

Exploring social determinants of early onset alcohol intake among schoolchildren in five African countries: Preliminary analysis of the Global School-based Health Survey

Background

Alcohol use by children is overlooked globally, especially before adolescence. While alcohol use is more prevalent among affluent adults, the harm per litre is higher for disadvantaged populations. The association between social determinants and alcohol use among young children is, to our knowledge, not yet investigated. This study will investigate social determinants of early onset alcohol intake before age 10 in five African countries.

Methods

We present preliminary analysis of data from the publicly available cross-sectional WHO Global School-based Health Survey (GSHS). The data was collected between 2012-2017 in Benin, Ghana, Mauritius, Namibia, and Tanzania. The study included schoolchildren, primarily aged 13-17 years. The GSHS used a two-stage sampling process and standardised questionnaires. We applied multinomial logistic regression in STATA17, accounting for survey weights and design. The dependent variable was onset of alcohol use categorised as never, age 9 or younger and age 10 or later. The independent variables were social determinants; always going hungry, never using soap on hands, parents never checking homework, always struggling to sleep and missing school more than 10 days in the past month.

Results

The population comprised 17504 schoolchildren, 52.3% boys and 47.7% girls. Overall, 73.3% of the children had never tried alcohol, 10.1% first drank at ≤ 9 years and 16.7% first drank at ≥ 10 years. The regression analysis showed that not using soap, not having homework checked and missing school were more strongly associated with earlier onset drinking (≤ 9 years) than later onset drinking (≥ 10 years). The association with being hungry was similar for early and later drinking, but sleep problems had a stronger association with later drinking (Table 1).

Social determinant, in the past 30 days	Never drank	Alcohol intake from age ≤ 9	Alcohol intake from age ≥ 10
Always (vs never) went hungry	Ref	2.46 (CI: 1.69-3.60)	2.49 (CI: 1.73-3.58)
Never (vs always) used soap on hands	Ref	2.53 (CI: 1.85-3.47)	1.49 (CI: 1.07-2.08)
Parents never (vs always) checked homework	Ref	2.12 (CI: 1.69-2.63)	1.51 (CI: 1.23-1.85)
Always (vs never) could not sleep	Ref	5.21 (CI: 3.70-7.32)	6.33 (CI: 4.66-8.59)
Missed school ≥ 10 days (vs 0 days)	Ref	4.20 (CI: 2.71-6.52)	3.01 (CI: 1.85-4.91)

Table 1: Social determinants of early and later alcohol initiation. We applied crude multinomial logistic regression, reporting relative risk ratios comparing early vs never drinking, later vs never drinking and always vs never of the social determinants.

Conclusion

There seems to be a social gradient between the social determinants and the onset of alcohol intake, with the strongest associations mostly seen for earlier onset. We emphasize that the analysis was preliminary, and the findings will be further investigated. We note that the sample only included schoolchildren and is missing the most vulnerable non-school going children.