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Editorial

Recovery Efforts: Understanding Adolescent Substance Use Through a Longitudinal COVID Lens



As I write this editorial in mid-August 2021, my adolescent is entering her second school year impacted by the COVID-19 pandemic. Like nearly all young people, she has spent the last 18 months balancing remote and in-person learning, canceled and/or constrained sports and extracurricular activities, and ever changing access to peer interaction and has rotated between heightened stress, anxiety, and boredom. And she is one of the more fortunate ones—some of her peers have also grappled with food insecurity, worries about housing stability, and parental job loss. When I asked her what she wanted this audience to know about what she and her friends are feeling moving into this school year, she paused for a moment and said, “Tell them we are hopeful, but we are also worried, and we are tired. If you had told me a year ago that we would still be dealing with COVID, I would not have believed you.”

Her sentiments echo an idea that we see daily in our students, in our patients/clients, and in our own children: although social mitigation measures have been necessary to control COVID-19 transmission, we are beginning to see that these measures likely have important consequences on young people’s long-term health behavior [1], particularly substance use [2]. Although many cross-sectional studies have examined adolescent substance use early during COVID-19, far fewer have investigated the longitudinal trajectories of substance use as the pandemic has progressed. Just as we need longitudinal data to fully document the chronic physical, emotional, and cognitive sequelae of COVID-19 long-haulers [3], we also need longitudinal studies that can illuminate changes in adolescent substance use patterns during different phases of the pandemic and offer explanatory mechanisms for these changes.

The work of Pigeau et al. [4] in this month’s issue of *Journal of Adolescent Health* contributes much needed knowledge in this area, comparing the prevalence of Dutch adolescents admitted to hospitals for acute alcohol intoxication before, during, and after the first COVID-19 lockdown, as well as at the beginning of the second lockdown. The authors find that intoxication significantly decreased from before to during the first lockdown, significantly

increased again during the first re-opening period, but did not significantly change between the first re-opening and the second lockdown. The authors suggest that the severity of lockdown measures (e.g., schools being closed vs. open, not having vs. having access to friends, degree of parental supervision) likely impacts adolescents differently and, by extension, also impacts how, why, and when they use substances.

More longitudinal studies such as this are vitally needed to understand not only how to best support our young people as we navigate the next phases of COVID but also as we strengthen our planning for future disasters. The term “recovery efforts” typically refers to how municipalities rebuild postdisaster infrastructure and economy; this term is rarely used to frame how those impacted by the disaster respond to and process their experiential trauma. We know that adolescents who experience catastrophic events can experience long-term psychological distress [5] and that these effects are linked to increased substance use [6,7]. Important questions remain as to how different periods in a disaster—such as different COVID lockdown and re-opening phases—create different protections or exposures to outcomes like substance use and, by extension, signal the specific type of supports needed [8]. For example, predictable declines in adolescent drinking, smoking, and cannabis use could mark opportunities to accelerate directed prevention and cessation supports, whereas periods of increased use might indicate a need for more broadly targeted mental health supports [1].

Our understanding of the association between COVID-19 and long(er)-term adolescent use can be strengthened with attention to two important areas in future research. First, Pigeau et al. [4] operationalized acute alcohol intoxication through hospital admissions. There is no information available as to the frequency and/or amount of alcohol consumed before an adolescent seeking medical attention. This methodology does catch the most severe—but perhaps the least frequent—of adolescent drinking habits. Prospective data collection approaches recording the frequency and amount of alcohol would permit examination of how often adolescents binge drink in response to disaster stress, as well

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as to identify adolescents who evolve from light or moderate drinking into problematic drinking.

Second, although Pigeau et al. [4] speculate as to how changes in different contexts could have influenced their results, they did not engage data of these types to actually examine how such factors could impact frequency and amount of adolescent substance use over time. For example, despite stay-at-home orders, we know from studies during the early stages of COVID that alcohol use, marijuana use, and vaping continued in different settings for adolescents, including with parents, with peers face-to-face, and with peers via technology [9]. Additional research will be needed to understand how the social context of pandemic drinking serves different purposes (e.g., connection/social solidarity vs. coping) at different points in time. Likewise, more data are needed to understand how changes in substance use link to a larger context of change in other health behavior domains (e.g., sleep hygiene, nutrition, technology consumption). It could be that for some adolescents, stay-at-home orders represented more parental supervision and encouragement for healthy habit, whereas for others, lockdowns were associated with more relaxing of the rules and higher tolerance for some otherwise unallowed behaviors.

What will happen to adolescent well-being when this pandemic ends? Can we as adolescent health researchers, clinicians, and educators be prepared to support our youth as they transition into a post-COVID world? That habits established in the teen years often extend into adulthood means it is likely our youth will still be dealing with their COVID experiences—as well as the health behaviors adopted during this time frame—for many years to come.

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