey of emergency department staff working at an urban inner-city tertiary care centre to examine perceived levels of violence in the emergency department, to obtain health care workers' definitions of violence, to determine the self-reported effect of violence on health care workers and to determine self-reported coping mechanisms and potential preventive strategies.

Methods

The study was conducted at St. Paul's Hospital, an urban hospital in downtown Vancouver with 55 000 emergency department visits annually. The emergency department is staffed 24 hours a day by certified emergency physicians, with a complement of rotating medical students and residents. Twenty-four-hour onsite staff include 10 to 12 nurses, 2 to 3 admitting clerks, 1 emergency psychiatry nurse, 1 social worker, 1 unit coordinator and protection services personnel.

After obtaining approval from the Ethics Committee for Human Experimentation at St. Paul's Hospital, we distributed a questionnaire to all 163 emergency department staff employed during 1996. The questionnaires were distributed in May 1998 in person or, if the person no longer worked at the hospital, by mail. The questionnaires were returned by mail, with all information being anonymous and confidential.

The survey questions elicited the respondents' definition of violence, their perception of its severity and associated degree of stress (rated on a scale of 1 to 5 from "Not severe" to "Extremely severe"), the number of episodes of violence in the previous year, the frequency of reporting of episodes of violence, and the effect of violence on job performance, subsequent fear of patients, job satisfaction and career choice. Finally, the staff's coping mechanisms and the value of preventive strategies were assessed.

The data were summarized with medians for skewed continuous and ordinal data, means for normally distributed continuous data and proportions for categorical data.

Results

Of the 163 staff members, 106 (65%) responded to the survey: 47 nurses, 19 protection services personnel, 13 physicians, 8 admitting clerks, 7 social workers, 5 licensed practical nurses, 4 unit coordinators, 2 ward aides and 1 porter. The mean age was 37 years. There were 63 women and 43 men. The respondents had worked 9.2 years on average in emergency departments, with 7.1 years at St. Paul's Hospital Emergency Department. Of the 106, 58 were full-time staff, 27 were part-time staff, and 21 were casual workers.

Of the respondents who answered the question regarding the definition of violence against themselves (Table 1), 76% (76/100) included witnessing verbal abuse and 86% (86/100) included witnessing physical threats or assault.

Most of the respondents also included experiencing verbal abuse (92% [94/102]), physical threats (97% [99/102]) and physical assault (92% [93/101]). The remaining respondents in each category did not identify the particular experience as violent.

In all, 55% (57/103) of the respondents reported experiencing physical assault as the most severe violence against themselves in the previous year, followed by witnessing physical threat or assault (21% [22/103]), experiencing verbal abuse (12% [12/103]) and experiencing physical threat (10% [10/103]). The frequency of each type of violence is given in Table 2.

Among the 103 respondents who answered this question, the number who rated the degree of stress from an episode of violence as moderately to extremely severe was

Table 1: Survey question to emergency department staff regarding definition of violence against themselves

You define violence against yourself as an intense reaction from a patient/visitor/relative that includes:

- Hearing an individual shouting verbal abuse (screaming, calling names etc.) at another staff
- Witnessing physical threat and/or assault (raising fists, attempts to bite, kick, punch etc.) toward another staff
- Experiencing verbal abuse (e.g., screaming at you, calling you names, verbal threats)
- Receiving physical threat/intimidation (e.g., raising fists, attempts to kick or bite)
- Getting physically assaulted (throwing liquid, slapping, kicking etc.)
- Other (please specify)

Table 2: Number of times during 1996 that emergency department staff experienced various types of abuse

No. of times	Type of abuse; no. (and %) of respondents n = 106*		
	Physically assaulted	Physically threatened	Witnessed physical threat/assault
0	45 (43)	11 (10)	0
< 5	39 (37)	41 (39)	28 (27)
6-10	6 (6)	19 (18)	22 (21)
11-20	5 (5)	10 (10)	14 (13)
> 20	10 (10)	24 (23)	41 (39)
	Verbally abused		Witnessed verbal abuse
< 1 per mo	6 (6)	2 (2)	
1 per mo	4 (4)	1 (1)	
1 per wk	25 (24)	13 (13)	
1 per shift	33 (32)	36 (36)	
> 1 per shift	35 (34)	49 (48)	

*Column totals vary owing to missing responses on specific questions.



31 (30%) for witnessing verbal abuse, 84 (82%) for witnessing physical threat or assault, 57 (55%) for verbal abuse, 81 (79%) for physical threat and 98 (95%) for physical assault.

The relation between occupation and the most severe violence experienced is shown in Fig. 1. The occupations with the highest proportion of respondents experiencing physical assault were nurses and protection services personnel.

A total of 68% of the respondents (70/103) reported an increased frequency of violence over time, and 60% (64/106) reported an increased severity of violence over time.

Overall, 66% (68/103) of the respondents indicated that in 1996 verbal abuse was never or rarely reported. Of the 70 respondents who were physically assaulted without injury, 38 (54%) never or rarely reported it. Of the 48 respondents who were physically assaulted with injury, 21 (44%) never or rarely reported it. The vast majority of the respondents (95/104 [91%]) felt that incidents of violence were underreported.

In all, 38% (39/102) of the respondents considered a job outside the health care system because of violence on the job. Eighteen respondents no longer worked in the emergency department, of whom 12 (67%) reported that they had left the job at least partly as a result of violence. Of the 105 respondents who answered the question regarding job performance, 26 (25%) reported impaired job performance for the rest of the shift after an incident of violence, 23 (24%) reported impaired job performance for the rest of

the week, and 20 (19%) reported impaired performance for a longer period. Twenty-seven percent of the respondents (27/101) took days off work because of violence. As a result of violence in the emergency department, 73% (77/105) of the respondents were afraid of patients: 25 (24%) were afraid of the violent patient only, 37 (35%) were afraid of patients they perceived to have "the potential for being violent," and 15 (14%) were afraid of patients in general. A total of 49 of 100 respondents hid their identity from patients because of fear. Violence interfered with job satisfaction for 78 respondents (74%).

After a violent incident, the respondents sought support mainly from colleagues rather than from support mechanisms already in place, such as the manager or debriefing after a critical incident.

Overall, 95% (100/105) and 68% (70/103) of the respondents respectively rated 24-hour coverage by protection services and a workshop on violence prevention strategies as the most useful interventions to prevent violence. Physical exercise, sleep and the company of family and friends were the most frequent coping strategies.

Interpretation

Verbal and physical violence in the emergency department is frequent and underreported and has a negative influence on staff working conditions. One respondent stated, "Not only has the violence increased, but people

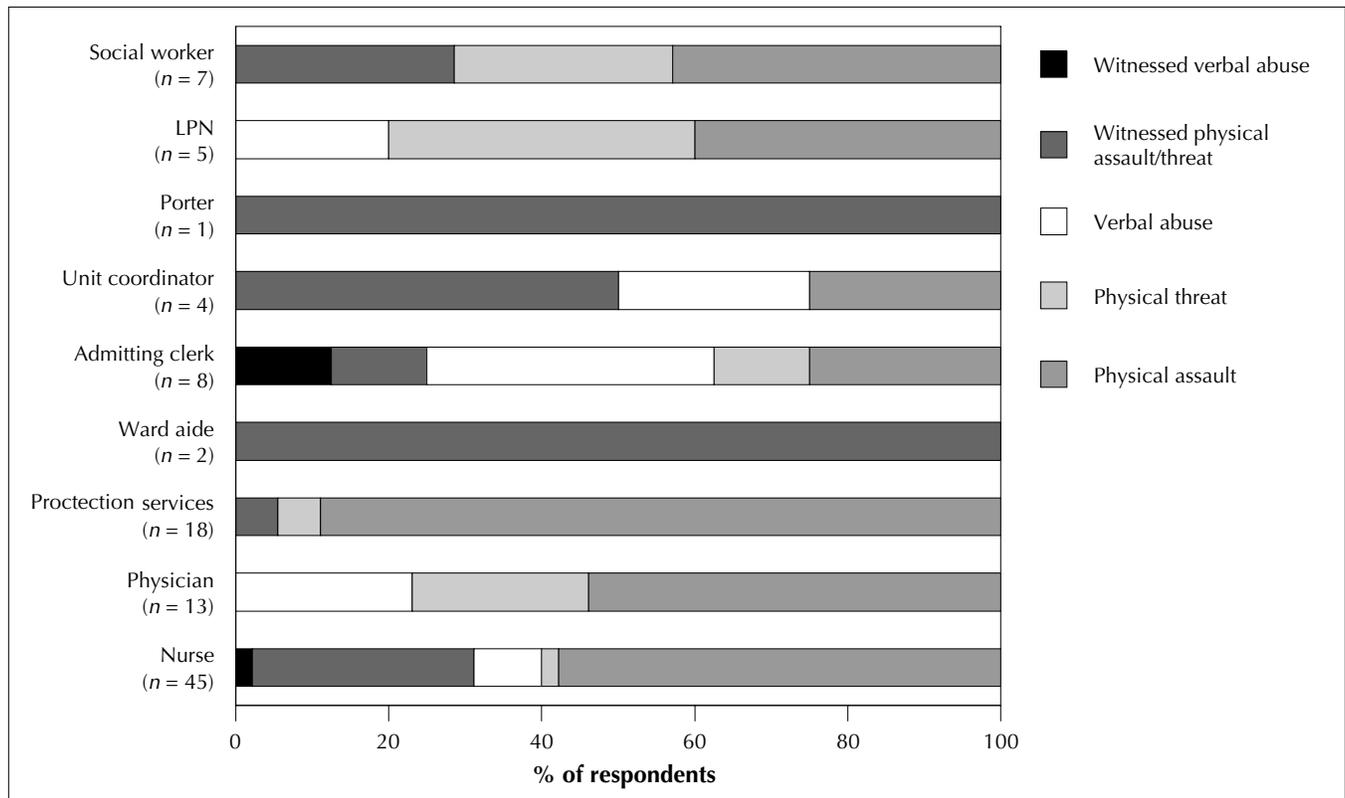


Fig. 1: Most severe violence experienced in 1996 by emergency department staff at an inner-city tertiary care centre, by occupation.



seem less inhibited about acting violently. This lack of an internal braking system crosses all socioeconomic groups.”

The reported frequency of contact with violence in the emergency department is high. A total of 84% of the respondents reported witnessing verbal abuse at least once per shift in the year before the survey, and 90% had been verbally abused at least once a week. More than 20% recalled physical threats over 20 times in the year, and over 50% had been physically assaulted. It appears that emergency department staff work in an environment where they are constantly exposed to situations with aggressive individuals.

The occupations with the highest proportion of respondents experiencing physical assault were nurses and protection services personnel. Our findings for nurses are consistent with previous reports.⁵ However, there has been little focus on security officers. Future programs need to strengthen training for these staff.

The reported increase in the frequency and severity of violent incidents over time is not surprising, in view of the increased contact with patients at high risk for initiating violence, such as drug abusers, alcoholics, mentally ill people and gang members.^{2,4} Factors unique to the emergency department (long waits, high-stress illness, noisy environment and nonselective 24-hour “open-door” policy)⁶ may predispose this setting to violence. Experiencing violence contributes to the sense of victimization among emergency department staff.¹⁴ The resultant effects are considerable in their cost and implications for patient care.¹²

Our respondents reported a variety of coping mechanisms. Most sought support from colleagues rather than any official debriefing. The fact that colleague support rated highly, both as a coping mechanism and in providing tension relief, suggests that avenues of support to be explored include acquisition of debriefing skills by emergency department staff and a regular debriefing format after experiencing or witnessing violence.

Our study has several limitations. First, owing to recall bias, the number of incidents of violence may have been overreported. Second, conclusions from this survey may not be applicable to other health care systems. Third, there may have been a nonresponse bias, in that the 57 people who did not respond may have been more or less likely to have experienced violence.

Nonetheless, our study raises topics for further research, such as comparing the actual incidence and nature of violence to the perception of the respondents, assessing violence prevention programs and measures in the emergency department, examining the best strategies available to recognize potentially violent situations, and testing strategies to support emergency department staff who have experienced violence. Would the unique characteristics of the emergency department necessitate changes in established programs?¹⁵

The responses to our survey provide a greater understanding of how emergency department staff define violence and how violence affects them. Addressing this issue

may have a beneficial effect on staff well-being, with improved job satisfaction and job retention, reduced fear and better staff-patient relationships.

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Competing interests: None declared.

References

1. Murray MG, Snyder JC. When staff are assaulted. A nursing consultation support service. *J Psychosoc Nurs Ment Health Serv* 1991;29:24-9.
2. Pane GA, Winiarski AM, Salness KA. Aggression directed toward emergency department staff at a university teaching hospital. *Ann Emerg Med* 1991;20:283-6.
3. Rose M. A survey of violence toward nursing staff in one large Irish accident and emergency department. *J Emerg Nurs* 1997;23:214-9.
4. Lavoie FW, Carter GL, Danzl DF, Berg RL. Emergency department violence in United States teaching hospitals. *Ann Emerg Med* 1988;17:1227-33.
5. Stultz MS. Crime in hospitals 1986-1991 — the latest IAHS surveys. *J Healthc Prot Manage* 1993;9:1-25.
6. Mahoney BS. The extent, nature, and response to victimization of emergency nurses in Pennsylvania. *J Emerg Nurs* 1991;17:282-94.
7. Keep N, Glibert P, 1990-1991 California ENA Government Affairs Committee. California Emergency Nurses Association's informal survey of violence in California emergency departments. *J Emerg Nurs* 1992;18:433-9.
8. Levin PF, Hewitt JB, Misner ST. Insights of nurses about assault in hospital-based emergency departments. *Image J Nurs Sch* 1998;30:249-54.
9. Clairmont S. Emergency! *Med Post* 1997;Nov 18:6.
10. Hewitt JB, Levin PF. Violence in the workplace. *Annu Rev Nurs Res* 1997;15:81-99.
11. Lion JR, Snyder W, Merrill GL. Under-reporting of assaults on staff in a state hospital. *Hosp Community Psychiatry* 1981;32:497-8.
12. Liss GM, McCaskell L. Injuries due to violence: Workers' Compensation claims among nurses in Ontario. *AAOHN J* 1994;42:384-90.
13. Sullivan C, Yuan C. Workplace assaults on minority health and mental health care workers. *Am J Public Health* 1994;85:1011-4.
14. Rees C, Lehane M. Witnessing violence to staff: a study of nurses' experiences. *Nurs Stand* 1996;11:45-7.
15. Nijman HLI, Merckelback HLG, Allertz WFF, a Campo J. Prevention of aggressive incidents on a closed psychiatric ward. *Psychiatr Serv* 1997;48:694-8.

Reprint requests to: Dr. Christopher M.B. Fernandes, Department of Emergency Medicine, St. Paul's Hospital, 1081 Burrard St., Vancouver BC V6Z 1Y6; cfernand@unixg.ubc.ca

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