

better focus injury prevention efforts and make the most impact on specific populations.

Significance This study adds to the field of injury prevention by providing a possible population to target injury prevention efforts and to ultimately, improve patient outcomes.

23 THE CHARACTERISTICS OF DRUG-IMPAIRED DRIVERS IN THE UNITED STATES

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10.1136/injuryprev-2020-savir.99

Statement of Purpose Driving under the influence of drugs (DUID) is a burgeoning public health concern in the United States. Most studies have focused on the presence of drugs and/or alcohol among fatally injured drivers. Because little is known about individuals who actively drive drug-impaired, the purpose of this study was characterize the demographics and behaviors of these individuals.

Methods/Approach Data from the 2015–2017 National Survey of Drug Use and Health were analyzed. The study population was limited to drivers ≥ 18 years of age. The outcome was those who self-reported DUID in the past 12 months. Demographic and behavioral characteristics of those who drove drug-impaired vs. not drug impaired were compared via frequencies, percentages, binary and multivariable logistic regression analyses, which accounted for the survey design.

Results Among eligible respondents (N=118,741), 4.7% reported DUID (unweighted). DUID was highest among 18–25 year olds (9%), unmarried individuals (8%), non-heterosexuals (10%), those whom abused or were drug dependent (40%), engaged in risky behaviors (15%), and ever received treatment for substance use (15%). Those who were dependent on or abused marijuana (32%), heroin (53%), or methamphetamine (52%) reported DUID most frequently. After adjustment for key demographic and behavioral variables, males [odds ratio, OR=1.56; 95% confidence interval (CI) 1.4, 1.7], those who abused or were dependent on drugs (OR=4.3; 95% CI 3.8, 4.8), exhibited the most risky behaviors (OR=3.7; 95% CI 3.0, 4.6), non-heterosexuals (OR=1.3; 95% CI 1.2, 1.5), and employed individuals (OR=1.3; 95% CI=1.2, 1.5) were more likely to engage in DUID.

Conclusions DUID was particularly common among some population sub-groups including young males, non-heterosexuals, employed individuals, and those who abused or were dependent on drugs. These groups may benefit from interventional measures.

Significance and Contribution to Injury and Prevention Science These findings may help direct future interventional efforts to mitigate DUID. Center.

24 METHODOLOGICAL REVIEW OF STUDIES THAT INVESTIGATED FACTORS ASSOCIATED WITH TRAUMA RECIDIVISM

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10.1136/injuryprev-2020-savir.100

Statement of Purpose Trauma recidivists are patients who present to an emergency room or trauma center on more than one occasion for different incidents of traumatic injury.

Although a major public health issue, there has not yet been a systemic review of the literature that synthesizes our understanding of correlates of trauma recidivism. The purpose of this presentation is to report on the findings of a systematic review of the trauma recidivism literature. This oral presentation focuses on the methodological findings and recommendations that resulted from the review.

Methods/Approach 13 data bases were searched from inception to 2017 for studies that explicitly compared hospital-based trauma recidivists to non-recidivists. The search was conducted using PRISMA guidelines for systematic reviews.

Results Screening resulted in the selection of 29 studies that met the inclusion criteria.

Conclusions The literature review generated findings that could inform the quality of research among victims of violent injury. Methodological considerations to consider include, a) identifying a common ‘recidivism window’ that allows detection of patients who are at risk for recidivism, b) disaggregate patients by epochs informed by the human development literature, and c) improving on mixed method methodologies.

Significance and Contributions to Injury and Violence Prevention Science Social science concepts and methodology coupled with medical/victim research can help provide a deeper understanding of the meanings and processes that shape both health research and the behaviors of patients that lead to subsequent re-injury. Insights from this research and the collaborations that stem from it can guide the design of health care delivery practices and interventions that acknowledge and adapt to social, cultural, and economic barriers; harness social mechanisms to increase their effectiveness; or even attempt to manipulate social and cultural determinants of health directly.

25 CORRELATES OF TRAUMA RECIDIVISM: RESULTS FROM A SYSTEMATIC LITERATURE REVIEW

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10.1136/injuryprev-2020-savir.101

Statement of Purpose Trauma recidivists are patients who present to an emergency room or trauma center on more than one occasion for different incidents of traumatic injury. The purpose of this presentation is to report on the findings of a systematic review of the trauma recidivism literature with the purpose of identifying correlates for future research aimed at preventing trauma recidivism. This presentation will discuss the factors traditionally explored in trauma recidivism research, which of those factors are deemed critical based on previous research and provide recommendations for future research with this vulnerable population.

Methods/Approach 13 data bases were searched from inception to 2017 for studies that explicitly compared hospital-based trauma recidivists to non-recidivists. The search was conducted using PRISMA guidelines for systematic reviews.

Results Screening resulted in the selection of 29 studies that met the inclusion criteria.

Conclusions The literature review identified variables across 6 categories that were included in trauma recidivism literature: 1) Demographic, 2) injury related variables, 3) health related variables, 4) substance use, 5) crime/weapons and 6) vehicular causes. Variables within each category are discussed followed by recommendations of variables to include in future research.

Significance and contributions to injury and violence prevention science Although previous trauma recidivism research has identified risk factors for recidivism, it has largely remained within the field of medicine as a medical issue. Merging social science and medical constructs and processes, improving research on social and cultural influences on health, and integrating basic social science theories, concepts, and methods into applied health research is imperative to moving the field of injury prevention forward. Integration of social science research with the biological and behavioral sciences is an essential component of this task. reported leaving their child alone on a bed without a railing. Nearly 33% of parents (46% of which have a high school diploma or less) reported not using safety guards on all windows. Parents reported not using stair gates 48% of the time, with 55% of those parents having completed less than a Bachelor's Degree. Also, 67% of parents (all on Medicaid) reported their child wore a helmet 'sometimes' or 'never' while riding a bicycle. Even though 79% of parents 'strongly agreed' to having the knowledge to protect their child from being injured by a fall, 63% of parents reported 'sometimes' or 'rarely' watching their child when on playground equipment.

36 AGE DIFFERENCES IN FIREARM INJURIES TREATED IN THE EMERGENCY DEPARTMENTS AND RELATED COSTS IN THE US, 2006 TO 2016

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10.1136/injuryprev-2020-savir.102

Statement of Purpose There is a lack of consensus regarding age- and intent-related differences in the burden of non-fatal firearm injuries. We determined the time trends in burden and costs of age- and intent-specific non-fatal firearm injuries presenting to US emergency departments (EDs) differentiated by survival after treatment to correctly estimate non-fatal injuries.

Methods We performed a retrospective study of the Healthcare Cost and Utilization Program Nationwide Emergency Department Survey (NEDS) from 2006 to 2016. We present survey-weighted counts, proportions, means, and rates, and confidence intervals of national and age groups (0–4, 5–9, 10–14, 15–17, 18–44, 45–64, 65–84, >84 years) specific ED discharges for firearm injuries. Inflation-adjusted charges were applied to costs.

Results There were a total of 1,033,771 ED visits for firearm injuries from 2006 to 2016 and 6.8% died in the ED. The firearm injury ED rates remained steady, while ED death rates declined slightly during 11-years. There was also a slight decline in firearm ED visits in children (0–17), but the largest burden was between 18–44 years (20.8 per 100,000) with stable rates. Assault injuries declined from 39.7% to 36.4% overall with a significant drop in all age groups, while unintentional injuries increased from 46.4% to 54.7% overall and in all age groups. There were significant declines in legal intervention injuries. The total charges were \$3,777,264,968 (\$369,006,396/year) and increased across time in all subgroups. The mean predicted charges increased from \$2,386 to \$3,975 among those discharged alive versus \$1,322 to \$2,203 among those who died in ED.

Conclusions The burden of firearm injury treated in ED is among young adults. Interventions and programs to reduce

firearm violence should include non-fatal injuries as they live with ongoing morbidity and economic burden.

Significance There is a need for an accurate and standardized data collection of firearm injuries.

79 FACTORS ASSOCIATED WITH PERCEPTION OF LIFE EXPECTANCY IN ASSAULT-INJURED URBAN YOUTH: AN EMERGENCY DEPARTMENT SAMPLE

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10.1136/injuryprev-2020-savir.103

Statement of Purpose This study aimed to identify factors associated with perception of minimized life expectancy in assault-injured youth, a population at-risk for future assault-related injuries.

Methods/Approach Assault-injured youth (n=188; ages 10–15 years; 61% male; 96% black) were recruited from two urban pediatric emergency departments (Baltimore, MD, Philadelphia, PA) to participate in a mentoring intervention to prevent violence. At enrollment, youth were asked 'Do you think you will live to 35?'; youth responding 'yes' (optimistic life expectancy) were compared to youth responding 'maybe' (uncertain life expectancy) using descriptive statistics, t-tests and chi-square analysis.

Results Although there were no differences between the groups in age, gender or socioeconomic status, youth with an uncertain life expectancy (31.4%, n=59) were more likely to have a family member injured by violence (61.0% vs. 43.4%, p=0.028) or in a gang (42.1% vs. 19.2%, p=0.002) and less likely to take steps to avoid a fight (57.6% vs. 76.7%, p=0.01) or think about consequences before acting (70.7% vs. 87.6%, p=0.007). These youth were also more likely to believe that revenge is a good thing (47.4% vs. 29.0%, p=0.019), and think about suicide (42.9% vs. 7.9%, p<0.001). Finally, youth with an uncertain life expectancy felt less likely to go to college or have a successful career, and more likely to have difficulty finding a good job in adulthood.

Conclusions One third of assault-injured early adolescents expressed uncertainty of living until age 35. Several risk factors and behaviors were identified as being associated with possible risk of premature death.

Significance and Contributions To Injury And Violence Prevention Science Perception of risk of premature death is present in a sizable proportion of assault-injured youth. Future work should investigate the impact that an uncertain life expectancy has on future behaviors and response to violence prevention interventions.

83 STRENGTHENING RESEARCH PARTNERSHIP AND HEALTH CARE SYSTEMS TO PREVENT VIOLENCE: A SWOT ANALYSIS

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10.1136/injuryprev-2020-savir.104

Purpose The Jefferson Center for Injury Research and Prevention (JCIRP) is a full entity of the Department of Surgery's Trauma Division and the College of Nursing at Thomas