Individual and environmental factors associated with heavy drinking among South African adolescents

BRONWYN MYERS,^{1, 2, 3,} NANCY HORNSBY,² CLAIRE VAN DER WESTHUIZEN,³ KATHERINE SORSDAHL.³

¹Curtin enAble Institute, Faculty of Health Sciences, Curtin University, WA, Australia, ²Alcohol, Tobacco and Other Drug Research Unit, South African Medical Research Council, ³Department of Psychiatry and Mental Health, Faculty of Health Sciences, University of Cape Town, South Africa

Presenter's email: bronwyn.myers-franchi@curtin.edu.au

Introduction and Aims: Heavy episodic drinking (HED) is a common pattern of drinking among South African adolescents, increasing risk of injury and harm. Factors that increase risk of HED are poorly understood. We aimed to identify factors associated with adolescents' HED, number of HED days and alcohol use severity to inform the design of targeted interventions.

Design and Methods: We recruited 157 adolescents (15-18 years old) from disadvantaged communities in Cape Town, South Africa (SA). Self-reported HED and number of days of HED in the past month were assessed using the timeline follow back technique. Alcohol use severity was assessed via the ASSIST-Y. Multivariate regression models examined socio-demographic, psychological and environmental factors associated with these alcohol outcomes.

Results: Adolescents had lower odds of HED if their neighborhoods were safer (OR: 0.87, 95%CI: 0.77;1.00) and they had greater depression severity (OR: 0.27; 95%CI: 0.12;0.68). Number of HED days increased with age (β =0.23, 95%CI: 0.05;0.42) and anxiety levels (β =0.27, 95%CI: 0.01;0.12). Less food insecurity (indicative of alcohol affordability) (β =0.23, 95% CI: 0.79;6.13) and more emotional dysregulation were associated with higher scores on the ASSIST-Y (β =0.26;95%CI: 0.07;0.75). In contrast, greater depression severity was associated with lower ASSIST-Y scores (β =-0.23, 95%CI: -0.73;-0.03).

Discussions and Conclusions: Worse perceptions of neighborhood safety and greater alcohol affordability, anxiety and emotional dysregulation increased risk of HED and alcohol use severity in this sample of disadvantaged SA adolescents. Findings suggest that interventions to reduce harmful patterns of alcohol use severity among adolescents should target both environmental and psychological risks.

Implications for Practice or Policy: Psychological interventions that target anxiety and emotional regulation may support alcohol reduction among adolescents in this context but are likely to yield greater benefits and more sustained if accompanied by structural interventions to improve neighborhood safety and reduce alcohol affordability.

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