Prevalence, nature, severity and potential significance of cognitive disturbances in clients presenting to a rural alcohol and other drug clinical service: an exploratory study

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Lay description
Cognitive deficits associated with acute and chronic substance use can create barriers to treatment engagement, retention and effectiveness. Impairments in attention, concentration, memory, problem solving, decision making, inhibitory control and abstract reasoning are associated with structural and functional neurological changes in chronic alcohol and other drug (AOD) users.

Until recently, assessing cognitive impairment in clients with substance use disorders has been limited in AOD treatment because of the specialized training and time needed. The present study will trial the implementation of a computer based cognitive assessment tool, CogState, in an AOD treatment service. CogState can be administered by AOD workers with minimal training and expertise. All subjects in the current study will be drawn from clients accessing treatment at Riverlands Drug and Alcohol Service, North Coast Area Health Service. Three groups of subjects have been selected for study: (1) those presenting for detoxification at Riverlands; (2) those entering the methadone maintenance program at the same centre; and (3) clients receiving outpatient counselling.

Testing these groups provides an opportunity to evaluate three factors: (a) the sensitivity and utility of the task in a dynamic clinical setting; (b) the extent to which cognitive function changes with involvement in a long term therapeutic program (i.e. in methadone maintenance); and (c) the nature, severity and prevalence of cognitive impairment in a large but unselected group of substance-abusing clients accessing AOD treatment. The outcome of the study may inform future research and treatment, as well as selection of treatment type and intensity, and may provide a useful diagnostic and therapeutic tool.

Research achievements
Research in progress.

Expected future outcomes
1) Objective assessment of cognitive function will find a higher incidence of cognitive impairment in clients accessing AOD treatment compared to community norms. 2) Improvements in cognitive abilities will be found following treatment including detoxification, methadone and AOD counselling. 3) Implementation of a brief computer based cognitive test battery will be acceptable to AOD workers and clients, and the results of these will be a useful prevention and therapeutic tool in AOD treatment.

Publications & Key Presentations:
Research in progress.
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