Mental health consequences of violence

67 SUICIDALITY AND EXPOSURE TO SCHOOL-BASED VIOLENCE AMONG A NATIONALLY REPRESENTATIVE SAMPLE OF ASIAN AMERICAN AND PACIFIC ISLANDER YOUTH

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Statement of Purpose Asian Americans and Pacific Islanders (AAPI) are the fastest growing racial/ethnic minority group in the U.S. However, less focus has been paid to the rates of suicidal behaviors among AAPI youth, despite estimates placing suicide as the second leading cause of death among AAPI youth (15–24 years). At the same time, exposure to school-based violence has a long-term negative impact on youth outcomes. And recent research has noted that AAPI youth are more likely to be victimized in schools than their non-AAPI peers. The current study expands on the limited existing research and examines the relationship between suicidal behavior and exposure to school-based violence among a national sample of AAPI high school students.

Methods We conducted a secondary analysis of the CDC's most recent Youth Risk Behavior Surveillance System data ($n=14,765$).

Results Results demonstrated that the prevalence of AAPI youth engaging in suicidal behaviors does not differ significantly from other demographic subgroups. Further, a significant correlation between exposure to school-based violence (including having been threatened with a weapon and a perceived lack of safety at school) and four suicidal behaviors was observed among this sample of AAPI youth: considered suicide attempt: $r=0.237$, $p<0.001$; made a suicide plan: $r=0.237$, $p<0.001$; attempted suicide: $r=0.164$, $p<0.001$; had a suicide attempt that resulted in injury: $r=0.147$, $p<0.001$.

Conclusions Our findings confirm that AAPI youth are engaging in suicidality behaviors and experiencing school-based violence at rates comparable to non-AAPI youth. We also demonstrate that a significant relationship between exposure to school violence and suicidality persists for this subgroup.

Significance Implications for integrating existing mental health practices with school-based violence prevention efforts and that are tailored specifically to the needs of AAPI youth are discussed.

School violence

68 K-12 SCHOOL ENVIRONMENTAL RESPONSES TO GUN VIOLENCE: GAPS IN THE EVIDENCE

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Statement of Purpose The US has experienced 48 active school shootings in the past twenty years. During this time, K-12 schools have undertaken efforts to modify their school environment in response to the anticipation of gun violence. However, it is unclear whether there is evidence that these strategies are effective.

Methods We identified the most common school tactics and policies that are being implemented in K-12 schools across the US: (1) target hardening (e.g. metal detectors, locked classroom doors, security cameras), (2) presence of zero tolerance policies, (3) presence of school resources officers (whether armed with lethal or non-lethal forces), (4) implementation of emergency preparedness programs (e.g. active shooter training drills and first-aid and hemorrhage control training programs), (5) behavioral threat assessment efforts, (6) policies that allow for teachers or administrators to be armed with firearms, and (7) notification technologies. We systematically reviewed the literature over the past two decades to determine i) which school environmental factors have evidence supporting their effectiveness at deterring gun violence and ii) where the gaps in the literature are.

Results Our work confirmed that while there is a large number of strategies available to schools, there is very limited empirical evidence as to their efficacy. Of the evidence that exists, a preliminary review of the literature indicates that behavioral threat assessment efforts may be effective and conversely, that certain hardening efforts such as metal detectors are not effective at deterring violence.

Conclusions Notably, K-12 schools are implementing several policies and practices intended to prevent gun violence that do not have an evidence-base.

Significance Our review also highlights the impact efforts may be having on child well-being and on school communities at-large. Implications for future research and for how school professionals might more effectively consider available information about these safety strategies will be discussed.

Violence prevention policy and advocacy

72 STATE EARNED INCOME TAX CREDIT POLICIES AND INTIMATE PARTNER HOMICIDE IN THE UNITED STATES, 1990–2016

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The Earned Income Tax Credit (EITC) is the largest cash transfer program to low-income working families in the U.S. Some states augment the federal EITC with variable levels of generosity. As lack of finances is the most frequently-cited barrier for women to leave abusive relationships, federal and state EITCs could provide financial means to leave abusive relationships. However, the financial control associated with abuse and current EITC eligibility rules may hinder the program's use for this purpose. We hypothesized that increased generosity in state EITC's would be associated with a reduction in intimate partner homicide (IPH).

Approach Using multiply-imputed Supplementary Homicide Reports, we obtained state- and year-level counts of female IPH victims aged 18 or older for 1990–2016. Using a difference-in-differences approach and linear regression with state- and year- fixed effects, we assessed the impact of changes in EITC generosity on annual rates of IPH per 100,000 adult female population, adjusted for state economic productivity, welfare policies, demographic characteristics, firearm availability, and non-familial homicide rates.

Results A modest negative association between increased state EITC generosity and IPH rates was found. In the fully-adjusted models, a 10% increase in refundable state EITC (as percentage of federal) was associated with a reduction of 0.12 IPH events per 100,000 female-years (95% CI:-0.23,-0.01).

Conclusions Increased state EITC generosity was associated with a small but significant reduction in IPH rates. The modest effects may relate to current EITC eligibility rules which typically preclude people who are married but separated from receiving benefits.

Significance Cash assistance to low-income families may be an important policy to prevent IPH, but the mechanisms through which cash transfers are meted out may affect their impact. Creating state EITCs, increasing their generosity, and changing eligibility rules for married individuals filing separately (as Massachusetts is exploring) may protect against IPH.

State policy and violence prevention

73 EXTREME RISK PROTECTION ORDERS IN WASHINGTON: A STATEWIDE STUDY

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Statement of Purpose Extreme Risk Protection Orders (ERPOs) restrict an individual's access to firearms if they pose a danger to themselves or others. We conducted a statewide study to examine the current uptake of this law and describe characteristics of petitioners and respondents.

Approach We requested all ERPO records from Washington Administrative Office of the Courts since the law implementation on January 1, 2017 to May 15, 2019. We traveled to county courthouses throughout the state to extract further information from each case file.

Results 243 ERPOs for 239 respondents were filed. There was wide variation in the rate of filing ERPOs by county ranging from 0 (in 16 counties) to 22 cases per 100,000 population. County-level correlation between ERPO filing and firearm violent death rates was weak (correlation coefficient=0.18; $p=0.45$). 81% of respondents were male and 86% of petitioners were law enforcement agents. The ERPO filing reason was potential for harm to self (28%), others (36%), or both self and others (35%). 11% of petitions were denied or dismissed. 39% of respondents had unlawfully or recklessly used, displayed, or brandished a firearm (39%), 36% had expressed an intent to obtain a firearm, 12% had recently acquired a firearm, and 10% had access to someone else's firearm. Several respondents had a documented history of mental or behavioral health issues (40%), substance abuse (35%), and criminal behavior (30%). 614 firearms including 316 handguns and 298 long-guns were removed from 161 respondents.

Conclusions ERPOs are predominantly petitioned by law enforcement. We need to promote education and awareness on the purpose and process of filing ERPOs to increase their utilization.

Significance ERPOs can create safer circumstances for both petitioners and respondents by removing firearms from high-risk situations and engaging resources to provide treatment or address the underlying causes of the dangerous behaviors.

Epidemiology of TBI

76 TRAUMATIC BRAIN INJURY SURVEILLANCE IN THREE LOW-MIDDLE INCOME COUNTRIES

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Traumatic Brain Injury (TBI) disproportionately affects Low and Middle-Income Countries (LMICs), which have higher incidence and poorer outcomes than high-income countries. TBI disproportionately affects the young, who have potential life-long disability from neurological deficits. Gaps in TBI data were identified by the World Health Organization as a priority in global TBI research. We report findings from the NIH-funded project, INITiatE: International Collaboration to increase Traumatic Brain Injury Surveillance in Europe, which established prospective TBI registries in eight hospitals in Armenia, Georgia and Moldova. These countries are in transition with improving health infrastructure but with acute care systems that lag behind international standards. A census of hospitals treating TBI patients was established, and the two highest volume hospitals treating adult and pediatric TBI in each country were selected. Prospective TBI registries in these six hospitals collected data from January 1 through June 30, 2019 for patients admitted with a TBI. The average age was 22 years and 66% were male. Falls (46%) were the most frequent mechanism of TBI, followed by road traffic injury (23%), struck by object (19%) and assault (7%). Emergency Department Glasgow Coma Scale (GSC) indicated severe injury (GCS 1 – 8) in 5% of patients, moderate injury (GCS 9 – 12) in 11%, and mild injury (GCS 13 – 15) in 84%. Over 74% of patients arrived at the hospital more than one hour after injury and 19% arrived after more than four hours. Moderate and severe TBI was associated with an increased time to definitive care. Discharge status measured by the EQ-5D indicated problems with mobility (9%), self-care (13%), unable to engage in usual activities (25%) pain/discomfort (50%), and anxiety (37%). Future efforts to improve pre-hospital care with a focus on reducing time to definitive care and increased rehabilitation services are priorities for these three LMICs.

Innovation methods

77 IDENTIFYING VICTIMS OF FIREARM ASSAULT IN INDIANAPOLIS THROUGH POLICE AND CLINICAL DATA

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Statement of Purpose The largest obstacle to advancing the scientific understanding of firearm assault is the lack of integrated and reliable data. This study links police and clinical data to fill this gap.

Methods/Approach A descriptive study of firearm assault victims; Indianapolis, Indiana between 2014 – 2016 (N=1469). Clinical data were accessed from Indiana Network for Patient Care (INPC) that captures ER visit data from all hospital systems within Indianapolis. Police data were obtained from the