YOUTH USE OF DIFFERENT BRANDS OF POD-TYPE E-CIGARETTES POPULARIZED BY JUUL: HOW AND WHY THEY ARE USING
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Purpose: To understand youth use and perceptions across different pod-based e-cigarette products.

Methods: Data were collected from January 22 to March 19, 2019, constituting wave 8 of a study of perceptions and use of tobacco products. A convenience sample recruited from ten large high schools in California with racially/ethnically and socioeconomically diverse populations. Participants completed an online survey. Sample: N=445; mean age=20.1 (SD=1.66); 64.8% female (n=278); 38.8% (n=161) “white;” 23.9% (n=99) each “more than one race” and “Asian,” 13.5% (N=56) other; 36.9% (n=160) Hispanic. Main outcome measures were description of and reasons to use pods, perceived nicotine content, use patterns.

Results: A majority had heard of Juul and just over one-quarter reported ever-use of Juul; under one-quarter reported ever-use of cigarettes and e-cigarettes. Over half of Juul ever-users reported past 30-day use and under one-third of cigarette smokers and e-cigarette users did. Cigarettes, e-cigarettes, hookah, and Juul, in that order, were the most commonly reported first tobacco products used. The most agreed-upon reason for using pods was “they are easy to hide.” About half of pod users “don’t know” about using other brands of e-juice with their brand of pod, nicotine concentration in their pods/cartridges, and how long it took to finish a pod/cartridge; over one-third reported “never” sharing their device. There was no consensus about how the different brands of vapes were referred to.

Conclusions: Our findings indicate youth harbor confusion about pod-based e-cigarettes, including nicotine content, usage patterns, and labeling, suggesting regulation and education about these products is needed.

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STUDENTS’ PERSPECTIVES ON BEST PRACTICES FOR IMPLEMENTING SUBSTANCE USE SCREENING IN SCHOOLS
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Purpose: Adolescent substance use is associated with increased risk for mortality and addiction. Universal screening, brief intervention and referral to treatment (SBIRT) for adolescents could help mitigate adverse consequences. Schools are a key frontline setting for reaching youth, leading Massachusetts to be the first state to mandate school-based SBIRT; all public school districts must
annually screen students in one middle and one high school grade using a verbal screening tool. Prior studies examined feasibility/acceptability of school-based SBIRT from the perspective of school nurses. However, little is known about students’ perspectives. We examined the perspectives of middle and high school students on SBIRT in the school setting, including their perceived barriers and facilitators to honest disclosure of substance use. We included students who had already undergone screening and those who were screening-naïve.

Methods: This study was conducted in December 2018 in a Massachusetts suburban school district. We utilized a mixed-methods research design. The IRB-approved protocol included an anonymous survey of all 8th and 11th grade students, most of whom received screening in school at the end of the prior school year, and two focus groups each with 7th and 10th grade students who were screening-naïve. The 25-minute student survey was self-administered on tablet computers during health class; the hour-long focus groups were conducted after school by research staff. Both the survey and focus groups assessed perceptions about the value of school-based screening and barriers/facilitators to student honesty. The survey also assessed substance use history. We computed descriptive statistics on survey responses. Focus group discussions were transcribed, and thematic analysis was conducted by two researchers who came to consensus on key themes.

Results: The survey sample (N=280, 130 8th graders [age 13.3±0.5 years], 150 11th graders [16.1±0.4 years]) had 45.4% self-identified girls, 84.2% White non-Hispanic students, and 75.7% with college-graduate parents. Sixty-three percent reported completing screening in the prior school year, and 33.7% reported past-12-month substance use. The majority of survey respondents agreed it would be beneficial to talk confidentially with someone in school about substance use (8th grade=55.8%; 11th grade=63.0%). A greater proportion agreed than disagreed that school substance use screening could be helpful to students (agreed/disagreed: 8th grade=47.2%/16.8%; 11th grade=41.1%/26.7%). They reported being most likely to be “completely honest” when completing screening on a paper questionnaire (39.3%), followed by a computerized questionnaire (31.5%) and least likely to be honest during a “private interview with school staff” (24.8%). Screening preferences were similar across grades, as well as by substance use history. Screening-naïve focus group participants (12 7th and 16 10th graders; 14 girls, 14 boys) also saw value in school-based SBIRT, but were skeptical that students would be honest. Survey respondents and focus group participants concurred that ensuring confidentiality of student responses, eschewing disciplinary action, and having non-school personnel conduct screening would facilitate honest disclosure during school-based screening.

Conclusions: Students see potential value in school-based SBIRT, making schools promising venues for SBIRT implementation if barriers to students’ honest disclosure can be effectively addressed.

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EXAMINING THE ROLE OF SOCIAL SUPPORTS ON RISKY INJECTION BEHAVIORS AMONG PEOPLE WHO INJECT DRUGS

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**Purpose:** As a growing number of young adults die from opioids, it is essential we examine the social and community context of injection opioid use. We hypothesize access to social support and sober peers may reduce certain behaviors associated with elevated infectious risk (e.g. sharing needles) among people who inject drugs (PWID). Thus, we examined the role of social support on risky injection behaviors in a sample of PWID.

**Methods:** PWID were recruited from inpatient units at an academic safety-net hospital and completed baseline interview data related to substance use, demographics, and social supports as part of a randomized trial to lower bacterial infection risk from drug injection. We used a validated 4-item tangible support subscale with higher scores representing greater tangible support (e.g. “someone to take you to the doctor if you needed it.”) To calculate proportion of sober support, participants provided the number of close friends and the number of people who use drugs among those close friends. We used the 8-item Drug-Risk score section of the Risk Assessment Battery, a validated instrument measuring behaviors associated with increased HIV acquisition. Higher scores (range 0-22) were associated with higher risk behaviors. We dichotomized the sample into young adults (YA) (less than age 30) and older adults (30 or greater) and calculated descriptive statistics for each. We used bivariate and multivariate logistic regression models to estimate unadjusted and adjusted associations of demographic characteristics on RAB Drug-Risk score. Based on these findings, we used the entire sample to examine characteristics of social support related to risky injection behaviors and adjusted for race, sex, and age using Poisson generalized linear models with robust standard errors.

**Results:** A quarter of the sample were YA (n=63) and the majority injected opioids (90.5%). YA were more likely to be female (74.6%), and white (n=51; 81%) compared to the older adult group (30.7%; 52.4% respectively). The majority of YA either injected alone (n=31; 49.2%) or with a sex partner (n=12; 19.0%). Half shared needles or works with two or more people. Over three-quarters reported an accidental overdose (n=48) and over a third (n=23) watched someone die from an overdose. Although YA had higher RAB Drug-Risk scores than older adults on bivariate analyses, when adjusted for race and sex, the differences attenuated and were no longer significant. We found that while tangible social support was not associated with RAB Drug-Risk scores (b=-0.063; 95% CI: -0.138, 0.011), the type of person providing support may matter, with a greater proportion of sober supports among close friends being associated with lower RAB Drug-Risk scores (b=-0.290; 95% CI: -0.495, -0.086).

**Conclusions:** Our sample represents the changing demographics of the opioid epidemic, which is impacting populations that are increasingly young, white, and female. Ongoing research exploring intersectionality (of race, gender, and age) and its impact on risk and risk behaviors will be important to target subpopulations at most risk. Our findings suggest increasing engagement of sober supports within one’s social network may be a way to transform risk and promote wellness among PWID.

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63. – withdrawn

64.

“I NEEDED SOMEWHERE TO TURN TO”: UNDERSTANDING AND ADDRESSING THE NEEDS OF AFRICAN AMERICAN YOUTH AFFECTED BY PARENTAL DRUG USE
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Purpose: Adolescents with a family history of substance use have a greater likelihood of engaging in risky behaviors including illegal activity, early sexual initiation and substance use. Research suggests that about 25% of children are exposed to parental substance abuse before age 18. Many parents who use drugs cannot adequately care for their children because of incarceration, homelessness, extended periods of drug use, or enrollment in drug treatment. Understanding the unique needs of youth whose parents use drugs would yield targeted strategies that inform interventions aimed at promoting well-being among this population. We conducted a qualitative study to understand the needs and barriers of African American adolescents with a substance-abusing parent in Baltimore.

Methods: We conducted 60 to 75 minute in-depth interviews (N=29) with three participant types: parents with a history of drug use, young adults (18-24yo) who had a biological parent with a history of drug use and youth providers who had experience working with families affected by drug use. Participants completed a demographic questionnaire prior to the interview. All participants were African American and either lived or worked in Baltimore city. Interviews were digitally recorded and transcribed by a professional transcription company. Atlas.ti 8.0 was used as a data management system. Five research team members developed a code book, double coded all transcripts and analyzed inductively using a qualitative content analytic approach. Techniques such as constant comparisons, memo writing, and peer review were used to ensure credibility. Any discrepancies in coding were reconciled with the entire research team. All study procedures were approved by the Johns Hopkins Institutional Review Board.

Results: Participants were consistent in their assessment of the primary needs of youth affected by parental drug use: stability, safety and support. Basic needs such as stable housing, food and money were described as being unmet. Access to and awareness of safe spaces were identified as challenges for young people. Finally, participants noted that emotional support often left youth in these families feeling unloved, misunderstood and lacking guidance to make healthy decisions. Due to the complexity of families affected by drug use, consistent support from people, continued connections to resources and collaborations across systems were identified as strategies to offset the potentially negative influence of parental drug use on youth.

Conclusions: Parental absence due to drug use creates more opportunities for negative, risky behaviors to occur among youth. Findings from the study deepen the understanding of how to support the well-being of youth impacted by parental drug use. Our findings highlight the value of including the voices of vulnerable families in research and exploring community-based strategies for addressing their needs. Furthermore, the needs and strategies described may be used to advance the research and practice of others who are investigating ways to mitigate the negative effects of childhood adversity.

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INTIMATE PARTNER VIOLENCE VICTIMIZATION HISTORIES AND THEIR ASSOCIATION WITH ALCOHOL USE PATTERNS AMONG COLLEGE STUDENTS

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Purpose: Researchers have consistently demonstrated a link between physical intimate partner violence (IPV) victimization and alcohol use among adolescents and young adults. Less is known about how other forms of IPV are associated with alcohol use. We sought to examine how lifetime experiences with specific types of partner violence, including sexual IPV, physical IPV, stalking, and cyber dating abuse (CDA), are associated with alcohol use patterns among college students seeking care at campus health centers (CHCs).

Methods: Students (aged 18-24 years) seeking care at CHCs across 28 college campuses in Pennsylvania and West Virginia completed online surveys. Lifetime IPV victimization was our primary predictor, assessed 4 ways: sexual IPV, physical IPV, stalking, and CDA. Our outcomes included the following drinking patterns: frequency of drinking in the past year (<1 time/month, 1-3 times/month, 1-2 times/week, 3+ times/week); average number of drinks when drinking in the past year (1-2, 3-4, 5-6, 7+); and frequency of drinking and binge drinking in the past 30 days. We used multinomial logistic regression and Poisson regression models to test the associations between each IPV victimization variable (in separate models) and alcohol use outcomes.

Results: Participants (n=2,291) were mostly 18-21 years old (81.4%), white (67.6%), female (72.3%) college students. 81% consumed alcohol in the past 12 months; 69.8% in the past 30 days. 21.2% of our sample experienced lifetime sexual IPV, 11.4% physical IPV, 14.7% stalking, and 38.8% CDA. Female participants had higher odds of sexual IPV (3.4), physical IPV (1.6), stalking (2.0), and CDA (1.2) as compared to male participants (p<0.05). Adjusting for age and gender, exposure to any type of IPV was associated with both infrequent (less than once per month; ORs range: 1.75-2.20) and frequent (3+ times per week; ORs range: 1.38-3.04) drinking over the past year, with associations increasing in magnitude at higher alcohol consumption levels. We observed a similar pattern of association for average number of drinks when drinking over the past year (1-2 drinks ORs range: 1.75-2.71; 7+ drinks ORs: 1.61-3.73). Experiences with physical IPV, stalking, or CDA (but not sexual IPV) were significantly associated with increased frequency of drinking (incidence rate ratios range: 1.15-1.38) over the past 30 days.

Conclusions: Lifetime IPV and alcohol use are highly prevalent among college students seeking care at CHCs. Exposure to different types of IPV (sexual, physical, stalking, CDA) was associated with both infrequent drinking and binge drinking during the past year. These results strengthen emerging evidence that other forms of IPV beyond physical violence victimization are also strongly linked to alcohol use. In addition, these results further demonstrate that IPV is not only associated with heavy drinking patterns,
but also occasional alcohol use. CHC healthcare providers should be assessing all adolescent and young adult patients for relationship abuse and problematic alcohol use, offering universal education, resources, and harm reduction counseling. While this study brings to light new associations, longitudinal data are needed to further disentangle the temporal association between alcohol use and IPV.

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TO QUIT OR TO START? THE EFFECT OF E-CIGARETTES USE ON SMOKING TRADITIONAL CIGARETTES AMONG YOUNG PEOPLE IN SWITZERLAND
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Purpose: The aim of this research was to study trajectories of use of electronic cigarettes (EC) over time among youths distinguishing between EC only and dual users (EC + traditional cigarettes) and to assess reasons to use EC. Particularly, we aimed to observe whether ECs were a gateway to traditional cigarettes (TC) and if they effectively helped in quitting smoking.

Methods: Data came from the GenerationFree survey, a longitudinal study on youths’ lifestyles (15-24 years at baseline [T1]) in the canton of Fribourg, Switzerland. Participants (N=1437, mean age 16.7; 51.8% females) were divided at T1 in 4 groups according to their current smoking status: TC-only smokers (N=378, 26.3%; 51.5% females), EC-only (N=42, 2.9%; 27.3% females), dual users (N=97, 6.7%; 39.6% females) and non-smokers (N=920, 64%; 53.4% females). Additionally, participants in the EC-only and dual groups at T1 reported the reasons for EC use. Finally, we determined the trajectories between T1 and T2 (2016 and 2017) by observing in which of the 4 categories EC-only and dual users at T1 were at T2.

Results: Males outnumbered females in the use of ECs, alone or dually. Among current EC (alone or dually) users at T1, 79.9% responded having used it to “try”, 13.8% to “smoke where TCs were not allowed”, 12.8% to “reduce tobacco use” and 8.4% to “stop smoking”. Regarding group trajectories, among EC-only users at T1, 23.7% became TC-only smokers, 20.1% remained EC-only users, 4.6% became dual users and 51.5% non-smokers at T2. Among dual users at T1, 68.7% became TC-only smokers, 1.1% EC users only, 17.9% dual users and 12.2% non-smokers at T2. Moreover, the percentage of quitters among dual users was lower than among TC-only users at T2 (12.2% vs. 16.4%). Among dual users indicating wanting to quit as a reason to use ECs, 15.3% effectively quit smoking, while among those indicating to smoke when TCs were not allowed, none stopped smoking a year later.

Conclusions: The vast majority of youths used ECs “to try”, suggesting that the aggressive marketing campaigns that target them work. Furthermore, ECs seem to be a gateway to smoking and have little impact on helping to quit. Among EC-only users at baseline, about half maintained their smoking habits a year later implying that ECs are attractive for youth and a gateway to TCs for almost a third of them. As dual users at baseline reported the lowest quitting rate at T2, it suggests that using both products may make it more difficult to quit rather than making it easier, for example allowing to smoke where TCs are prohibited. There is a need to protect youths from the marketing of products that are presented as an alternative to traditional tobacco use with no evidence to support it among young people. It is
important to include ECs in prevention counseling, as they may be a gateway to smoking traditional cigarettes.

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