# Identification of co-morbidities associated with alcoholic liver disease

## Researchers

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## Summary

Alcoholic Liver Disease is responsible for 50 per cent of the total burden of liver disease (Holman, 1995) and underlies more than 1,000 deaths and 15 per cent of liver transplants in Australia (Haber 1999).  Hospital separation for alcoholic liver cirrhosis is on the rise, while the rates for alcohol consumption remain relatively steady in Australia (AIHW, 2008). Despite many reports suggesting that the patterns in presentation of alcoholic cirrhosis follow alcohol consumption rates, evidence thus far does not unequivocally link alcohol consumption to alcoholic liver cirrhosis (Holder, 1992). Several other factors potentially involved in changing cirrhosis rates, such as diet, viral load, co-morbidities, gender, treatment modalities and gene polymorphisms are likely to play an important role and may account for these discrepancies.  The respective contribution of these factors to liver disease appears to be changing but has not been clearly defined in Australia.

With FARE funding of $20,000, this study aimed to:

* characterise alcohol use disorders and mental health status of patients with alcoholic liver disease and
* determine common patterns of co-factors contributing to liver disease.

Patients drinking in excess of NHMRC Guidelines for safe drinking presenting with liver disease were recruited from the Royal Prince Alfred Liver Clinic. Initial screening of 600 hospital records identified 141 patients eligible for recruitment in this Study.  Of these, 68 participants were enrolled.

Data was collected through semi-structured interviews and self-administered questionnaires, physical examination, mental health assessment and routine clinical reviews.

## Outcomes

Data was analysed for 64 participants, as some data was incomplete.  Of those recruited, 31.3 per cent were still actively drinking compared to 68.8 per cent non-drinkers.

The Study found that non-drinkers had significantly worse liver synthetic functions compared to active drinkers. It can be surmised that this group was perhaps not actively drinking due to being more ill at the time of recruitment compared to those less sick who continued to drink. The ‘non-drinking’ is likely to be the consequence and not the cause of worse liver disease. It is likely that more severe liver disease provides a clear and undeniable motivation to reduce drinking.

Unlike liver disease severity, active drinkers showed significantly more severe features of alcohol dependence, alcohol craving,  recognition of alcohol problem and alcohol abuse.

In addition, the actively drinking group had significantly higher major depression, post-traumatic stress disorder and generalised anxiety disorder. This supports other research (Sullivan 2005) which found a strong link between excessive alcohol use and depression.  It is not known if regular alcohol consumption causes depression or people who suffer from depression drink more.  It may be that depression and alcohol abuse may share common genetic and environment risk factors that are activated in both conditions. It suggests that psychological intervention may help improve the quality of life in patients with alcoholic liver disease.

The study also found that participants with Hepatitis C had a significantly higher incidence of Hepatocellular Carcinoma.  This confirms previous literature.

## Recommendations

The study identified a significant clinical need for a study to test multidisciplinary services for the treatment of patients with mental disorders. As a next step from the FARE-funded project, the NSW Health, Mental Health Drug and Alcohol Office  awarded a project grant titled “Engaging patients with Alcoholic Liver Disease (ALD) into treatment for alcohol problems: enhancing the consultation liaison model of care”. This Project will set up a multi-disciplinary clinic involving hepatologists, psychiatrist and clinical psychologists to offer comprehensive treatment options for alcoholic liver disease patients with mental disorders, including those who participated in the FARE Project. If this multidisciplinary model of care is successful, it can be adopted in wider liver and drug health programs.

## Related Project

Haber Paul. 2011 [Novel Treatments for Alcohol Dependence: A Randomised Controlled Trial of Structured Stepped-Care Intervention for Psychiatric Comorbidity](https://fare.org.au/novel-treatments-for-alcohol-dependence-a-randomized-controlled-trial-of-structured-stepped-care-intervention-for-psychiatric-comorbidity/) University of Sydney.

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