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DAILY FIREARM CARRIAGE AND INTERPERSONAL VIOLENCE PATTERNS AMONG A HIGH-RISK URBAN EMERGENCY DEPARTMENT (ED) SAMPLE OF YOUTH AND YOUNG ADULTS

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Statement-of-Purpose Firearm violence is a leading cause of U.S. mortality. Intensive longitudinal daily data studies [ILDDS] have not examined firearm carriage or same-day/next-day predictors of carriage or violent conflict. Such data are necessary to inform violence interventions.

Methods/Approach ED youth/young adults (age=16–29) screening positive for substance misuse, firearm possession, and smartphone ownership were enrolled in a 30-day ILDDS. Daily assessment included 31-items about firearm carriage, violence, substance use, anger, anxiety/stress, and impulsivity. Separate conditional logistic regression models examined within- and next-day lagged associations with firearm carriage and violent conflict.

Results Across 30-days, 51% (n=27) of participants (n=53; M-age=24; 42%-male; 68%-Black; 87%-handgun possession) carried firearms, averaging 7 carriage-days/person. Carriage did not vary by day, week, day-of-week, or weekday/weekend. Firearms were carried 17% (180-of-1046) of days, with protection (97%) the primary reason-for-carriage and perceived low-risk (75%) the primary reason-for-not-carrying; 19% of participants disposed of their firearms. Examining between-person associations, no baseline differences were identified for participants carrying and not carrying firearms. Examining within-day factors, using illicit drugs (OR=7.5) and spending time in high-risk locations (OR=3.5) were associated with same-day carriage. No same-day associations were identified for other daily variables and carriage. Across 30-days, 26% of participants engaged in violent conflict (n=20 conflict-days; 63%-partner/27%-non-partner, 25%-firearm threats/use). Examining within-day, higher anger (OR=1.48), impulsivity (OR=1.28), stress/anxiety (OR=1.35), and riskier firearm behaviors (e.g., carriage drunk/high; OR=6.46) were associated with same-day conflict. Higher anger (OR=9.63) and lower self-efficacy for avoiding fights (OR=1.42) were associated with next-day conflict.

Conclusions Among high-risk youth, daily firearm carriage/violence rates were high. Results highlight carriage patterns and foci for interventions, including risky firearm behaviors, illicit-drug use, anxiety/stress, impulse control, anger management, and violence avoidance/refusal skills.

Significance/Contributions This is the first ILDDS examining firearm carriage/violence and identifies key data for future public health efforts addressing firearm violence.

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SOCIOCULTURAL AND DEMOGRAPHIC FACTORS ASSOCIATED WITH THE EDUCATIONAL PREPARATION AND GOALS OF ATHLETIC TRAINING STUDENTS

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Statement of Purpose Athletic training students (ATS) are training to provide independent healthcare, including injury prevention, to physically active patients. Our study aimed to identify sociocultural (race, gender) and demographic (age, athletic training program type) factors associated with the educational preparation of ATS.

Methods/Approach ATS (n=832; 629 females; mean age=22.2 ±2.7 years) completed a validated cross-sectional questionnaire on sociocultural and demographic variables, and educational experiences. A general linear model determined the effect of race (Caucasian, African-American, Asian, Latino/Hispanic, multi-race, other), gender, age category (<20, 20–24, 25–29, ≥30), and athletic training program type (undergraduate professional vs. graduate professional), on how prepared ATS felt for clinical practice. The 7-point scale ranged from completely unprepared to completely prepared.

Results Most participants were female (75.6%), Caucasian (73.8%), 20–24 years old (84.1%), and from an undergraduate professional-level athletic training program (78.3%). Most participants felt at least moderately prepared for clinical practice (46.5%). Additionally, most participants planned to further their education in some capacity (68.9%). In the general linear model, compared to Caucasian ATS, African-American ($\beta=-0.593$, $p<0.001$) and multi-race ATS ($\beta=-0.383$, $p=0.016$) felt less prepared for clinical practice.

Conclusions Our findings suggest that ATS of different racial backgrounds may have differing experiences compared to Caucasian ATS related to their perceived preparedness for clinical practice, independent of age- and program-related influences. Although these results only represent a one-level difference (moderately to somewhat prepared), the findings are important to consider when discussing the need to prioritize confidence, particularly among diverse populations of ATS.

Significance/Contribution to Injury and Violence Prevention Science Athletic training programs need to be aware of student differences relative to race/ethnicity as related to their perceived preparedness for independent clinical practice. Understanding how such disparities exist, their influence, and how to mitigate their influence on educational experiences will help to better train ATS to prevent future injuries.

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ALTER FOR HOME SAFETY IN BRIEF: A PROCESS EVALUATION TO EXAMINE THE FEASIBILITY AND ACCEPTABILITY OF AN ADAPTED INTERVENTION PROGRAM FOR A VULNERABLE POPULATION

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Unintentional injury is the leading cause of death in children 1–19 years of age; rates of injury in children of vulnerable parenting populations (e.g., those with lower socio-economic status, lower levels of education, younger maternal age) are even higher. Thus, intervention programs for parents need to be targeted and tailored for such a population. Currently, no evidence-based programming related to injury prevention is being used by Public Health agencies across Ontario, Canada. The previously validated Supervising for Home Safety intervention program was adapted to fit the needs of a vulnerable parenting population within the context of pre-existing community programming through these Public Health agencies. This process evaluation sought to explore parent acceptability,

feasibility of facilitator implementation, and to determine practicality of a PRE/POST questionnaire as a future method to evaluate efficacy of this newly adapted program. Parents provided ratings of the program (e.g., helpfulness, utility, increase in knowledge, would they recommend the program), and facilitators provided ratings and written responses (e.g., preparation, clarity, improvements that could be made). Results suggest that overall both parents and facilitators rated the program positively. Major themes identified by facilitators suggest that the questionnaire should be significantly shortened and simplified to account for low literacy in this population specifically. Additionally, the limits of existing session length for this community programming is a barrier to implementing a thorough questionnaire evaluation. Moving forward, literacy level will be reduced overall, and alternatives to a questionnaire format will be explored. Conducting research within community setting constraints is discussed. This research has identified what remains to be addressed for the purposes of a large scale evaluation of a well-received program. This program has the potential to provide large scale publicly funded parenting programs with evidence based intervention to reduce the rates of unintentional injury in children among vulnerable parenting populations.

114 ADVERSE CHILDHOOD EXPERIENCES AND ADULT ADVERSITIES CLUSTERS BY GENDER

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The overarching goal of this study is to better understand how adverse childhood experiences and adult adversities cluster together by gender.

Methods/Approach We used latent class analysis (LCA) in the College Student Health Survey (CSHS), a large state surveillance system of 2- and 4-year Minnesota college students to identify clusters of childhood adversities plus highly correlated adult adversities among emerging adults aged 18–24. Exploratory LCA was conducted in 2015 data and replicated with 2018 data. Given observed differences between men and women with regard to experiences of adversities, the analyses were stratified by gender.

Results In the 2015 sample, the seven-class and five-class models were selected for females and males, respectively, based on fit statistics and class interpretability. Both females and males had a low adversity and childhood household dysfunction with childhood emotional abuse clusters. The low adversity clusters made up the highest prevalence in each sample, 48% for females and 66% for males. In females, the remaining clusters included childhood household mental illness, high adversities, adult sexual abuse, childhood emotional abuse, and high adult adversities with low child adversities. In contrast, in males, the remaining clusters were childhood household alcohol abuse, child physical and emotional abuse, and intimate partner emotional abuse. The classes identified in the 2015 sample replicated well in the 2018 sample.

Conclusions The assessment of adversity clusters revealed distinct patterns of lifetime adversity by gender. These different patterns may have different impacts throughout life that are not captured by a simple summed score of the number of adversities.

Significance and Contributions to Injury and Violence Prevention Science The unique pattern of adversity from those with different backgrounds is important to prevent adversity and to advance understanding of its impacts across different populations.

115 USING NATIONAL VITAL STATISTICS SYSTEM (NVSS) MORTALITY DATA TO ESTIMATE COUNTY-LEVEL TRENDS IN DRUG-SPECIFIC OVERDOSE MORTALITY: CONSIDERATIONS AND LIMITATIONS

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Statement of Purpose Researchers often use National Vital Statistics System (NVSS) mortality data to examine county-level opioid-involved overdose mortality rates. Limitations such as small counts and county-level variation in reporting the specific drugs involved are not always considered. This study describes county-level death counts and variation in drug reporting, and possible implications when making county-level comparisons.

Methods/Approach NVSS mortality data from 2015–2017 were analyzed. Drug overdose deaths were identified using the International Classification of Diseases, 10th Revision underlying cause-of-death codes X40–X44, X60–X64, X85 and Y10–Y18. Drug specificity was calculated by determining the percent of drug overdose deaths with a multiple cause code of T36–T50.8.

Results Of 3,149 counties, only 1,574 (50%) had 10 or more drug overdose deaths in 3 years, 1,261 (40%) had fewer than 10, and 314 (10%) had zero. Drug specificity was 86% overall. For counties with at least one death, drug specificity was 0–50% for 469 counties (17%), 51–85% for 644 (23%), 86–99% for 730 (26%) and 100% for 992 (35%). Compared to counties with high specificity (>85%), counties with lower specificity were more likely to be rural, located in Public Health Regions 5–9, have county coroners as the state system for medicolegal death investigation, and less likely to have a state medical examiner.

Conclusions Even with 3-year aggregate data, half of the counties had fewer than 10 overdose deaths, and therefore possibly unstable rate estimates. Counties with lower specificity in drug reporting differed from counties with high specificity. These differences might lead to biases when reporting county-level drug-specific overdose rates.

Significance and Contributions to Injury and Violence Prevention Science Low counts and differences in specificity of drug reporting should be considered when comparing county-level drug-specific overdose rates. Aggregation, imputation, modeling and other statistical techniques to account for these limitations may be warranted.

119 DOES EXPOSURE TO GENERAL WARNINGS IN FRAMED MESSAGES REDUCE RISK BEHAVIOURS IN SCHOOL-AGED CHILDREN?

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Statement of Purpose Framed safety messages (gain- or loss-framed) can counteract the increase in risk taking that occurs