

Editorial

Alcohol-related brain damage:
a 21st-century management conundrum

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**Summary**

Alcohol-related brain damage has a growing impact on service provision. Despite the benefit of therapeutic interventions and a relatively good prognosis in the context of service provision, few services exist. Both national and local initiatives are required in order to

provide psychosocial rehabilitation for this marginalised group of patients.

Declaration of interest

None.

Kenneth Wilson is Professor of Old Age Psychiatry and currently provides commissioned services for younger people with dementia and alcohol-related brain damage.

The problem

Cook *et al* undertook a meta-analysis of 39 704 postmortems from 11 centres in America and Europe and found a prevalence of alcohol-related changes in the brain in approximately 1.5% of the general population and 30% of heavy drinkers.¹ Despite this, a number of seminal guidelines relating to alcohol dependence and the treatment of Wernicke–Korsakoff syndrome do not address the psychosocial management of sufferers.² Management is further confounded by difficulty in identifying psychiatric specialties with the appropriate skills. Both general adult psychiatrists and alcohol treatment services may have difficulty in catering for patients with significant cognitive deficits. It is recognised that dementia services may not provide an appropriate skill-set for the management of people with alcohol-related brain damage.³ There is a possible role for neuropsychiatric services,² however, such services are patchy and often exclude individuals with alcohol-related brain damage.

Service user experiences highlight the lack of diagnostic expertise, general ignorance of psychiatric, medical and nursing staff, no evident pathways of care, being ‘passed from pillar to post’, stigma and lack of resources. Patients fall between services, are prone to readmission and, without access to appropriate service provision, have a higher morbidity and increased mortality.⁴ Complimenting this, Popoola *et al*⁵ reviewed 44 patients with alcohol-related brain damage admitted into acute hospital care over a 6-month period and in the absence of appropriate care pathways, found that the average length of stay in hospital was 84.0 days (s.d.=72.3) and mean lost bed days was 15.9 (s.d.=36.6). These circumstances reflect much of the current situation in England.

Rehabilitation

In the context of abstinence, the prognosis of alcohol-related brain damage, of which Wernicke–Korsakoff syndrome is one presentation, is relatively good. Following an acute presentation, five stages of recovery can be described. In the first instance, the patient requires medical stabilisation and management of the encephalopathy.³ This is followed by a few weeks of relatively fast

improvement. Subsequent, gradual improvement may take as long as 3 years, at the end of which the patient enters the fourth stage of adaptation in which strategies are employed to optimise independence in the context of residual cognitive damage.⁶ The last stage is characterised by progressive socialisation and relapse prevention. The model can be adapted to cater for patients presenting with more gradual onset of alcohol-related brain damage, which is quite common, often characterised by frontal lobe dysexecutive syndrome, in which cognitive deficits may be less evident.

Two types of evidence exist with regard to the effect of therapeutic intervention. The first relates to training in specific cognitive domains. Targeted, computerised practice has been shown to improve performance in a number of cognitive domains and may improve performance in general activities of daily function.⁷ The second source of evidence draws on generic rehabilitation programmes. These include outcome studies related to long-term, ward-based specialist rehabilitation, demonstrating better outcomes compared with patients placed in non-specialist institutions.⁸ Bates *et al*⁶ draw on this and other research relating to acquired brain injury and emphasise the importance of ecologically relevant programmes of rehabilitation in which the acquisition of personally relevant skills is promoted and complemented by training in memory and orientation.

As cognitive impairment is associated with a poor outcome in terms of therapeutic intervention for the treatment of alcohol dependence, the literature emphasises the importance of integrating cognitive assessment and rehabilitation into alcohol treatment programmes. A number of attempts have been made to establish specific programmes for people with alcohol-related brain damage who are alcohol dependent. These are summarised by Bates *et al*.⁶ Unfortunately, little research data exist in terms of efficacy of these programmes.

Examples of service delivery

The current situation represents a lost opportunity – what evidence there is, suggests that a significant proportion of patients with alcohol-related brain damage may respond to appropriate assessment and rehabilitation.

Australian services have established a significant lead, emphasising early recognition and intervention. Examples of Australian practice in the 1980s include reports by Lennane⁹ in which 104 patients discharged from a specialist in-patient and rehabilitation unit were followed up for between 8 months and 2 years. Of these patients, 53 were classified as successful

placements (39 living in boarding houses, 5 with relatives, 6 in nursing homes and 3 living on their own with support), 11 (10.6%) were readmitted into hospital and the remainder were lost to follow-up or presumed dead. Two years later, Price *et al*⁴ followed up 37 patients (without receiving specialist rehabilitation) for 1 year following discharge into the community. Of these patients, 10 (27%) were successfully placed (unspecified placements), a further 20 (54.1%) were described as dysfunctional and the remaining 7 (18.9%) were dead.

In the UK, Stirling University³ has led the way in exploring the needs of patients with alcohol-related brain damage and has drawn together a comprehensive framework for the development of services, addressing most of the main issues of service provision. The document highlights the need for education and care planning, working with the National Health Service (NHS), voluntary and private sectors. It emphasises the importance of early detection and intervention and a full needs assessment to be undertaken after 3 months of abstinence. In particular, the authors recommend a named person or service with responsibility to support the individual through the process of multidisciplinary assessment, management, care planning and review. Expertise lies in the field of neurorehabilitation psychiatry,² drawing on skills of cognitive assessment and the rehabilitation of acquired brain injury. However, in the absence of such services, compromises may have to be made, hence initiatives such as that on the Wirral, in which the service is nested within provision for younger people with dementia.¹⁰

A recent audit of this fledgling service hints at the potential impact on acute hospital services in England.⁹ The service is commissioned to take referrals from acute, general hospital in-patient wards with a view to enhancing the independence of people with alcohol-related brain damage and reduce acute, general hospital readmissions. A review of 17 patients (for which there are data), between 2 and 6 months of referral to the service, indicates an average Mini-Mental State Examination score of 21.7 (range 17–30; maximum score of 30) and Addenbrook's Cognitive Examination score of 61.8 (range 23–93; maximum score 100). The audit demonstrated an 80% reduction in acute hospital admissions in terms of in-patient bed days per year. Of the 11 individuals that had completed rehabilitation, 3 died despite being alcohol-free and stable. The remainder are alcohol-free. Four were initially placed in an 'out of area' private, specialised rehabilitation unit. One of these remains in the unit, two live in supported living and one went home with a care package. Seven individuals were rehabilitated in their own homes, supported by the team and care packages. Subsequently, the NHS team has built up expertise within a local private nursing home which now specialises in the rehabilitation of alcohol-related brain damage, enabling rehabilitation within the trust's footprint.

Overview

Despite emerging evidence indicating that intervention is associated with improved outcome and the possibility that appropriate services may be relatively cost-effective in terms of service utilisation, most people presenting with alcohol-related brain damage receive little coordinated help and support. There is an urgent need for professional leadership in developing guidelines at a national level. Commissioning organisations and mental health trusts should take the lead in establishing local clinical pathways of care. This should include the identification of professional teams or individuals so that patients with alcohol-related brain damage are not disenfranchised of appropriate care. Preferably, such services should be embedded within neurorehabilitation services, but in their absence, alternative provision such as those mentioned above should be considered and may include working in concert with private organisations.

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