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Mind the gap: what is the difference between alcohol treatment need and access for Aboriginal and Torres Strait Islander Australians?

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Introduction

Alcohol-related harms cause great concern to Aboriginal and Torres Strait Islander (Indigenous) communities in Australia as well as challenges to policy makers (1). Similar harms are experienced by other Indigenous peoples who have been colonised (2). This occurs in a context of ongoing experience of marginalisation, disempowerment and stress (2). For some families, cycles of transgenerational harm have been set up by past policies of child removal (2). In any population, treatment for alcohol dependence forms one component of the spectrum of measures to reduce alcohol's burden of harm. While severe alcohol dependence typically behaves as a chronic relapsing disorder (3), treatment can prolong remissions and shorten relapses (4). It provides benefits both to the drinker and to those around them. Treatment of alcohol dependence is also estimated to save governments money, with a benefit : cost ratio of 1.9 to 39.0 : 1 (5). However, health professionals and Indigenous communities have often advised of the unmet demand for alcohol treatment services and the difficulties Indigenous Australians face in accessing these. To rationally plan for adequate alcohol treatment services for Indigenous Australians (in terms of number of clients requiring treatment, treatment type and geographical distribution) more information is needed. This includes an estimation of the 'in-need' population and the demand for treatment. In this study we review existing evidence for the gap between treatment need and treatment access and suggest ways in which monitoring of this gap could be improved.

Determination of need for treatment services

Historically, alcohol treatment services have grown in an 'ad hoc' way in response to needs expressed or perceived in local populations and political pressures (6). More recently, attempts have been made to model the need for treatment services using data from surveys of alcohol consumption and related harms, on alcohol sales and on current service use (7). However, these models are limited by data availability and quality.

Alcohol consumption surveys

Current data on alcohol consumption among Indigenous Australians are of poor quality (8). The best available population data are from an urban survey conducted almost 20 years ago (9). Estimates from the largest national Indigenous social survey in 2008 (10) have been reported to underestimate alcohol consumption by over 200% for males and 700% for females (11). Furthermore, in population or general practice surveys to date, sample sizes of Indigenous Australians have been too small to provide estimates of regional or local variation, which are needed for service planning.

National population surveys have reported on quantity and frequency of drinking and not on alcohol dependence, which is likely to be a better indicator of treatment need. In a remote

Western Australian (WA) study, 33.5% of respondents met criteria for alcohol dependence compared with 4% in national general population surveys (12). That figure was very similar to the prevalence of dependence (32.5%) estimated in a 1991 WA study (13). More recently, in a prison setting, over two in every five Indigenous Australian inmates (42- 45%) were estimated to be dependent on alcohol (8). This is around twice the prevalence among non-Indigenous inmates (22–30%).

Prevalence of alcohol-related harms

Alcohol is responsible for major social disruption including family violence (1, 14) and crime. Nearly nine in ten Indigenous Australian contacts with the justice system are estimated to involve alcohol as a precursor (15). Indigenous Australians are also hospitalised for common alcohol-related diagnoses 2–8 times more often than their non-Indigenous counterparts (1). Recently, a high prevalence of fetal alcohol spectrum disorder has been reported in some Indigenous communities (16). Alcohol's harms to people other than the drinker are often poorly recorded so current data are likely be underestimates. Furthermore, there is a lack of publically available data on regional variation in harms.

How do we assess how well treatment needs are currently being met?

Consultation and data on specialist service access provide some information on likely unmet treatment need.

Consultation: community and workforce

The National Indigenous Drug and Alcohol Committee (NIDAC) has conducted regular, nationwide consultations with Indigenous communities and the alcohol and other drugs treatment workforce (17). In addition, networks of Indigenous specialist workers such as the Aboriginal Drug and Alcohol Network of New South Wales (18) have provided feedback. Each source has identified unmet demand for access to withdrawal management services, residential rehabilitation and for community-based on-going care (14). Women (in particular, those who are pregnant), families, young people and individuals with complex physical and mental health comorbidities have been identified as groups which face difficulties accessing treatment services for alcohol dependence. Unfortunately government funding for NIDAC was recently terminated (19), which has reduced capacity to monitor unmet treatment demand and need.

Who is accessing what treatments?

Another way to assess service need is to look at the numbers currently accessing treatment. In primary care settings, Indigenous Australians are over-represented among those accessing treatment for chronic alcohol problems (0.8 compared to 0.26 per 100 treatment

encounters for other Australians) (20). Similarly, in specialist substance use treatment services, 20% of episodes of care in which alcohol was the main drug of concern were for Indigenous clients in 2011-12 (21). This is despite Indigenous Australians comprising just 2.5% of the general population. In addition, Indigenous specific stand-alone substance use services collect data separately. In 2009-10, Indigenous specific residential services provided 2781 episodes of care (22), though figures for alcohol use disorders are not reported separately.

These Australian treatment service data are challenging to use for planning purposes. Firstly, service use reflects treatment access, which may be far less than the true level of need. Access typically reflects both desire for treatment (demand) and service accessibility and appropriateness. For individuals who have not yet thought about changing their drinking, quality screening and brief intervention in primary care may promote engagement, but the rate of systematic screening varies widely (23). An added difficulty with alcohol treatment service data, is that these are recorded by treatment episode rather than at the individual level. Accordingly, one 'end stage' dependent drinker may cycle repeatedly through treatment services and have multiple treatment episodes counted. On the other hand, others in need may have been unable to access treatment at all. Furthermore, some individuals who have been compelled to attend treatment by courts or child protection agencies, may or may not have appropriately sent to residential treatment.

Waiting lists provide another potentially useful indication of the gap between demand and accessibility. Around two-thirds of residential treatment and rehabilitation facilities had waiting lists in 2010-11 (24), although no data is available on expected waiting times or on those who are turned away. There are minimal population level data on access to alcohol treatment services. The 1991 WA study reported that although 63% of drinkers met CAGE criteria for likely dependence, only one in 20 had accessed specialist alcohol treatment (13).

Considerations once the population in-need is identified

As well as assessing the gap between treatment need and level of service provision, it is also important to assess whether available services are accessible and appropriate to the need. For example, there is reportedly a shortage of residential treatment services funded to a level which allows them to care for individuals with more complex needs (such as those with physical and psychiatric comorbidities or on opioid maintenance treatment) or services for women and or families (25). There are also many barriers to service access, ranging from an individual's lack of awareness of the risks from drinking, through to stigma, lack of transport and childcare, lack of service flexibility, and geographic and language barriers (25, 26). Long waiting times can also mean lost opportunities for change for individuals with dependence

and multiple life stressors (25). Services also need to be both culturally secure and to provide the full range of evidence-based care – both residential and non-residential.

When they do have treatment access, Indigenous Australians are likely to receive generic mainstream interventions whose effectiveness is unstudied within this population subgroup (27). There remains very limited evidence on specific treatment approaches which may work best for Indigenous Australians.

Currently, time-limited funding constrains the capacity of Indigenous specific (and some other) treatment services to attract and retain highly skilled staff (25). The recent trend for competitive tendering for alcohol treatment services pits community-controlled services against large, well-resourced non-government organisations. However, these non-government organisations may not have the breadth of cultural experience and cultural skills to effectively engage Indigenous clients and communities (28).

Recently some Australian jurisdictions have increased use of compulsory treatment or even imprisonment for ongoing drinking among those with chronic alcohol problems (29). This is of grave concern given the lack of convincing evidence that compulsory treatment or prison improve consumption- (or crime-) related outcomes (30). Compulsory treatment is also likely to differentially impact on Indigenous Australians, a group exposed to greater barriers to accessing voluntary treatment (25, 26). Anecdotally, increasing use of compulsory treatment is in itself further reducing voluntary access to already stretched services because of policies prioritising compulsory admissions. Further evidence of this effect needs to be gathered in a formal evaluation of current compulsory treatment policies.

Estimating unmet service need: can we do it better?

Although not yet in widespread use, a 'Drug and Alcohol Service Planning Model' has been developed in Australia to enable planners to estimate local need for treatment services for populations based on epidemiological estimates of harm by age group, demand for services, and expert advice (31, 32). The output of this model includes the number of people 'needing' treatment by age and drug type and the amount of other resources such as staff, beds and treatment facilities required. Similar modelling techniques have been used to estimate both alcohol (7) and mental health treatment service needs (33). However, this work is currently limited by the quality of survey and administrative data available. There are also assumptions regarding the optimal approaches to treat alcohol disorders in Indigenous people, and the ideal 'package of care' for this population is often based on expert opinion rather than evidence.

There is considerable potential to employ record linkage techniques to better geographically map treatment need and access as well as the impact of unmet need. For example linking an individual's contact with health, social and justice departments can help identify the population and health behaviours of those with a high burden of alcohol-related harms but who are not accessing treatment. There are already examples of this approach (34, 35) but it is not yet routinely used in health service planning. Record linkage is also limited by the quality of administrative data collection, which is often suboptimal, even for recording of Indigenous status. There remains significant under-ascertainment, which tends to reduce estimates of Indigenous disadvantage. This is because a large number of disadvantaged individuals are wrongly assigned to the non-Indigenous cohort. Improving identification by triangulating datasets (36) has been shown to improve estimates of disadvantage. For example, this approach significantly increased estimates of Indigenous death rates and reduced estimates of life expectancy compared to Western Australian death records (37). However, the inability to link some federal datasets, cost and time currently limit this approach. The increasing use of data repositories, in which data is already linked, may provide one solution (38).

Improving both administrative and survey data collection is key to increasing capacity to measure treatment service need. Working in partnership with communities is important to determine appropriate content and methods of data collection, including broadening sampling to include more marginalized members of the Aboriginal community (8).

Further research is also needed to optimize and then monitor approaches to treatment of alcohol use disorders to ensure that available treatment (Indigenous specific or mainstream) is appropriate and high quality (27). Cultural enhancement approaches reportedly can have great benefit in treatment of substance use problems among Indigenous Australians (39). There is further opportunity to describe and evaluate these, so that best practice cultural approaches can be meshed with the best of 'western' medicine.

Conclusion

There is evidence of a large gap between current need for alcohol treatment and its availability, which is contributing to ongoing harms to Indigenous Australians who continue to drink, and to those around them. To improve planning of alcohol treatment provision, more accurate measures of the in-need population (8, 11), the barriers to treatment access, and the unmet need and demand for treatment are required. Rethinking policies that may be contributing to this gap such as current funding models (28) and compulsory treatment may also assist in treatment provision. In addition there is a need to generate evidence to support optimal treatment strategies and best practice models.

Word count: 2083

References

1. Australian Institute of Health and Welfare. Substance use among Aboriginal and Torres Strait Islander people. Canberra: Australian Institute of Health and Welfare; 2011.
2. Kirmayer LJ, Brass GM, Tait CL. The mental health of Aboriginal peoples: transformations of identity and community. *Canadian Journal of Psychiatry*. 2000;45(7):607-16.
3. Gilpin NW, Koob GF. Neurobiology of alcohol dependence: focus on motivational mechanisms. *Alcohol research & health: the journal of the National Institute on Alcohol Abuse and Alcoholism*. 2008;31(3):185.
4. Weisner C, Matzger H, Kaskutas LA. How important is treatment? One-year outcomes of treated and untreated alcohol-dependent individuals. *Addiction*. 2003;98(7):901-11.
5. Popova S, Mohapatra S, Patra J, Duhig A, Rehm J. A literature review of cost-benefit analyses for the treatment of alcohol dependence. *International Journal of Environmental Research and Public Health*. 2011;8(8):3351-64.
6. Ford WE. Alcoholism and drug abuse service forecasting models: a comparative discussion. *Substance Use & Misuse*. 1985;20(2):233-52.
7. Crook G, Oei T. A review of systematic and quantifiable methods of estimating the needs of a community for alcohol treatment services. *Journal of Substance Abuse Treatment*. 1998;15(4):357-65.
8. Lee KSK, Chikritzhs T, Wilson S, Wilkes E, Gray D, Room R, et al. Better methods to collect self-reported alcohol and other drug use data from Aboriginal and Torres Strait Islander Australians. *Drug and Alcohol Review*. 2014.
9. Commonwealth Department of Human Services and Health. National Drug Strategy Household Survey: urban Aboriginal and Torres Strait Islander peoples supplement 1994. Canberra: Australian Government Publishing Service; 1996.
10. Australian Bureau of Statistics. National Aboriginal and Torres Strait Islander Social Survey 2008. Canberra: ABS; 2009.
11. Chikritzhs T, Brady M. Fact or fiction? A critique of the National Aboriginal and Torres Strait Islander Social Survey 2002. *Drug and Alcohol Review*. 2006;25(3):277-87.
12. Nadew G, Nadew G. Exposure to traumatic events, prevalence of posttraumatic stress disorder and alcohol abuse in Aboriginal communities. *Rural and remote health*. 2012;12(1667).
13. Hunter E, Hall W, Spargo R. Patterns of alcohol consumption in the Kimberley aboriginal population. *The Medical journal of Australia*. 1992;156(11):764-8.
14. [MCDS] Ministerial Council on Drug Strategy. National Drug Strategy: Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2009. Canberra: Commonwealth of Australia, 2006.
15. National Indigenous Drug and Alcohol Committee. Bridges and barriers: addressing Indigenous incarceration and health. Canberra: Australian National Council on Drugs; 2009.
16. Fitzpatrick JP, Latimer J, Carter M, Oscar J, Ferreira ML, Carmichael Olson H, et al. Prevalence of fetal alcohol syndrome in a population-based sample of children living in remote Australia: The Lililwan Project. *Journal of paediatrics and child health*. 2015.
17. National Indigenous Drug and Alcohol Committee. NIDAC Activities: Consultation Forums Canberra: Australian National Council on Drugs; nd [August 2014]. Available from: <http://www.nidac.org.au/activities.html>.
18. Aboriginal Health and Medical Research Council of New South Wales. ADAN (The Aboriginal Drug and Alcohol Network of NSW) 2010 [September 10, 2014]. Available from: http://www.ahmrc.org.au/index.php?option=com_content&view=article&id=16:adan&catid=14:programs&Itemid=17.
19. Morgan M. Government axes Indigenous drug advisory body 2014. Available from: <http://www.sbs.com.au/news/article/2014/12/19/government-axes-indigenous-drug-advisory-body>.
20. Britt H, Miller G, Charles J, Valenti L, Fahridin S, Pan Y, et al. General practice in Australia, health priorities and policy 1998 to 2008. Canberra: AIHW; 2009.
21. Australian Institute of Health and Welfare. Alcohol and other drug treatment services in Australia 2011-12. Canberra: AIHW; 2013.

22. Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander health services report 2009-10: OATSIH services reporting: key results. Canberra: Australian Institute of Health and Welfare; 2011.
23. Panaretto K, Coutts J, Johnson L, Morgan A, Leon D, Hayman N. Evaluating performance of and organisational capacity to deliver brief interventions in Aboriginal and Torres Strait Islander medical services. *Australian and New Zealand journal of public health.* 2010;34(1):38-44.
24. Deloitte Access Economics. An economic analysis for Aboriginal and Torres Strait Islander offenders: prison vs residential treatment. Canberra: 2012.
25. Gray D, Stearne A, Wilson M, Doyle M. Indigenous specific alcohol and other drug interventions: continuities, changes, and areas of greatest need. Canberra: A report prepared for the National Indigenous Drug and Alcohol Committee, 2010.
26. Conigrave K, Freeman B, Carroll T, Simpson L, Lee K, Wade V, et al. The Alcohol Awareness project: community education and brief intervention in an urban Aboriginal setting. *Health Promotion Journal of Australia.* 2012;23(3):219-25.
27. Gray D, Siggers S, Wilkes E, Allsop S, Ober C. Managing alcohol- related problems among Indigenous Australians: what the literature tells us. *Australian and New Zealand journal of public health.* 2010;34(s1):S34-S5.
28. Alford K. Economic value of Aboriginal Community Controlled Health Services. Canberra: National Aboriginal Community Controlled Health Organisation; 2014.
29. Buckley T. A criminal shift: Alcohol regulation in the Northern Territory. *Indigenous Law Bulletin.* 2014;8(12):20.
30. EM H, WD H, RM S. Patterns of alcohol consumption in the Kimberley aboriginal population. 1992.
31. National Indigenous Drug and Alcohol Committee. Report on the modification to the National Drug and Alcohol Clinical Care and Prevention (DA-CCP) project packages. Canberra: NIDAC; 2012.
32. Alcohol Tobacco and other Drug Association ACT. National Drug and Alcohol Clinical Care & Prevention (DA-CCP) Project: Alcohol Tobacco and other Drug Association ACT; 2014 [updated 16 April 2014; September 19, 2014]. Available from: <http://www.atoda.org.au/national-projects/national-drug-and-alcohol-clinical-care-prevention-daccp-project/>.
33. Pirkis J, Harris M, Buckingham W, Whiteford H, Townsend-White C. International planning directions for provision of mental health services. *Administration and Policy in Mental Health and Mental Health Services Research.* 2007;34(4):377-87.
34. Patterson KM, Holman CAJ, English DR, Hulse GK, Unwin E. First- time hospital admissions with illicit drug problems in Indigenous and non- Indigenous Western Australians: an application of record linkage to public health surveillance. *Australian and New Zealand Journal of Public Health.* 1999;23(5):460-3.
35. Burke V, Lee AH, Hunter E, Spargo R, Smith R, Beilin LJ, et al. Alcohol intake and incidence of coronary disease in Australian aborigines. *Alcohol and alcoholism.* 2007;42(2):119-24.
36. Thompson SC, Woods JA, Katzenellenbogen JM. The quality of Indigenous identification in administrative health data in Australia: insights from studies using data linkage. *BMC medical informatics and decision making.* 2012;12(1):133.
37. Draper GK, Somerford PJ, Pilkington ASA, Thompson SC. What is the impact of missing Indigenous status on mortality estimates? An assessment using record linkage in Western Australia. *Australian and New Zealand journal of public health.* 2009;33(4):325-31.
38. Holman CDAJ, Bass JA, Rosman DL, Smith MB, Semmens JB, Glasson EJ, et al. A decade of data linkage in Western Australia: strategic design, applications and benefits of the WA data linkage system. *Australian Health Review.* 2008;32(4):766-77.
39. Preuss K, Preuss K, Brown JN. Stopping petrol sniffing in remote Aboriginal Australia: key elements of the Mt Theo Program. *Drug and Alcohol Review.* 2006;25(3):189-93.