

Poster: 0165

Occupational Violence: Incidence, Consequences and Identification of Risk Factors as a Basis for Prevention

SG Gerberich (1) presenting, TR Church (1), PM McGovern (1), HE Hansen (2), NM Nachreiner (1), MS Geisser (1), AD Ryan (1), SJ Mongin (1), GD Watt (1), A Jurek (1)

University of Minnesota, Center for Violence Prevention and Control, Division of Environmental Health Sciences, School of Public Health, Minneapolis, MN, United States (1), University of Minnesota, School of Nursing, Minneapolis, MN, United States (2)

Work-related violence has recently been recognized as a major problem. Homicide is the third leading cause of occupational fatality, overall, and the second leading cause of occupational fatality for women. However, there has been a serious deficiency in the knowledge of non-fatal work-related violence and the associated risk or protective factors. Few analytic studies have been conducted, whereby comparisons of exposures have been made between victims and non-victims of violence -- studies that enable identification of risk or protective factors and, in turn, serve as a basis for prevention.

The purpose of this study was to identify the magnitude and consequences of and risk factors for the problem of work-related violence within a major occupational population. In particular, this enabled determination of the relation between work-related violence in a cohort of registered and licensed practical nurses and: 1) personal exposures; 2) environmental situations/exposures in the work environment; and 3) characteristics of others in the environment (other workers, patients, visitors). In this study, work-related violence was defined as the intentional use of physical force or emotional abuse, against an employee, that resulted in physical or emotional injury and consequences. This included physical and non-physical violence (threat, sexual harassment, and verbal abuse). Work-related events included any activities associated with the job or events that occurred in the work environment; work-related travel was included.

Initially, a comprehensive survey instrument was sent to a random selection of 6,300 nurses, licensed in one state in the United States, to identify work status and work-related violence experience in the past year. Subsequently, using a case-control design, a survey was then sent to the cases and randomly selected controls to obtain data on work-related exposures. This enabled analyses of exposures between cases (n=475) and controls (n=1,425) to identify specific risk and protective factors to be used as a basis for

developing prevention and control efforts. Both univariate and multiple regression analyses were performed to identify the incidence and consequence of and risk factors for violent outcomes. Logistic regression was used to model the dependence of physical assault on each exposure of interest and associated confounders; adjustments were included for unknown eligibility and non-response.

Response to the initial survey was 74%. Adjusted respective rates of physical assault and non-physical violence per 100 persons per year (with 95% confidence intervals [CIs]) were 13.2 (12.2, 14.3) and 38.8 (37.4, 40.4). Perpetrators varied by type of violence, and consequences appeared greater for non-physical than physical violence. From the case-control survey (response, 75%), increased risks (Odds Ratios with 95% CIs) were identified, respectively, for working in: long-term care facilities (2.6; 1.9-3.6); emergency (4.2; 1.3-12.8) and psychiatric/behavioral (2.0; 1.1-3.7) departments; and environments with illumination less than “bright as daylight” (2.2; 1.6-2.8). Decreased risks were identified for working with young populations (0.4; 0.2-0.99); carrying cell phones/personal portable alarms (0.3; 0.2-0.7); and working in home/public health agencies (0.2; 0.1-0.4), outpatient facilities (0.4; 0.2-0.8), and clinics/health provider offices (0.2; 0.1-0.5).

From these findings, it is evident that work-related violence is a problem within this population, and that specific prevention and control strategies can be developed more realistically. For example, attention to environmental factors within facilities or departments, such as lighting or use of protective devices like cell phones, need to be addressed by employers and relevant safety committees. Work-related violence affects not only the victim but also, the employer, others in the work environment, families and significant others outside the work setting, and society, in general. It is a problem that warrants continued and rigorous attention.

NORA Symposium 2006

Research Makes a Difference

April 18-20, 2006

L'Enfant Plaza Hotel

Washington, DC

NORA

