## Alcohol negatively impacts subjective and objective measures of sleep in those undergoing overnight sleep assessment in a hospital setting

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Introduction and Aims: Commonly used drugs including alcohol affect the quality and underlying architecture of sleep. Understanding which components of sleep quality are impacted is important given that good quality sleep is vital for maintaining optimal physical and mental health. The present study: (i) assessed the components of sleep quality affected in participants attending a tertiary sleep clinic; and (ii) examined how alcohol impacted objective and subjective sleep measures.

**Method:** Participants (N=120; 50 females) underwent overnight polysomnography (PSG) assessment. They also completed questionnaires assessing their sleep quality (Pittsburgh Sleep Quality Index, PSQI), alcohol use (Alcohol Use Disorders Identification Test, AUDIT), and depression and anxiety (Hospital Anxiety and Depression Scale, HADS).

**Results:** The mean age of participants was 53 years, and 8.2% exceeded AUDIT criteria for hazardous drinking. The most disturbed PSQI subscales were: Disturbances (M=1.68, SD=.65), and Daytime Dysfunction (M=1.34, SD=.88). There were significant associations between the AUDIT and Sleep Latency subscale (r=-.247), and between HADS anxiety and depression scores and all subscales sans Medication. Participants with Obstructive Sleep Apnea (n=87) scored poorer across the subscales. PSG revealed that participants who scored in the hazardous AUDIT range spent a significantly lower proportion of the night (16% vs 27%) in Stage N3 'deep' sleep.

**Discussions and Conclusions:** Sleep quality can be assessed in hospital settings and if alcohol is being used to reduce sleep latency, subjective tools may be best placed to detect this. Hazardous alcohol use negatively impacts deep sleep, which is of concern given that reductions in deep sleep are associated with increased risk of chronic disease.

**Implications for Practice or Policy** (optional): Commonly used drugs can be screened for in clinical sleep lab-settings, and these settings potentially provide an opportunity for the provision of health promotion strategies and brief interventions. Alcohol impacts both objective and subjective measures of sleep, and this should be considered when interpreting the results of overnight PSG results.

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