

## LETTER

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**Alcohol-related brain damage (ARBD): a service need**

Alcohol-related dementia (ARD) is a controversial concept. Alcohol-related brain damage (ARBD) is a term used to cover a spectrum of conditions and disorders: this includes alcohol-related dementia, Korsakoff's syndrome, Wernicke's encephalopathy, alcohol-related brain injury, and alcohol amnesic syndrome. In other words, these are the conditions that have been induced by chronic alcohol consumption, resulting in some degree of brain damage. The prevalence data are varied.

There are a number of characteristics commonly associated with an ARBD condition (Smith and Hillman, 1999; Elleswei, 2000; Chiang, 2002): (a) Cognitive and memory problems such as confusion, impaired attention, and concentration; difficulty in processing new information (verbal and visual); confabulation; apathy; and depression and irritability. (b) Physical problems such as ataxia; damaged liver, stomach, and pancreas; possibility of traumatic brain injury; and peripheral neuropathy.

Alcohol-related brain damage is non-progressive if abstinence is maintained. It is crucial to remember that impairment is not degenerative if abstinence from alcohol and good nutrition are maintained (Smith and Hillman, 1999). Therefore, early identification and appropriate intervention can promote optimum recovery.

Alcohol-related brain damage is not the same as having an intellectual disability or having dementia. Hulse and colleagues (2005) reported that the degree that alcohol-related cognitive impairment must reach to be classified as dementia is currently obscure, and that currently available data do not support the introduction of a separate diagnostic category such as alcohol-related dementia. The needs of people with ARBD may be more akin to people with acquired brain injury than those with dementia.

There are unmet needs of patients with ARBD that hinders them accessing appropriate services. They either receive no services, or admitted to acute hospital or old age psychiatry beds. These unmet needs include early identification and diagnosis, patients may be unaware that they have the condition and they present variability, variable levels of awareness in different clinical settings, lack of

national guidelines or standardized care pathways, lack of appropriate rehabilitation services, and lack of robust prevalence data (The Royal College of Psychiatrists, 2014). The most robust prevalence relates to old postmortem studies. In meta-analyses of 39,704 post-mortems of people living in community settings in America and Europe, Cook *et al.* (1998) reported that approximately 1.5% of brains showed lesions of the Wernicke–Korsakoff syndrome in and near the mammillary bodies, or cerebellar atrophy. Chiang (2002) reported an estimated prevalence of ARBD at seven per 10,000 in the Argyle and Clyde area.

Awareness, information, and training are needed for a range of groups: carers of, and people with ARBD, staff in first point of contact settings, and staff involved in the care of those with ARBD. The literature suggests that staff in general hospital settings, primary care settings as well as those in community teams are likely to encounter people with an ARBD condition; these staff need basic alcohol awareness training, information on ARBD screening tools, information and guidance on Vitamin prescribing, and referral options (Chiang, 2002).

Alcohol specialists (nurses, social workers, and occupational therapists) working in general settings have been shown to be useful for detecting, referring, counseling, and preventing further alcohol-related problems. They can be involved in the prevention and management of alcohol use, in raising awareness about alcohol-related conditions, facilitating referral, and providing immediate support for those who have problematic alcohol use (Moyer *et al.*, 2002; Emmen *et al.*, 2004; Guth *et al.*, 2008; Havard *et al.*, 2008).

Alcohol specialists should have a role in the assessment and subsequent management of alcohol-related issues wherever a person with ARBD is accommodated. This should include guidance on the use of thiamine and community detoxification. Detoxification may not always be an option but this should not negate the need for alcohol management, nutrition, vitamin treatment, and on-going needs assessment led by an identified person and/or team. Psychiatric, cognitive, and functional assessment should be done every three months for up to one year and on-going for up to two years. Assessment procedures, whether inadequate or adequate, will have implications for prognosis, subsequent rehabilitation, and appropriate accommodation placements for people with ARBD.

A lead practitioner should be identified to coordinate referrals and help navigate the person through their care pathway. Joint data sets should be developed to facilitate coordination and cooperation as well as to allow for more accurate estimations of prevalence. The care planning and provision will vary in each area; however, whatever the form of care, an identified ARBD team or person could coordinate, track, and support the person with ARBD through the assessment, rehabilitation, and placement process as well as facilitate regular multi-disciplinary reviews.

Care homes in which a climate of specialism is prevailing enhances social functioning. Staff and people with ARBD in care homes benefit from having links with multi-disciplinary team members and specialist alcohol practitioners. The National Institute for Health and Care Excellence (2011) clinical guidelines on the alcohol use disorders recommended that people with the Wernicke–Korsakoff syndrome who suffer mild cognitive impairment should be offered long-term placement in supported independent living facilities, while those with moderate or severe cognitive impairment should be offered supported 24-hour care. In both settings the environment should be adapted for people with cognitive impairment and support should be provided to help service users maintain abstinence from alcohol.

The field of dementia care and acquired brain injury may offer some general principles in terms of assessment tools, care pathways, and person-centered approaches to care (Naidoo and Bullock, 2001). These are the models of care that cannot only provide the immediate clinical diagnostic and assessment elements of care but also those that respond to longer term, not acute conditions. Their focus tends to be to augment existing service provision by providing and/or facilitating early diagnosis, joint working to coordinate service provision, prevention of admission, and support after discharge. However, MacRae and Cox (2003) recognized that dementia services may not provide an appropriate skill-set for the management of people with ARBD.

The Royal College of Physicians (2001) reported that expertise lies in the field of neuro-rehabilitation psychiatry where the skills of cognitive assessment and rehabilitation of acquired brain injury exists. In areas of high prevalence, consideration should be given to developing a multidisciplinary specialist rehabilitation unit. Other options that could provide assessment, support, and rehabilitation in the medium term should be actively considered.

The solution to complexity is often to create a specialist resource that can provide a range of expertise required even on a regional level. These

regional services could assess and manage people affected by the condition and provide assertive outreach support to community-based services. If such specialist services do evolve, part of their role will be to enhance and support mainstream services such as home care workers, general practitioners, and primary care services – as well as providing their specialist services such as diagnosis, specialist assessment, managing challenging behavior, and alcohol detoxification, treatment, and rehabilitation. Invest to save business case of such service will be offset against better patient outcome, and cost reduction secondary to less bed occupancy in both hospitals and care homes (Wilson *et al.*, 2012). Assessment of an individual's longer-term needs is possible only after a period of abstinence, and may take up to two years. It is important to avoid premature and inappropriate placement decisions, and to consider community living options. Wilson *et al.* (2012) reported that appropriate services providing a rehabilitative model reduce all acute hospital bed-day usage by 85%, dramatically improve the quality of life of individuals, and are able to maintain 75% of affected patients in non-institutional community settings. When receiving appropriate care, relapse into alcohol misuse runs at about 10% and there is a 10% mortality rate. Locally, patients can be jointly discussed between Community Drug and Alcohol Teams (CDAT), adult, and rehabilitation services and if needed old age services on a case-by-case basis.

Finally, there is a need for national and international evidence-based and cost-effective guidance to look at the needs of this group to improve their care and outcome.

## Conflict of Interest

None.

## References

- Chiang, C. C. P.** (2002). *Wernicke–Korsakoff Syndrome in Argyll and Clyde: A Literature Review, Needs Assessment and Recommendation for the Prevention, Treatment and Provision of Wernicke Korsakoff Syndrome*, Part II. Submission to the Faculty of Public Health Medicine, London, UK.
- Cook, C. C. H., Hallwood, P. M. and Thomson, A. D.** (1998). B Vitamin deficiency and neuropsychiatric syndromes in alcohol misuse. *Alcohol and Alcoholism*, 33, 317–36.
- Elleswei, E.** (2000). Caring with people with alcohol-related brain injury. *Signpost*, 4, 12–3.
- Emmen, M. J. et al.** (2004). Effectiveness of opportunistic brief interventions for problem drinking in a general hospital setting: systematic review. *BMJ*, 328, 318–310.

- Guth, S. et al.** (2008). Brief intervention in alcohol-dependent versus non-dependent individuals. *Journal of Studies on Alcohol and Drugs*, 69, 243–250.
- Havard, A., Shakeshaft, A. and Sanson-Fisher, R.** (2008). Systematic review and meta-analyses of strategies targeting alcohol problems in emergency departments: interventions reduce alcohol-related injuries. *Addiction*, 103, 368–376.
- Hulse, G. K., Lautenschlager, N. T., Tait, R. J. and Almeida, O. P.** (2005). Dementia associated with alcohol and other drug use. *International Psychogeriatrics*, 17(Suppl. 1), S109–27.
- MacRae, R. and Cox, S.** (2003). *Meeting the Needs of People with Alcohol-Related Brain Damage: A Literature Review on the Existing and Recommended Service Provision and Models of Care*. Report of the Dementia Services Development Centre, University of Stirling, Scotland. Available at: [http://lx.iriss.org.uk/sites/default/files/resources/ARBD\\_MeetingNeeds.pdf](http://lx.iriss.org.uk/sites/default/files/resources/ARBD_MeetingNeeds.pdf); last accessed 25 January 2014.
- Moyer, A., Finney, J. W., Swearingen, C. E. and Vergun, P.** (2002). Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment seeking and non-treatment-seeking populations. *Addiction*, 97, 279–292.
- Naidoo, M. and Bullock, R.** (2001). *An Integrated Care Pathway for Dementia: Best Practice for Dementia Care*. London: Harcourt Health Communications.
- National Institute for Health and Care Excellence.** (2011). *Alcohol-Use Disorders: Diagnosis, Assessment and Management of Harmful Drinking and Alcohol Dependence*. NICE Clinical Guidance 115. Available at: <http://www.nice.org.uk/nicemedia/live/13337/53191/53191.pdf>; last accessed 25 January 2014.
- Royal College of Physicians.** (2001). *Alcohol – Can the NHS Afford It? Recommendations for a Coherent Alcohol Strategy for Hospitals*. Report of a Working Party of the Royal College of Physicians of London. Available at: [http://www.rcplondon.ac.uk/sites/default/files/documents/alcohol\\_nhsweb.pdf](http://www.rcplondon.ac.uk/sites/default/files/documents/alcohol_nhsweb.pdf); last accessed 25 January 2014.
- Smith, I. and Hillman, A.** (1999). Management of alcohol Korsakoff syndrome. *Advances in Psychiatric Treatment*, 5, 271–278.
- The Royal College of Psychiatrists.** (2014). *Alcohol and Brain Damage in Adults with Reference to High-Risk Groups*. College Report CR185. Available at: <http://www.rcpsych.ac.uk/publications/collegereports.aspx>; last accessed 30 May 2014.
- Wilson, K. et al.** (2012). The psycho-social rehabilitation of patients with alcohol related brain damage in the community. *Alcohol and Alcoholism*, 47, 304–11.

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