

1.03–2.82), and “Sometimes” (OR = 1.11, 0.77–1.61), and decreased for those indicating “Never” (OR = 0.27, (0.07–0.93). Risk of physical assault increased for those educators in the 80th percentile scoring level compared to others (OR = 1.71, 1.20–2.44).

Conclusions: Burnout was associated with increased risk of physical assault. This is a first step in examining violence as an outcome for burnout for this population, and serves as a basis for further in-depth research.

G2.3

Title: Environmental Violence and Physical Assault Against Teachers

Authors: **Gerberich S**, Nachreiner N, Ryan A, Mongin S, Church T, McGovern P, Geisser M, Feda D, Sage S, Pinder E, Watt G

Introduction: Teachers are known to be at high risk for work-related violence; however, data specific to risk factors are limited. Data from a case control study were analyzed to determine the effect of reported environmental violence on work-related physical assault among educators working in kindergarten through grade 12 schools.

Methods: From the Minnesota license database, 26,000 randomly selected educators were screened for eligibility by mailed questionnaire; 6,180 were eligible for data collection. Phase 1 (12-month recall) identified eligible cases (n = 290) and controls (n = 867) and characteristics of the violent events; Phase 2 (case control, recall from the calendar month before the violent events for cases or a randomly selected month for controls) enabled identification of environmental exposures. Confounders were selected for multiple logistic regression analyses using Directed Acyclic Graphs with reweighting for nonresponse biases.

Results: Response rates for each phase were 84%. Assaults were primarily perpetrated by students (95%). Respective risks (ORs; 95% CIs) for physical assault increased for educators working in environments where they witnessed students involved in physical assault 1–3 (2.94, 1.95–4.43), 4–10 (6.61, 3.73–11.72), 10+ (15.66, 7.84–31.27) versus zero times; threat 1–3 (1.49, 0.97–2.27), 4–10 (4.07, 2.40–6.90), 10+ (8.25, 4.57–14.91) versus zero times; sexual harassment 1–3 (1.94, 1.30–2.89), 4–10 (3.31, 1.73–6.36), 10+ (9.97, 4.47–22.23) versus zero times; verbal abuse, 10+ versus zero times (3.86, 2.26–6.57); bullying, 10+ versus zero times (3.21, 1.89–5.46). Witnessing persons, other than students, engaged in

violence was also important: physical assault 1–3, 4–10+ versus zero times (3.14, 1.67–5.88; 11.61, 1.78–75.64).

Discussion: Teachers were at increased risk for physical assault in environments where they witnessed students and others engaging in violent behaviors. Examination of such environments, in concert with other environmental characteristics, is essential for developing intervention efforts to protect educators and others in schools.

G2.4

Title: EMS Providers’ Exposure to Violence

Author: **Heick RJ**

Introduction: Nearly half of patients involved in emergency department violence are transported by EMS personnel, making it likely that EMS providers would be at increased risk of exposure to violence and injury in the line of duty.

Methods: This cross-sectional study examined the relationship between assault injuries and patient restraint policies, looking at odds of physical assault and subsequent injury across multiple variables.

Results: Physical assault was reported by 147 (22%) of the 660 EMS providers who responded to the survey, with a total of 267 physical assaults reported. Physical assault was twice as frequent among paid providers versus volunteers. The patient was the most frequently identified perpetrator, with no significant difference found between paid and volunteer providers ($p = 0.41$). For both groups, the most common patient condition reported for patient-perpetrated assaults was use of alcohol or other drugs, followed by the “other or unknown” category. Nearly one third of assaults among paid and volunteer providers occurred while they were restraining or attempting to restrain a patient. Injury from physical assault was reported in 8% of paid and 7% of volunteer provider assaults (n = 26 injuries). No significant differences in training in handling of aggressive or combative patients were found between paid and volunteer providers. Training was not found to significantly decrease odds of physical assault. Written patient restraint policies were reported by 63% of paid and 42% of volunteer providers. Odds of physical assault decreased with law enforcement only policies (0.60, 95% CI 0.38–0.93) and increased when policies included chemical restraint (1.46, 95% CI 1.08–1.98).

Discussion: Exposure to violent or aggressive behavior is a significant problem for EMS providers.

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