Parental supply and alcohol-related harm in adolescence: emerging but incomplete evidence

Alcohol consumption is the leading risk factor for death and disability-adjusted life years (DALYs) in 15–24 year-olds globally, and accounts for 7% of incident DALYs in young people aged 10–24 years. Although there is mixed evidence regarding the association between socioeconomic status and alcohol consumption, alcohol-related harm occurs disproportionately in disadvantaged groups and, as such, alcohol use contributes to health inequalities. It is thus essential to understand trajectories leading to risky drinking in adolescence, across the social gradient, to inform prevention efforts at the population level.

In The Lancet Public Health, Richard Mattick and colleagues present the results of their longitudinal study of 1927 adolescents recruited in the first year of secondary school in three Australian cities, and consider whether supply of alcohol from parents, other sources, or both, in early adolescence predicts alcohol-related harms in later adolescence. Their findings strongly refute the view that parental supply of alcohol promotes safer drinking: compared with adolescents who reported no supply of alcohol, adolescents who reported obtaining alcohol only from their parents were at increased risk of consuming more than four standard drinks on at least one occasion in the past year (odds ratio [OR] 2·58, 95% CI 1·96–3·41), experiencing at least one alcohol-related harm in the past year (2·53, 1·99–3·24), and reporting two or more symptoms of alcohol use disorder (2·51, 1·46–4·29). Parental supply also doubled the odds of subsequent supply from other sources, which in turn was associated with an even greater increase in risk of alcohol-related harms. Mattick and colleagues conclude that parental provision of alcohol is associated with risk, not with protection.

An important strength of the study is the careful adjustment for potential confounders. Nevertheless, it is difficult to exclude the possibility that some parents provided alcohol to their children in response to other, unmeasured risk factors, such as alcohol expectancies. Positive child alcohol expectancies (ie, an expectation of desirable cognitive, affective, or behavioural consequences of alcohol consumption) have been associated with earlier onset of alcohol consumption and with binge drinking in adolescence. Further research is required to better understand why some parents choose to supply their children with alcohol.

Unsurprisingly, parents were more likely to supply alcohol to older adolescents: the proportion reporting parental supply increased from 15% at wave 1 (mean age 12·9 years) to 57% at wave 6 (17·8 years). The most common context for parental supply at wave 6 was “with family on a special occasion” and parents typically supplied a maximum of two drinks. Although parental supply was measured at each wave with some granularity (assessing context, frequency, and quantity supplied), this exposure was dichotomised (any parental supply vs none) for the primary analyses, presumably for reasons of statistical power. An important avenue for future research—perhaps combining quantitative and qualitative methods—will be to provide a richer characterisation of the mechanisms by which parental supply leads to risky drinking, and to obtaining alcohol from other sources, in later adolescence.

Although consistent with Australian guidelines, the threshold Mattick and colleagues used to define binge drinking was conservative (at least four standard drinks at least once in the past year), such that there was no association between parental supply and either more intense or more frequent risky drinking. Furthermore, Mattick and colleagues did not observe an association between parental supply of alcohol and DSM-IV-defined symptoms of alcohol abuse or alcohol dependence symptoms. Although there was a dose–response relationship between the number of waves of other supply and all measured alcohol-related harms, there was no dose–response relationship between parental supply and alcohol use disorder symptoms, and the strength of the dose–response relationship between parental supply and both binge drinking (adjusted OR 1·21, 95% CI 1·09–1·34) and alcohol-related harm (1·24, 1·12–1·38) was comparatively weak.

The 2016 Lancet Commission on adolescent health and wellbeing highlighted the need for more and better data on the health of adolescents, particularly vulnerable adolescents. As such, it is regrettable that adolescents from families of low socioeconomic
status were markedly under-represented: whereas in Australia 14% of children attend private schools and 65% attend public schools, in this study 49% attended a private school and 39% attended a public school. Mattick and colleagues simply noted that populations of low socioeconomic status were “somewhat under-represented” in their study, while this important sampling bias would have deserved more attention. In light of evidence that alcohol-related harm is concentrated in groups of lower socioeconomic status, further research with disadvantaged populations is required before these findings can be confidently applied across the social gradient.

The findings by Mattick and colleagues strongly suggest that parental supply of alcohol to adolescents does not protect against future alcohol-related harm, and might in fact increase risk. However, before drawing firm conclusions, it will be important to replicate this finding in larger samples that permit more granular characterisation of both exposures and outcomes, and in samples with at least proportionate representation of socioeconomically disadvantaged families. In view of the substantial role of alcohol in the burden of disease for adolescents, evidence-based prevention of alcohol-related harm across the social gradient is crucial.

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