CORRESPONDENCE

Binge Drinking in Childhood and Adolescence: Epidemiology, Consequences, and Interventions

by Dr. med. Martin Stolle, Dr. phil. Peter-Michael Sack,
Prof. Dr. med. Rainer Thomasius in volume 19/2009

Binge Drinking in Adolescents

With regard to the article by Stolle et al., we would like to mention some important further aspects that are discussed in greater detail in our review articles (cited below).

As for “particular risk constellations,” extensive studies are available on the influence of genetic protective factors and risk factors, which account for more than half of the risk for excessive alcohol consumption and the development of alcohol dependence. Among their demonstrated effects in children and adolescents, these factors have been shown to interact with emotional stresses that may have occurred long before the alcohol consumption began (1–3). As for the externalizing behavioral disorders of childhood mentioned by Stolle et al., several mechanisms are now known by which these can elevate the risk of alcohol-related disorders. If such a disorder is present, then the risk of an alcohol-related disorder developing later can be lowered by both medication and behavior therapy, as has been shown in multiple therapeutic studies (1).

Stolle et al. emphasize the indirect risks and harms of excessive alcohol consumption—accidents, suicidal behavior, and risk-taking—yet the brain damage directly induced by alcohol is also important. Its occurrence in adolescents has been shown in multiple studies, which have employed both functional imaging and neuropsychological tests revealing low performance (3).

An awareness of these heterogeneous risk factors can aid in preventive efforts by enabling the timely identification of children and adolescents at high risk of addiction, who can then be informed that they are at risk, and why, according to the principles of motivational interviewing. This may prompt them to deal actively with their risk and to draw their own correct conclusions about how they can lower it by changing their behavior.

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In Reply:

Zimmermann and Laucht, in the context of risk constellations for binge drinking among adolescents, rightly point out the importance of genetic protective factors and risk factors that become effective in association with early-life stress. We ourselves did place due importance on the interaction, or correlation, of genes and the environment in our review article.

We also mentioned in our article alcohol induced brain damage, as mentioned by Zimmermann. We wish to add to this an article by de Bellis et al (2005), who found a volume reduction of the prefrontal cortex and a reduction of the white matter located therein in adolescents with alcohol related disorders (including binge drinking).

Children and adolescents at particularly high risk of developing alcohol related disorders can be identified by considering the multiconditional genesis of alcohol misuse and risk of addiction (neurobiological aspects, comorbid psychological disorders, psychosocial factors). However, we remain critical of our colleagues' conclusion, that such high risk children and adolescents can be informed about their personal risk by means of motivational interviewing and thereby prompted to engage in actively considering their risk, from which they can then draw the right conclusions. Motivational interviewing does not solely aim to provide information. Prevention research has shown that such an approach may actually engender resistance (Thomasius et al, 2009). Motivational interviewing gains its effectiveness through an empathetic underlying attitude while abstaining from confrontation, and by promoting the understanding of discrepancies (“If I continue to consume alcohol in this manner I will neither pass my driving test nor manage to pass the school finals”). This technique is also used to develop confidence in the self efficacy of children and adolescents (Miller and Rollnick, 1999).

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Conflict of Interest Statement

The authors of both contributions declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.