Alcohol consumption patterns amongst Hepatitis C Positive people receiving opioid maintenance treatment at RPAH Drug and Alcohol Health Service: Research findings and Implications for Practice

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Lay description
Amongst people on opioid maintenance treatment (OMT), chronic hepatitis C (HCV) is common but infrequently treated. Numerous barriers, including misuse of alcohol may limit efforts at antiviral treatment. The aims of this study were to define barriers, including alcohol misuse, to the effective treatment of HCV amongst OMT recipients and to pilot test several non-invasive objective markers of alcohol use.

Research achievements
Ninety-four OMT patients completed the 3-item Alcohol Use Disorders Identification Test (AUDIT-C). A semi-structured interview was used in 53 subjects to assess alcohol use in detail, psychological health, discrimination and access to HCV treatment. Feasibility of brief intervention for alcohol misuse was assessed. Of screening participants, 73% reported they were HCV positive. Of detailed interview participants, 26% reported no drinking in the past month, but 53% scored 8 or more on AUDIT and 42% exceeded NHMRC drinking guidelines. Twenty subjects received brief intervention and among 17 re-interviewed at one month, alcohol consumption fell by 3.1 g/day (p=0.003). Severe or extremely severe depression, stress and anxiety were found in 57%, 51% and 40% of interviewees respectively. In addition to gamma-glutamyl-transferase (GGT) and mean corpuscular volume (MCV), ethyl glucuronide (EtG) and ethyl sulphate (EtS) were determined in serum and urine (UEtG, UEtS, SEtG) using liquid chromatography/tandem mass-spectroscopy (LC/MS-MS) with deuterated internal standards. Among the 19 UEtG positives, 8 had not reported any ethanol intake in the 7 days prior to the study. Six participants reported intake of up to 320 g of ethanol in the last 7 days, but were negative for SEtG, UEtG and UEtS. Self-reported ethanol intake in the last 28 days correlated with AUDIT score (r = 0.733, P < 0.001), with the direct ethanol metabolites and MCV.

Expected future outcomes
Episodic heavy drinking, mental health problems, perceived discrimination, limited knowledge concerning HCV were all common and uptake of HCV treatment was poor. Brief intervention for alcohol use problems was acceptable to OMT patients, and warrants further study. The biomarkers tested in this study correlated with self-reported alcohol use but were not more reliable than self-report using the AUDIT score.

Publications & Key Presentations

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