**Daily alcohol consumption among UK homeless people during Covid-19: a latent class and cross-sectional study**

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**Abstract**

**Background:** Alcohol consumption and related issues among the homeless population are key public health concerns. The COVID-19 pandemic may have altered drinking patterns among homeless people. We aimed to examine the drinking patterns of homeless people and their association with housing status.

**Methods:** 1,129 participants (82.5% female) from the COVID-19 Homeless Rapid Integrated Screening Protocol (CHRISP) study reported their drinking behaviours (i.e., daily drinking, drinking after waking up, alcohol-related injury, and getting help to stop drinking) and their past housing status (e.g., rough sleeping, with family/friends, and prison). Latent class analysis (LCA) was used to assess the daily drinking patterns and multinomial logistic regression was used to explore the relationship between housing status and daily drinking patterns.

**Findings:** The prevalence of daily drinking was 14.3%. There were significant gender differences in alcohol-related injury and getting help to reduce/stop drinking (both p<.05). The LCA identified an optimal three-class model: a high daily consumption group (Class 1, 7.6%), a low daily consumption group with alcohol-related injury (Class 2, 7.1%) , and a low daily consumption group without negative consequences (Class 3, 85.3%). Using class 3 as the baseline, people who have lived in prison, as opposed to family/friends (reference group), were 8.6 times more likely to be classified into the high daily consumption group (Class 1). No significant drinking pattern differences were found between the reference group and other housing statuses.

**Interpretation:** The prevalence of daily drinking among the UK homeless population during COVID-19 has been assessed for the first time. The findings suggest that different housing statuses are associated with different drinking patterns, and history of prison residence may reflect broader vulnerabilities or disadvantages. Authorities should enhance support for individuals leaving prison, including referrals and follow-up to alcohol and drug rehabilitation services.

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**Contributor**

HS designed the study, analyzed the data, and drafted the Abstract. AB supervised the study and critically revised the Abstract. All authors have seen and approved the final version of the Abstract for publication.

**Conflicts of interest**

We declare that we have no conflicts of interest.

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**Note**

Hongyi Sun (presenting author) is an early career researcher, Annie Britton (full professor) is a considered expert by experience.