

involvement. Sexual/relationship violence measures included a past 9-month history of sexual harassment, non-partner sexual violence (SV), and intimate partner SV. We first performed a latent class analysis (LCA) to create baseline future orientation profiles of participants. Mixed effects logistic regression then assessed how baseline future orientation class related to each form of violence perpetration over time (baseline to follow-up). Models were adjusted for age, intervention group, race/ethnicity, and parental education.

Results: There were 817 participants included in the analysis, with a mean age of 15.5 years (SD = 1.6 years). Most participants identified as Black, Non-Hispanic (74%). Nearly half of participants' parents/caregivers did not graduate from high school (43%). Our LCA yielded four classes ranging from low to high future orientation, with nearly 80% of youth belonging to moderately-high and high future orientation classes. Levels of violence perpetration among youth were high, ranging from 4.8% perpetrating intimate partner SV to half (50.7%) bullying someone else. Future orientation latent class was significantly associated with weapon violence, bullying, sexual harassment, non-partner SV, and intimate-partner SV in adjusted models (all $p < 0.01$). Compared to the low future orientation class, youth belonging to moderate-high and high future orientation classes were less likely to perpetrate weapon violence (Moderate-High: adjusted odds ratio [aOR]=0.45, 95% CI:[0.20, 1.13]; High: aOR=0.41, 95% CI:[0.18, 0.99]). Use of violence was consistently highest among youth in the low-moderate future orientation class.

Conclusions: This LCA identified several unique profiles of future orientation among male adolescents from disadvantaged neighborhoods with differing patterns of association with multiple forms of violence. Identifying modifiable factors that contribute to lower future orientation and mechanisms for how future orientation influences use of violence is needed in youth violence prevention interventions.

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29.

USE OF BUPRENORPHINE FOR OPIOID USE DISORDER AMONG US ADOLESCENTS AND YOUNG ADULTS DURING THE COVID-19 PANDEMIC

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Purpose: Opioid overdose deaths increased substantially during the COVID-19 pandemic, even as policy changes were implemented to facilitate better access to medications for opioid use disorder (MOUD). While prior work has suggested relatively stable sales volume of buprenorphine, a safe and effective FDA-approved MOUD, among adults during 2020-2021, less is known regarding whether the pandemic has been associated with changes in the use of buprenorphine to treat opioid use disorder among adolescents and young adults (AYA). AYA comprise 10% of annual opioid overdose fatalities in the US, yet are less likely than older adults to receive addiction treatment, and specifically MOUD such as buprenorphine.

Methods: We licensed IQVIA LifenLink, which represents anonymized patient-level prescription data throughout the US to characterize

changes in buprenorphine utilization during the COVID-19 pandemic. We included AYA ages 12-29 with at least one buprenorphine prescription fill between January 2018 through August 2020. We stratified analyses by patient age group and insurance to evaluate whether insurance served as an effect moderator. We used descriptive statistics to estimate the effect of the COVID-19 pandemic on AYA buprenorphine utilization by comparing March-August of 2019 with March-August of 2020. Data analysis was conducted with Stata, version 15 (StataCorp), using 2-sided t tests with significance set at $P < 0.05$. The study was exempted from review by the Johns Hopkins Bloomberg School of Public Health IRB.

Results: A total of 413,152 AYA age 12-29 filled at least one buprenorphine prescription between January 2018 and August 2020; prescriptions per month ranged between 90,932-120,740. Among young AYA age 12-17, the overall monthly rate increased by 8.3%, with small absolute increases in Medicaid and commercial insurance prescriptions, and a decrease in prescriptions filled with cash. Buprenorphine prescriptions per 100,000 decreased 7.5% during the pandemic among AYA age 18-24 and decreased 5.1% among AYA age 25-29. Among AYA age 18-24 and 25-29, monthly Medicaid prescription rates did not significantly change from the pre-COVID-19 period (March-August 2019) to the during-COVID-19 period (March-August 2020). In contrast, commercial insurance prescriptions during-COVID-19 decreased 12.9% among AYA age 18-24 and 11.8% in 25-29 year olds, and cash/other prescriptions decreased 18.7% among 18-24 year olds and 19.9% in 25-29 year olds.

Conclusions: Our findings suggest that during the COVID-19 pandemic, buprenorphine prescriptions paid with commercial insurance or cash among young adults significantly decreased, suggesting a possible unmet need among this group. The stable Medicaid prescription rate during the COVID-19 pandemic demonstrates the safety net role Medicaid has played in providing access to substance use disorder treatment. Our findings contrast with a study among all adults which found no significant change in buprenorphine prescriptions paid by commercial insurance. Young adults in particular may be more susceptible to the health consequences of COVID-19's economic impact, such as interruptions in employer-sponsored commercial insurance and financial hardship limiting individuals' ability to pay cash for prescriptions. Further research is needed to assess the potential impact of disruptions in buprenorphine access on health disparities and overdose, and to design interventions to improve treatment of OUD among AYA in the post-COVID era.

Sources of Support: RAND OPTIC.

RESEARCH POSTER SYMPOSIA III: PREDICTORS OF ADOLESCENT HEALTH-RELATED BEHAVIORS AND OUTCOMES

30.

EXAMINING AND CHARACTERIZING ADOLESCENT-ADULT SOCIAL NETWORKS, ATTITUDES TOWARDS VIOLENCE AND RETALIATION, AND VIOLENCE EXPOSURE

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Purpose: Social network-based studies demonstrate that peer connections influence youth violence, yet less is known about the

influence of adolescent-adult networks on violence exposure and involvement. This egocentric social network analysis examined adolescent-adult support networks, youths' and adults' attitudes towards violence and retaliation (ATVR), and youth violence exposure.

Methods: 106 youths, ages 12–22, completed egocentric social network surveys through a community-based violence prevention study in Pittsburgh, PA, from April 2019 to March 2020. Validated survey measures sought to capture youths' past 30-day violence perpetration, victimization, and witnessing, youths' own attitudes towards violence and retaliation, as well as youths' perceptions of their caregiver's attitudes towards violence and retaliation. Through the egocentric social network survey measures, youth enumerated their family-, school-, and community-based adult supports (alters), and reported on each alter's violence involvement (ever in a fight, gang, or shot/stabbed) as well as their perceptions of each alter's attitudes towards violence and retaliation. Adjusted Poisson regression (age, sex, race, parental education, household composition) separately examined associations between 1) youths', caregivers' and adult supports' (alters) attitudes towards violence/retaliation, 2) alters' violence involvement, and youths' violence perpetration, victimization, and witnessing.

Results: Mean participant age was 16.7 years (SD=1.9); 55.6% were female and 84.8% identified as Black or African American. Overall, in the past 30 days, 70.8% of youth perpetrated violence, 78.3% experienced victimization, and 92.5% witnessed violence. The mean score for youths' attitudes towards violence and retaliation was 3.35 (observed range:1.5–5) and 75.5% of youth had endorsed very high attitudes towards violence and retaliation on at least one item. Mean score for perceived caregivers' attitudes towards violence/retaliation was 3.12 (observed range:1–5). From the egocentric social network survey data, youth identified a mean of 4.8 adult supports in their networks (observed range:1–14). An average of 73.6% of adult supports were either immediate or extended family and 38.2% of all adult supports were involved in violence. Overall, 93.3% of youth listed at least 1 parent/guardian/caregiver as an adult support in their network and 55.6% of those youth reported that at least 1 parent/guardian/caregiver had been involved in violence. Youths' own attitudes towards violence/retaliation were significantly associated with violence perpetration (aIRR 1.34, 95%CI:1.10–1.62), but not with victimization (aIRR 1.18, 95%CI:0.93–1.51) or witnessing (aIRR 1.16, 95% CI:0.97–1.39). There were no significant associations between perceived caregiver or perceived adult supports' (alters) attitudes towards violence/retaliation and youth violence perpetration, victimization, or witnessing. Identifying at least one adult support (alter) who had been involved in violence was significantly associated with youth violence victimization (aIRR 1.74, 95%CI:1.04–2.90) and witnessing violence (aIRR 1.71, 95%CI:1.19–2.47). Identifying any parent/guardian/caregiver in one's support network who had been involved in violence was significantly associated with youth witnessing violence (aIRR 1.38, 95%CI:1.04–1.84).

Conclusions: Violence prevention interventions designed to leverage adolescent-adult support networks should consider trauma-focused supports for those adults which acknowledge how exposure to violence may shape violence risk.

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31.

FACTORS ASSOCIATED WITH ADOLESCENTS AND YOUNG ADULTS' INTENTION TO RECEIVE A COVID-19 VACCINE

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Purpose: To lessen the impact of negative health outcomes associated with COVID-19, effective vaccines have received Food and Drug Administration (FDA) approval for those 16 years and older and Emergency Use Authorization (EUA) status for those 12–15 years old. Several studies have identified factors associated with intention to receive a vaccine within the general population such as gender, race, perceiving potential side effects from a COVID-19 vaccine, and mistrust of the government. However, there are limited studies assessing modifiable factors specifically among adolescents and young adults' intention to receive a COVID-19 vaccine. The study aim was to determine characteristics and attitudes, among a group of adolescents and young adults, associated with intention to receive a COVID-19 vaccine.

Methods: The study population was comprised of adolescents (12–17 years old) and young adults (18–25 years old) seeking primary care at a large Midwest academic medical center serving a racially and ethnically diverse community. In January 2021, potential participants were sent an email with a link to an online survey and all responses to the survey were included in the analysis. The survey included multiple items including assessment of the participants' beliefs about COVID and vaccines against the infection as well as beliefs about vaccines in general. Survey results were analyzed using separate multivariable logistic regression analyses with stepwise variable selection to determine characteristics and attitudes associated with intent of participants to be vaccinated against COVID-19.

Results: A total of 585 people (n = 248 adolescents and n = 337 young adults) responded to the survey. The mean age of adolescents was 14.8 years (SD = 1.8) vs 20.4 years (SD = 2.0) for young adults. Of the respondents, 60.1% (n = 149) of adolescents and 65.6% (n = 221) of young adults stated they intended to receive a COVID-19 vaccine. For both adolescents and young adults, positive attitudes towards vaccines in general (AOR = 3.55, 95% CI: 2.17–5.80 for adolescents; AOR = 1.39, 95% CI: 1.19–1.64 for young adult; p < 0.001 for both groups), and perceiving the COVID-19 vaccine to be safe (AOR = 1.54, 95% CI: 1.32–1.81 for adolescents; AOR = 7.29, 95% CI: 3.79–14.02 for young adults; p < 0.001 for both groups) were associated with an intent to be vaccinated against COVID. In addition, knowing enough about the COVID-19 vaccine to make a decision (AOR = 2.20, 95% CI: 1.44–3.38, p<0.001) was associated with intent to receive a COVID-19 vaccine for young adults.

Conclusions: Positive attitudes about vaccines in general and perceiving the vaccine to be safe were factors associated with both adolescents and young adults' intention to receive a COVID-19 vaccine. This study identifies potential modifiable factors which may lead to an increase adolescents and young adults' intention to receive a COVID-19 vaccine.

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