Firearm Violence Among High-Risk Emergency Department Youth After an Assault Injury

Purpose
The purpose of the study was to examine the rates of firearm aggression, victimization, and fatal/nonfatal firearm injury between two samples of drug-using youth seeking care at an emergency department (ED).

Background
Firearm violence is a leading cause of death among youth in the U.S. To date, no longitudinal studies have looked at the incidence of future firearm violence among youth after an assault injury or the modifiable risk factors associated.

Methods
The two-year prospective study compared firearm violence outcomes among two groups of drug-using youth aged 14 to 24 presenting to an urban-based ED: an assault-injured group compared with a non-assault-injured group. For each assault-injured patient enrolled in the study, a non-assault-injured patient matched by gender and age was enrolled as a comparison. At baseline, all enrolled subjects completed a self-administered computerized survey and were interviewed by a research assistant. Additional data was collected from medical chart reviews and follow-up assessments were conducted at six, 12, 18, and 24 months.

Key Findings
- Nearly 60% of the assault-injured group reported firearm violence (victimization or aggression) within two years of the ED index visit—an almost 40% higher risk than the non-assault-injured comparison group.
- Among those reporting firearm violence, the majority (63.5%) had at least one event within the first six months of the ED index visit.
- Analysis identified the following baseline predictors of firearm violence: male gender, African American race, assault injury, firearm possession, attitudes favoring retaliation, post-traumatic stress disorder, and a drug use disorder.

Implications
High-risk youth seeking care at an ED for an assault-related injury have increased rates of subsequent firearm violence. These findings indicate that substance use, negative retaliatory attitudes, firearm possession, and mental health needs increase the risk of firearm violence. This suggests interventions at the index visit may help decrease firearm violence among urban youth if these risk factors are addressed.

Citation