ALCOGENIC ENVIRONMENTS: DO CHANGES IN ALCOHOL OUTLET DENSITY INFLUENCE ALCOHOL CONSUMPTION IN YOUNG ADULTS?

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Introduction and Aims: Few studies test the causal relationship between alcohol licenses and alcohol consumption. We examined the cross-sectional and longitudinal associations between licenses in the local neighbourhood and alcohol consumption for young adults in Perth, Western Australia.

Design and Methods: The Western Australian Pregnancy Cohort (Raine) Study 20 and 23 year follow-ups provided data on alcohol intake (grams ethanol/day). Time-matched liquor licenses were sourced from the Department of Racing, Gaming and Liquor. License locations were mapped in GIS and the count of licenses within 1600m of participants' addresses computed. Linear regression examined associations between licenses and alcohol consumption at 20 (n=988) and 23 years (n=893), and whether change in licenses between 20 and 23 years (n=665) affected change in consumption. Analyses adjusted for demographics, area disadvantage and mental health.

Results: Taverns, restaurants and small bars were positively associated with consumption at 20 and 23 years, and hotels, liquor stores and clubs correlated with consumption at 23 years only (all $p<0.05$). Longitudinal analysis revealed that increases in liquor stores and club licenses impacted on changes in alcohol consumption between 20 and 23 years. For each additional liquor store, alcohol consumption increased by 1.2 grams/day ($p=0.039$), and with each additional club license, consumption increased by 0.9 grams/day ($p=0.007$).

Discussion and Conclusions: We found evidence that suggested a causal relationship between specific license types and alcohol consumption. There was a small but significant association between liquor licenses and alcohol intake, where each additional liquor store equated to almost one extra standard drink/week.

Implications for Practice or Policy (optional): This study provides local evidence that strategies designed to curb the widespread community availability of alcohol could prove a viable approach to minimising alcohol consumption in young adults.

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