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Risk factors associated with patient and visitor violence in general hospitals: Results of a multiple regression analysis

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ABSTRACT

Background: Patient and visitor violence (PVV) is the most dangerous occupational hazard that health professionals must contend with. Staff training is recommended to prevent and manage PVV. There is minimal research focusing on risk factors associated with PVV in general hospital settings. Therefore, staff training is mostly based upon expert knowledge and knowledge from psychiatric and emergency settings.
Objectives: This study investigates health professionals' experiences with PVV in order to describe risk factors related to PVV that occur in general hospital settings.
Design: A retrospective cross-sectional survey was conducted in 2007.
Setting: A university general hospital in Switzerland.
Participants: 2495 out of 4845 health professionals participated (58.0% nurses & midwives, 19.2% medical doctors, 3.6% physical therapists, occupational therapists & nutritionists, 6.1% ward secretaries, medical & radiology assistants, 6.3% nursing assistants or less qualified nursing staff and 5.1% other staff). All had direct patient contact and 82% were female.
Methods: Data were collected via questionnaires using the Survey of Violence Experienced by Staff German-Version-Revised, the German version of the shortened Perception of Aggression Scale and the Perception of Importance of Intervention Skills Scale. Descriptive statistics and multiple logistic regression analyses were used.
Results: Risk factors associated with PVV depend upon the form of violence. Those trained in aggression management and/or those who work predominantly with patients over 65 years of age experience twice as much PVV as others. Health professionals working in emergency rooms, outpatient units, intensive care units, recovery rooms, anesthesia, intermediate care and step-down units also experience PVV more often. When health professionals are older in age, are from the medical profession, are students, or when they have an attitude rating preventive measures as being less important and aggression as emotionally letting off steam, they experience less PVV.

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Conclusion: Training could change the perception and the recognition of PVV, and could therefore increase the risk of experiencing PVV. The health professionals' specific occupation along with attitude and age, the patients' age, the communication and the workplace are all relevant risk factors. Further studies should investigate the impact of aggression management training and other measures that would reduce PVV.

What is already known about the topic?

- Patient and visitor violence (PVV) is an occupational hazard for all health professionals.
- High levels of PVV exist not only in psychiatric and emergency room settings, but also in recovery rooms, anesthesia, intermediate care, in step-down and intensive care settings.
- Factors related to PVV are the characteristics of the health professionals and of the patients/visitors, the interactions between health professionals and patient/visitors during the treatment process, the characteristics of the work environment, as well as the organizational procedures where the interactions take place.

What this paper adds

- A working model is presented regarding patient and visitor violence in the general hospital setting and allows for a more adequate description of violence experienced in the workplace.
- Younger personnel experience higher levels of all forms of PVV, in particular verbal violence.
- Medical doctors experience significantly less PVV than other health professionals.
- Health professionals with training in aggression management experience PVV more frequently than those without training.
- Working with patients over 65 years of age increases the risk of experiencing PVV.

1. Introduction

Although incidents of violence occur in all workplace environments, it is well known that health professionals are at the highest risk (Chappell and Di Martino, 2006; Hahn et al., 2008a,b) for experiencing violence in the workplace. Workplace violence has serious consequences for the involved health professionals, as well as for the entire health care system. Patients are the most frequent group that afflict violence upon health professionals (Camerino et al., 2008; Hahn et al., 2008a,b). In order to prevent and manage patient and visitor violence (PVV) and to improve health professionals' safety, strategies focusing on the organizational and individual level are recommended (ILO et al., 2002; International Council of Nurses, 2001). Although many countries have adopted occupational health and safety legislation and policies, the evidence supporting these recommendations is limited (Chappell and Di Martino, 2006; Pich et al., 2010).

Nursing associations and labor unions have called for intervention effectiveness research and more widespread protective regulations (International Council of Nurses, 2001; International Labour Office et al., 2002). Current research, however, describes only a small fraction of the problem caused by PVV (Campbell et al., 2011; Chappell and Di Martino, 2006). The majority of research has explored the prevalence of PVV (Hahn et al., 2008a,b; Koritsas et al., 2009) and has focused mainly on nurses' experiences and/or on psychiatric or emergency settings (Camerino et al., 2008; Campbell et al., 2011). Larger settings such as medical, surgical, women & newborn, pediatrics, rehabilitation, ambulatory care (Hahn et al., 2008a,b) or geriatric care (Zeller et al., 2009), have been investigated to a lesser extent.

Definitions of violence in the literature are inconsistent (Bjorkly, 2006; Hahn et al., 2008a,b). This impedes both research and the development of prevention and intervention strategies when combating PVV (Chappell and Di Martino, 2006; Lau and Magarey, 2006). This inconsistency is connected to the fact that in the field of human aggression, no current theoretical approach can describe all forms of violence (Selg et al., 1997). In this study, violence refers to incidents in which health professionals are abused, threatened or assaulted in work-related circumstances. PVV is defined as any verbal, non-verbal or physical behavior that threatens or is harmful to others or to their property (Morrison, 1990). Verbal violence is defined as the use of abusive or offensive language (including sexually abusive language), derogatory remarks or profane and/or obscene comments. Threats are warnings of intent to injure another person with or without an object or weapon, to harass (also sexually) and to physically intimidate. Physical assault includes slapping, pinching, pushing, shoving, spitting or kicking, with or without the use of weapons (McKenna, 2004).

Despite the increased attention given to violence, very few studies have investigated risk factors associated with PVV in accident and emergency health care settings (Ferns, 2005), geriatric health care settings (Kamchuchat et al., 2008) or in general health care settings (Lanza et al., 2006). A risk factor is the characteristic of a person, a situation or an environment that is associated with the likelihood that violence, in an interaction, will occur. In order to develop appropriate assessment and prevention strategies, studies investigating risk factors were conducted in the field of psychiatric and mental health care (Amore et al., 2008; Bjorkly et al., 2009; Flannery et al., 2006). Based upon these studies, the occurrence of PVV in mental health care is explained utilizing social-interactional models (Richter and Whittington, 2006).