CHASE SA
Collaboration for Harm Reduction and Alcohol Safety in the Environment in Southern Africa

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ASSOCIATIONS BETWEEN PHYSICAL ACCESSIBILITY OF ALCOHOL OUTLETS WITH HARMFUL, HAZARDOUS OR DEPENDENT ALCOHOL USE, MENTAL HEALTH OUTCOMES AND ALCOHOL-RELATED HARM TO SELF AND FROM OTHERS IN LOW-INCOME COMMUNITIES IN SOUTH AFRICA.

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Abstract:

Background:
South Africa has the 6th highest alcohol consumption per capita for drinkers in the world and has a majority of unlicensed alcohol outlets leading to a lack of legal oversight of alcohol sales and outlet density. Increased alcohol outlet density has been shown to increase frequency of alcohol use. The aim of the study was to determine associations between alcohol outlet density and proximity with alcohol use behaviours, mental health and harm to self and from other's alcohol use in lower socio-economic status (SES) households in two provinces in South Africa.

Methods:
This cross-sectional descriptive randomised household and mapping survey took place between September-December 2025 in selected small area layers within six different lower income areas in two provinces. We included 2,400 lower SES households in Gauteng and the Western Cape. Alcohol outlet mapping and household survey used global positioning system to calculate the physical alcohol outlet accessibility index, the household survey included SES questions, Alcohol Use Disorders Identification Test (AUDIT), alcohol harms to self and from others, depression (PHQ-9), anxiety (GAD-7), and traumatic experiences (PC-PTSD-5). Descriptive tests explored frequencies and associations using Chi-square and T-tests. Multiple linear regression models examined

associations between physical alcohol accessibility index with AUDIT score, PHQ-9 score, GAD-7 score, harm to self and from others score and PTSD-5 score.

Results:
Median age 40 years with 57% females, 40% unemployed-seeking work, 16.4% experiencing moderate hunger in the household. 73.4% of current drinkers drank in a HHDA way. Physical alcohol outlet accessibility was significantly associated with increased scores for harm to self due to alcohol use, harm from other's alcohol use, increased anxiety, depression and HHDA use scores.

Conclusions:
Our research shows that increased physical alcohol outlet accessibility is associated with higher anxiety and depression scores, higher harm to self and from others due to alcohol use and higher problematic alcohol use scores.

Keywords: Harmful, hazardous or dependent alcohol use, AUDIT, outlet mapping, mental health, physical alcohol outlet accessibility index, alcohol harm to self and from others.