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A lost generation? COVID-19 and adolescent mental health



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Media headings about the mental health of the adolescent population during the COVID-19 pandemic have projected serious short-term and longer-term consequences of the pandemic and the measures taken to limit the spread of the virus. Headlines suggesting that there is a so-called lost generation of youth, deprived of central developmental opportunities due to the pandemic, have reached a wide audience. It is thus timely to ask: is the current generation of adolescents really lost?

Ingibjorg Thorisdottir and colleagues¹ are among the first to tackle this question with empirical data at an adolescent population level with their excellent study on trajectories of prepandemic symptoms of depression at two time points (2016 and 2018), compared with depressive symptoms during the COVID-19 pandemic. With two large and representative Icelandic samples comprising nearly 60 000 13–18-year-olds, they present unique and highly needed data. Thorisdottir and colleagues showed that depressive symptoms increased (β 0.57 [95% CI 0.53 to 0.60]) and mental wellbeing worsened (-0.46 [-0.49 to -0.42]) significantly during the pandemic, and more so than one could expect based on the observed trends in adolescent mental health deteriorating over the past decade. Although observed change could not entirely be attributed to the pandemic and preventive measures, the present study clearly shows that gauging the mental health status of adolescents over time is of imminent importance. This is especially the case when facing a global crisis like a pandemic.

Adolescents are at a vulnerable stage of development, with the majority of mental disorders emerging during adolescence.² Rates of psychological distress among adolescents seem to be increasing. For example, the prevalence of depression increased from 8.7% in 2005 to 13.2% in 2017 among US adolescents aged 12 to 17 years.³ This finding is supported by the results of Thorisdottir and colleagues' study, which showed that the prevalence of depressive symptoms was increasing from 2016 to 2018, and then increased somewhat more from 2018 to the numbers reported during the COVID-19 pandemic in 2020. A comprehensive meta-analysis of population-based studies on mental health trajectories before and during the pandemic

showed similar trends (preprint).⁴ Thus, caution should be applied when interpreting this increase as a result of the pandemic alone. Rather, the pandemic might have exacerbated trends already present in the adolescent population, thereby highlighting the status of adolescents' mental health. We suggest that this hypothesis needs further study in other large and representative samples of adolescents well into the future.

Some groups of adolescents are more at risk for presenting with mental health problems than others. Risk and resilience factors are therefore imperative to map in studies like that by Thorisdottir and colleagues. As pointed out by both Pierce and colleagues⁵ and Holmes and colleagues⁶ in their position papers early in the COVID-19 pandemic, it is of utmost importance to capture vulnerable groups in these types of population-based studies. However, because adolescents from high-risk groups tend to opt out from surveys like that used in the present study, this is a demanding task. The result is that the true impact of the pandemic might be underestimated. Except for gender and age, the present study unfortunately does not analyse subgroups of adolescents with different susceptibility and protective factors. Similar research conducted in Norway suggests that some groups of adolescents, such as adolescents living in separated families, are disproportionately at risk for increased symptoms of mental health problems during times of crisis such as the COVID-19 pandemic.⁷ Surveillance of mental health trajectories in girls and boys across age groups, as well as in different groups of the adolescent population, will enable more targeted intervention efforts to alleviate psychological illness. Likewise, resilience factors need to be addressed in rigorous studies on mental health, as many adolescents adapt well in times of stress and crisis. Therefore, to inform policy makers and other important stakeholders, this dual focus should be one of the main purposes of population-based, representative studies.

Although concerns about adolescents' mental health and wellbeing during the pandemic are partly confirmed by the present study, it is also a reminder to be cautious when communicating assertive arguments about the negative effects of the pandemic on adolescents' mental health. Rather, we argue

that future efforts need to address the prepandemic as well as the pandemic-related increasing trend of mental health problems in the adolescent population. Moreover, the present study together with other similar studies^{7,8} shows the importance of closely monitoring indicators of risk and resilience, as it enables timely efforts to mitigate the risk for development of mental disorders during adolescence. To conclude, the true picture of wellbeing among young people is likely to be more complex than that portrayed in the news headlines.

We declare no competing interests.

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Substance use, coping, and compensation in autism

Please note that identity-first language (eg, autistic individual) is used in this Comment as this terminology is preferred by the majority of the UK autistic community.¹

Autistic people use coping strategies to manage autism-related difficulties (eg, in social communication) and co-occurring mental and physical health problems (eg, anxiety, depression, sleep difficulties).^{2,3} One relatively unexplored coping strategy is substance use or misuse. This shortage of research is surprising, given the well documented role of substance use in other psychiatric⁴ and neurodevelopmental⁵ conditions as a mechanism driving poor outcomes, and the strikingly high prevalence of mental and physical health challenges faced by autistic people⁶ that they might cope with through self-medication.

Using a mixed-methods survey, Elizabeth Weir and colleagues⁷ compared data from 1183 autistic and 1203 non-autistic adolescents and adults on the frequency of self-reported behaviours related to substance use (alcohol, smoking, illicit drugs) and derived themes from qualitative data on the motivations for these behaviours. Quantitative analyses showed that autistic people were actually less likely than non-autistic individuals to report drinking alcohol frequently (16.0% vs 22.2%) and binge-drinking

(3.8% vs 8.2%), and autistic male individuals (but not autistic female individuals) were less likely than their non-autistic counterparts to have ever smoked (50.8% vs 64.6%) or used drugs (35.4% vs 52.7%). Yet, qualitative content analyses revealed that autistic people were nearly nine times more likely than non-autistic people to report substance use to manage behaviour and three times more likely to do so to cope with mental health difficulties. These findings suggest that although autistic people are generally less likely to use substances than non-autistic people, when they do, they might do so for very different and more maladaptive reasons. Indeed, using substances in this way could have numerous negative consequences for autistic people; any positive effect or temporary relief associated with using substances to manage autistic behaviour (eg, reduce sensory overload) cannot be sustained over time, and self-medicating for mental health difficulties is likely to exacerbate these problems in the long-term.

It is unclear why some autistic people use substances to cope, despite possible negative effects. A closer look at Weir and colleagues' "managing behaviour" theme suggests one possible beneficial function of substance use; it alters or disguises autistic characteristics to other



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