Brief intervention: increasing access to the full range of treatment services for alcohol problems for Aboriginal and Torres Strait Australians

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ABSTRACT

Objective: to review the literature on uptake of treatment for alcohol problems among Aboriginal and Torres Strait Islander (Indigenous) Australians, and on approaches to increase access to earlier treatment, with an emphasis on screening and brief intervention.

Methods: A literature review was undertaken by searching Medline, listings of government policies and reports, perusal of the Internet and discussion with experts in the field. Search terms used were ("Aboriginal" or "indigenous") plus "alcohol" with ("brief intervention", "treatment", "engagement" or "uptake"). Health service databases were accessed to provide data on treatment utilisation.

Results: Indigenous Australians appear to have limited access to culturally appropriate voluntary treatment services for alcohol related problems. They are more likely to undergo compulsory treatment than non-Indigenous Australians, and this may reflect over-representation in justice and correctional systems. Anecdotally, late presentation to treatment is common. Various approaches have been attempted to increase treatment service accessibility and appropriateness. Around the world, brief intervention has been established as a cost-effective component of treatment for alcohol problems which typically provides earlier treatment access. However no published trials have reported on effectiveness of brief intervention in an indigenous population.

Conclusions and implications: Research is needed into methods for ensuring Indigenous Australians have the opportunity to engage with the full range of alcohol treatment services. Brief intervention provides a potentially important component of an integrated response to alcohol problems. Approaches need to be developed or refined so that they are culturally appropriate. This should be done in partnership with Indigenous communities and health professionals.

Key words: Alcohol, brief intervention, screening, Aboriginal, indigenous,
ARTICLE
Introduction
Alcohol use is an issue of considerable concern to Aboriginal and Torres Strait Islander communities.\(^\text{1}\) It contributes to health and social problems for both the drinker and their community.\(^\text{1,3}\) Indigenous Australians are over-represented among those with alcohol-related hospital admissions\(^\text{4}\) and alcohol was estimated to be 5.2 times and 3.7 times more likely to contribute to death among Indigenous men and women in West Australia from 1989-91 than among non-Indigenous men and women.\(^\text{5}\)

Around the world wherever indigenous peoples have been subject to colonisation they are at increased risk of developing substance use disorders and mental health problems.\(^\text{6, 7}\) This has been attributed to disempowerment, marginalisation, social disadvantage and erosion of connectedness to culture and community.\(^\text{1, 6, 8}\) Separation of indigenous children from their parents is another major risk factor.\(^\text{6, 9}\) Relative disadvantage in any culture is associated with a polarisation of drinking, with more non-drinkers and risky drinkers than moderate drinkers.\(^\text{10}\) Increased education and social advantage, including among Indigenous Australians, are associated with more moderate drinking.\(^\text{2}\)

There is a dearth of credible data on alcohol use patterns of Indigenous Australians.\(^\text{11}\) A 1994 urban household survey found that fewer Indigenous respondents (62%) reported drinking any alcohol in the past year than did general urban respondents (72%) in the comparable survey the previous year.\(^\text{1}\) However, among those who did drink, more than six times as many Indigenous Australians reported drinking above the then recommended limits (more than four standard drinks for men and more than two for women per day), than in the general urban population (68% compared with 11%).\(^\text{1}\)

There are minimal data on levels of awareness of safe drinking levels among the Indigenous community. Brady has identified that in some circles, “moderate” drinking has not been a widely recognised concept, with drinking viewed as an all or nothing phenomenon.\(^\text{12}\) There are no data on the prevalence of alcohol dependence among Indigenous Australians.
There is good evidence that effective measures exist both to prevent and treat alcohol use disorders in the general community, but few have yet been trialled specifically in the Indigenous community.\textsuperscript{8, 15} In the general population we know that early intervention is simpler, more effective and less costly than waiting to treat those with advanced dependence who seek help.\textsuperscript{16, 17} Early intervention can also prevent harms to the individual and those around them. It is unclear to what extent these measures are routinely available to Indigenous Australians.\textsuperscript{12} Yet providing effective prevention or treatment services is likely to contribute to closing the gap in life expectancy between Indigenous and non-Indigenous Australians.\textsuperscript{19}

**Methods**

In this article we reviewed literature on the level of access to treatment for alcohol problems among Indigenous Australians, and measures which have been trialled to increase access to earlier treatment, with a particular emphasis on screening and brief intervention.

We searched Medline, listings of government policies and reports, perused the Internet, and consulted with experts in the field. Search terms included (“Aboriginal” or “indigenous”) plus “alcohol” with (“brief intervention”, “treatment”, “engagement” or “uptake”). Health service databases were accessed to provide data on treatment service utilisation. A systematic review was not feasible due to the limited number of studies available, particularly on the effectiveness of brief intervention in indigenous communities. For mainstream populations, key meta-analyses in relation to brief intervention were retrieved, together with selected seminal articles. In addition to presenting a review of this literature a small number of case studies are presented of the routine use of screening and brief intervention among Indigenous Australians. These are derived from informal consultation with practitioners and experts in the field over the past 3 years.

**Results**

**Uptake of drug and alcohol treatment services by Indigenous Australians**

More Indigenous people are in treatment in mainstream treatment services for alcohol or drug problems having been referred by police, court or corrections (57% combined) than
are self referred (28%). This compares with 21% and 37% for non Indigenous clients respectively.\textsuperscript{18} These figures may reflect over-representation of Indigenous Australians in justice and correctional systems. The data do not capture all Indigenous individuals seeking help for substance use disorders as most Australian Government funded Indigenous specific services and other Aboriginal specific services do not supply data under the Alcohol and other Drug Treatment Service National Minimum Dataset. Furthermore, in mainstream services some clients do not have their Indigenous status recorded (6% in both 2003-04 and 2004-05).

In many rural and remote parts of Australia, treatment services for alcohol use disorders are scarce.\textsuperscript{19} Furthermore, staff of such services may not have optimal training or support opportunities.\textsuperscript{20}

Treatment services exist in many urban settings, but uptake by Indigenous Australians is variable.\textsuperscript{,} In one mainstream Area Health Service which covers a large sector of Sydney and surrounding district, outpatient treatment options for alcohol problems were reportedly rarely used by Indigenous individuals.\textsuperscript{21} In contrast, emergency and inpatient services were regularly used for advanced complications of drinking or unplanned alcohol withdrawal and residential detoxification services for planned withdrawal.\textsuperscript{21} Feedback from a nearby Aboriginal Community Controlled Health Service (ACCHS) suggested that there also few people were voluntarily engaging for outpatient treatment of alcohol problems\textsuperscript{21} even though the local community prevalence of alcohol problems was perceived as high. However in other areas of Sydney and Australia, some ACCHSs report that significant numbers of clients seek assistance for alcohol problems (personal communication).

A lack of treatment uptake in mainstream services could be due to several factors including poor cultural appropriateness and accessibility for Indigenous people.\textsuperscript{22} Traditional western models of one-to-one psychotherapy may need to be modified for Indigenous cultures.\textsuperscript{23} Models that consider whole families or communities, and focus less on the individual, may be more appropriate. Other potential reasons for the lack of treatment uptake postulated in both the mainstream and ACCHS in the study above include a lack of community awareness of the range of treatment services available (e.g. early intervention, home detoxification, medications to prevent relapse in dependence).
Furthermore, a high prevalence of alcohol problems in some sectors of the community may have led to a “normalisation” of heavy drinking. All these factors may contribute to late presentation of problems, often when the drinker is so sick that he or she has no choice but to seek medical attention, or when legal or other social complications have reached crisis point.

Historically, alcohol treatment services specifically designed for Aboriginal people had a focus on residential, abstinence-based models. Brady stresses the importance of increasing the availability of early treatment for Indigenous Australians.

The acceptability and practical application of pharmacotherapies for relapse prevention for alcohol dependence among Indigenous Australians have not been studied. Anecdotally it seems likely that few Indigenous Australians have had access to this modern form of treatment. While pharmacotherapies will need to be offered within a culturally appropriate model of service and in appropriate locations, it is clearly appropriate that all Australians have access to this treatment where needed.

**Methods to increase engagement of Indigenous people with alcohol treatment services**

To increase engagement of Indigenous people with drug and alcohol treatment services, the National Drug Strategy, Aboriginal and Torres Strait Islander Complementary Action Plan recommends a range of strategies, including local planning, responding to community needs and priorities, community control, development of culturally valid strategies and an appropriate level of resources to address disproportionate levels of harm. The formation of partnerships between mainstream services and ACCHSs is likely to increase the capacity of mainstream services to achieve this.

Best practice case studies of drug and alcohol intervention services targeted towards Indigenous people have been published. Several published studies have also obtained feedback from Indigenous clients and community informants on the appropriateness and accessibility of alcohol or drug treatment services, though these studies have typically focused on services for illicit drug use. Indigenous illicit drug users (n=95) in the Australian Capital Territory reported that they would prefer Aboriginal staff to be involved in their care and valued additional assistance such as family services and
A lack of flexibility in treatment services and long waiting times before entering treatment were reported barriers to service access. On the other hand, increased flexibility and employment of Indigenous health staff, appeared to increase attraction and retention of Indigenous clients to a mainstream urban program. Clients emphasised that trust was more likely to develop with Indigenous staff. Introduction of an Aboriginal-specific program within a more general health service in South Australia resulted in an increased uptake of opioid maintenance pharmacotherapy. Consultations with key stakeholders about mainstream drug and alcohol treatment services in the inner west of Sydney revealed that Indigenous people were well represented in opioid treatment services, partly because of existing collaboration with the local ACCHS, but rarely used outpatient alcohol treatment services. Priority appointments for new Indigenous clients were seen as beneficial. Suggested service improvements included increased cultural sensitivity of communication, a less clinical and more visually appealing physical environment, more culturally appropriate printed materials, availability of Aboriginal staff, peer support groups and holistic and integrated healthcare that considers individual, family and community.

While the importance of Indigenous staffing has repeatedly been identified, Indigenous health professionals and others point out their need for increased training opportunities. Measures to enhance recruitment and retention, reduce job stress, and enhance professional capacity could include cadetships, accredited training, career development opportunities and ongoing support are needed.

**Can screening and brief intervention increase access to alcohol treatment services?**

Rather than waiting for a drinker to recognise a problem and seek help, proactive screening uses a simple and systematic tool to identify people at risk of negative consequences from alcohol consumption. Depending upon the results of screening, an individual is then offered an intervention appropriate to their level of risk: low-risk drinkers may be offered further information and encouragement, hazardous drinkers may be offered a brief intervention, and dependent drinkers can be referred to more intensive treatment.
Brief intervention is typically provided to individuals who are not seeking alcohol treatment but are identified opportunistically, most often through primary care settings. There, the intervention is relatively short (typically 5-20 minutes), less structured and delivered by a non-specialist. Less often, brief intervention as been used for individuals who have been persuaded or mandated to seek treatment in a specialist setting. In these cases the intervention is usually slightly longer and more structured. Brief intervention focuses on raising awareness of the harms or risk arising from the individual’s drinking, advising on change, negotiating a goal for drinking (e.g. drinking within the recommended limits or cessation) and identifying strategies for achieving this goal. This advice or counselling is provided in an empathic, non-confronting way.

Brief and early intervention for alcohol use disorders has been reported to be one of the most cost-effective approaches to management of alcohol use disorders. It has several advantages over more extensive treatments. For non-dependent (hazardous or harmful) drinkers, brief intervention is often more acceptable than referral to a specialist alcohol treatment service with its associated stigma. Brief intervention can be widely available and is considerably less expensive.

However once alcohol dependence, or “addiction” to alcohol, has developed, typically more extensive treatment is required. Dependence is diagnosed when an individual meets three or more of the following criteria: loss of control, tolerance, compulsion to drink, high priority given to drinking, withdrawal symptoms, or continued use despite harm. However, even in a dependent drinker brief intervention can be an effective instigator of commitment for behaviour change whilst individuals are waiting for, or are yet to seek, further treatment. Although the term “brief intervention” is often used synonymously with “early intervention”, brief, opportunistic intervention was reported as a method to increase the engagement of dependent drinkers with treatment over 40 years ago. A 1961 study in an emergency department setting showed that 65% of patients who met briefly with a counsellor to discuss and evaluate their drinking kept subsequent appointments for specialist treatment, compared to only 5% of control patients who were simply referred to counselling.

In a subsequent randomised controlled trial, problem drinkers were identified through community screening. The intervention group were offered brief intervention, which
was repeated once every three months and included feedback on blood results. The intervention group had significantly fewer days in hospital over the next 4-7 years\textsuperscript{36} and fewer deaths over the next 10-16 years.\textsuperscript{37}

Brief intervention techniques were later and more widely applied predominantly to non dependent drinkers. Brief intervention has repeatedly been shown to be effective in reducing drinking among non-dependent drinkers who are not themselves seeking treatment.\textsuperscript{16, 32} It also can reduce associated harms such as trauma.\textsuperscript{38}

**How good is the evidence for the effectiveness of brief intervention?**

A 2002 meta-analytic review\textsuperscript{16} of 34 studies with non-treatment-seeking individuals found that brief interventions were more effective than no counselling for reducing alcohol consumption and for all drinking related outcomes in up to 12 months follow-up (the combined effect sizes at \(\leq 3\) months, 3-6 months and 6-12 months for all drinking-related outcomes were 0.30, 0.14 and 0.24 respectively). Little is known about the longer-term effects of brief intervention: only five of these studies had follow-up beyond one year. There appears to be attenuation of brief intervention’s effect over time\textsuperscript{39} and so a need for monitoring and booster intervention, or referral to treatment if necessary. Brief intervention alone was more effective in non-dependent than dependent drinkers: at 3-6 month follow-up, the effect for brief interventions was significantly larger when individuals with more severe alcohol problems were excluded (0.21) than when they were included (0.05).

A number of studies have examined whether brief intervention is as effective as more extensive interventions. Moyer et al\textsuperscript{16} found that in 20 studies of treatment-seeking individuals, overall there was no significant difference in aggregate effect sizes between brief intervention and more extensive treatments at most time points. However the brief interventions described in these studies were often more intensive than those typically given to non-treatment seeking individuals. Even so, at the 3-6 month follow-up, extended treatments were superior to brief intervention in reducing alcohol consumption (effect size 0.42). Most clinicians agree on the need for more intensive treatment for dependent drinkers.
Is there any evidence for the effectiveness of brief interventions in indigenous communities?

Few data are available on the effectiveness of brief intervention approaches among indigenous peoples. A United States study with 26% Native American participants reported on the acceptability but not the effectiveness of brief interventions for alcohol amongst trauma patients. The majority of patients surveyed were not offended by the concept of discussing drinking and being screened for hazardous alcohol use, and a brief counselling session was acceptable to all ethnic groups In Australia, although Indigenous subjects were included in the WHO multinational trial of brief interventions in primary care, there were too few to allow separate analysis of effectiveness An attempted randomised control trial of brief intervention for alcohol problems in an urban Aboriginal Medical Service (AMS) in 1998 was abandoned because of the challenges of integrating recruitment into regular clinic processes. The authors also reported a reluctance of both Indigenous clients and health workers to discuss alcohol, particularly where clients and staff were known to each other in the community. Furthermore the groups most likely to experience problem drinking (e.g. males aged 16-44 years) were under-represented among clinic attendees. However, the study reportedly increased general awareness of alcohol issues at the service.

Despite the challenges of routine implementation of screening and brief intervention, a study of Aboriginal Australians who quit drinking without formal treatment indicated that almost half changed their drinking behaviour in response to a medical problem or doctor’s health warning.

Screening for alcohol problems among Indigenous Australians

Opportunistic brief intervention is possible only if the drinking problem is identified. In primary care settings traditionally only half to one third of alcohol problems are detected in general populations. Doctors are often reluctant to approach the subject and lack confidence in responding to alcohol problems. There may be additional barriers to Indigenous health practitioners asking about alcohol as mentioned above.

Further research is needed on the optimal screening instruments for identifying at risk drinking among Indigenous Australians. Some clinicians suggest that given high rates of drinking above recommended limits among those who drink at all, simply asking, “Do
you drink alcohol?” is a good first stage screen. Second stage screening questions could include frequency of drinking, and/or frequency of drinking to intoxication (eg. Questions 2 and 3 from the 10 item World Health Organization Alcohol Use Disorders Identification Test - AUDIT).31

The AUDIT has been validated in other cross cultural settings, and anecdotally has been used successfully in hospitals and other health services with Indigenous Australians. However in the Sydney-based brief intervention study mentioned above, some of its questions were found to have poor acceptability.44 A shortened questionnaire, using only two of AUDIT’s questions was preferred. Worldwide, there also has been a trend towards using shortened forms of the AUDIT, for example the first 3 alcohol consumption questions, because of the desire for brevity.48 This shortened form has only slightly lower ability to detect alcohol problems than the full AUDIT.48

An integrated method of screening for alcohol and other drug problems and for mental health disorders among Indigenous Australians has recently been designed and validated.49 The seven items which relate to alcohol on this brief questionnaire, the IRIS (Indigenous Risk Impact Screen), focus on aspects of dependence. These include tolerance, withdrawal symptoms, lack of control and the high priority given to alcohol. The same research group that developed IRIS have reported preliminary findings that brief intervention can effectively reduce risky use of alcohol in Indigenous populations.50

In remote regions, quantification of drinking may be particularly challenging given variability in (Western) numeracy, and the widespread sharing of alcohol. Alternative second stage questions may instead address a harm experienced while intoxicated (such as a legal or social complication) or an aspect of dependence (e.g. AUDIT questions 4-6, or IRIS alcohol questions).

Routine implementation of screening and brief intervention among Indigenous Australians
No data are available on how many primary care services or hospitals offer routine screening for alcohol problems for their Indigenous clients. Anecdotally screening and brief intervention has been routinely conducted by Indigenous health professionals in several hospitals, including in NSW and the NT (personal communication, 2005-08).
Screening has often employed the AUDIT questionnaire or shortened forms of it. The health professionals involved reported that screening and intervention was well received by the patients. Screening for alcohol problems using the first three items of AUDIT (AUDIT-C) has also been routinely conducted at two ACCHSs in NSW (personal communication, Anton Clifford, UNSW). Brief intervention has also been incorporated into a community-based outreach program in Alice Springs.51

One Aboriginal health professional in Northern NSW (personal communication, 2006-07) reports that the “Drink-less” 52 brief intervention materials have been effectively used to engage a group of older Aboriginal adults in discussion about drinking and strategies for personal change in the community setting, with evidence of impact on drinking. These Drink-less materials use the AUDIT questionnaire and a visual aid based on the brief intervention validated in a WHO multi-country trial.42

Anecdotally, more recently a number of Indigenous Health Workers and agencies have reported routine screening with IRIS and provision of brief intervention in regional and remote areas of Queensland and in regional NSW, and have found this acceptable to clinic attendees.

Most brief intervention approaches that have been trialled within Aboriginal communities involve face to face intervention. However in Cairns, an interactive touch screen CD-ROM has been developed to provide screening and individualised intervention for Indigenous Australians in a range of rural or urban settings.53 This is reported to be popular in communities, although results of effectiveness have not been published.

**Discussion**

Indigenous Australians across Australia may not be routinely receiving access to the full range of treatment services available to mainstream populations in urban centres. While this restricted access to services may be most pronounced in remote settings, it appears likely to exist in many urban and regional centres. Among all Australians, individuals with alcohol problems tend to present late for treatment. This situation may be exacerbated where there are barriers to service access, or in communities where there is a high prevalence of alcohol problems and a resulting normalisation of heavy drinking.
Screening and brief intervention provides a method for earlier identification and treatment of alcohol problems.

Brief intervention should be only one ingredient in the comprehensive range of treatment services which should be readily available to Indigenous Australians. Treatment measures need to be combined with prevention initiatives, including action to address the social determinants of substance misuse. There is likely to be a need for grass roots education about safe drinking levels. In addition the potential effectiveness of alcohol supply control has been documented. This can range from alcohol restrictions in remote communities\textsuperscript{15,54} through to reducing access to alcohol in underage drinkers and reducing sale of alcohol to intoxicated patrons in any part of Australia.\textsuperscript{13} As in the general population, in households where one or more adults are dependent on alcohol, childhood access to alcohol may lead to an early onset of dependence. "Early" intervention in these cases may need to start in childhood and involve ensuring child safety, and improving access to treatment for substance use disorders for adults in the household.

There is a pressing need for trials of a range of approaches that increase access to treatment for alcohol use disorders, including early intervention. Any research should be designed where possible to convey immediate benefit to the community, as well as longer term contribution to understanding. Brief intervention and the full range of modern treatment services need to be examined and where necessary adapted for cultural appropriateness. This should be done in consultation with the communities for which they are intended. Indigenous health professionals have an important role to play in this process, and in service delivery.

**Conclusion**

In non-Indigenous settings, screening and brief intervention have been found effective in treating non-dependent drinkers and in engaging dependent drinkers with further treatment. Brief intervention potentially offers a cost-effective approach and empowers the drinker to address their drinking. Yet there has been limited study of brief intervention in Indigenous communities. Where there is alcohol dependence, brief intervention is a prelude to comprehensive assessment and treatment, not a substitute for it. Accordingly, in rural and remote areas, shortages and deficits in treatment...
services for alcohol problems need to be addressed. In urban centres, treatment services need to be made more accessible and culturally appropriate for Indigenous clients. In order to close the gap in life expectancy between Indigenous and non-Indigenous Australians arising from alcohol related disorders, mainstream treatment services and Indigenous community controlled agencies need to work in partnership to improve access to the full range of treatment services for alcohol problems among Aboriginal and Torres Strait Islander Australians.

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