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**Submission for the
Northern Territory Alcohol Policies and Legislation Review**

**From the
Centre for Research Excellence: Indigenous Health and Alcohol**

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Executive Summary

The Northern Territory (NT) has the highest rate of risky alcohol consumption in Australia, with two in four Territorians (40%) drinking at a level that puts them at risk of injury or other harms at least once in the past month (compared with 26% nationally).¹

Based on the evidence presented in this submission, we make the following recommendations:

Control of alcohol supply

1. Supply restriction is one of the policy responses with the best international evidence base. However local and broader impacts of any measures need evaluation.
2. Controlling the supply of alcohol through price-based measures such as a minimum unit price per standard drink of alcohol is likely to reduce alcohol-related harms.
3. There is an association between density of licensed premises and harms from alcohol. Licensing authorities should review data on alcohol-related harms and the current density of licensed premises before providing additional liquor outlet licenses.
4. Risk-based conditions on licensing should be applied, whereby licensed premises with a higher density of alcohol-related incidents in the surrounding community or town, should have greater restrictions on volume of pure alcohol that can be sold and on opening hours.
5. Licensing conditions should be regularly reviewed based on local prevalence data on alcohol-related crimes and injuries.
6. Any restrictions to supply of alcohol should be based on local prevalence of alcohol-related crimes or injury and should apply equally to all individuals within those regions. Limits should never be based on race.
7. A range of options are available to restrict access to alcohol. Each has differing merits and disadvantages. Community input is integral in considering options (local or Territory-wide):
 - The banned drinker register
 - Permit system (for particularly remote regions), as per Groote Eylandt example
 - Caps to the amount of alcohol that any one individual can purchase each day
 - Restrictions to the opening hours of licensed premises.

Treatment

8. Increased availability of voluntary alcohol treatment is needed, including both community-based and residential options.
9. Treatment services, including residential services, need to be funded and staffed to cope with the real-life complexity of clients – i.e. complex comorbidities involving substance use and mental health disorders and poor physical health.

10. Residential withdrawal management ('detox') services need to be available in addition to rehabilitation services.
11. Residential services are needed that can accommodate families (in addition to the 'drinker'). Selecting just one individual from a family or group of drinkers means that when the drinker leaves the service, their social context is unchanged and there is a higher risk of them returning to drinking.
12. Territorians should have access to the full range of modern evidence-based treatments for alcohol problems (including skilled counselling, relapse prevention medications, and management of comorbid mental health conditions).
13. Improved availability to quality mental health care is needed, and integration of this with alcohol treatment services.
14. Community controlled health services need support to enhance their ability to provide evidence-based screening and treatment for unhealthy alcohol use.
15. It is ethically highly dubious to have mandatory treatment in settings without ready availability of voluntary treatment option.
16. Evidence that compulsory treatment can improve outcomes in alcohol use disorders is limited.
17. Any mandated treatment needs to be delivered in a manner that draws on the latest evidence base, and is delivered by skilled clinicians. Treatment should be culturally appropriate and translators available where needed.
18. Alcohol treatment services for Aboriginal and Torres Strait Islander peoples are more likely to be accessible if delivered in a culturally secure manner:
 - Indigenous health professionals have a key role in ensuring accessible and appropriate treatment. These workers need support for ongoing skills and career development. They also need job security.
 - Non-Indigenous health professionals need to work in partnership with Indigenous health professionals, community controlled agencies and communities to ensure that mainstream treatment services deliver care in an accessible and culturally secure manner.
19. Appropriate support and early childhood intervention is needed for individuals with FASD, as they are likely to be at increased risk of alcohol use disorders.
20. Increased support is needed for families caring for an individual with FASD.

Prevention and harm reduction

21. Meaningful activity and connectedness of young people (e.g. to culture, sport or education, training or work), combined with use of supply control initiatives show evidence of value in preventing substance misuse:
 - The government needs to support communities to enhance the resilience of young people, providing them with opportunities to develop a sense of connectedness, self-respect, identity and control over their environment. Such opportunities can be provided

through improved school and alternative education environments, involvement with culture, meaningful training and employment activities and recreational opportunities.

22. Education on alcohol harms alone is far less likely to be effective than efforts that combine social skills-based education, measures to increase youth resilience and supply restrictions.
23. As alcohol is known to damage the brain of the developing fetus (resulting in FASD), all containers of alcohol and all licensed premises should be required to display clear visual warnings about the risks of drinking while pregnant
24. Many communities have worked to reduce the impact of alcohol in their communities. These efforts need further support, and in particular support for:
 - Challenging inappropriate liquor licenses or efforts to impose conditions on licenses.
 - Developing better opportunities for young people to maximise their potential.

The legal system and alcohol consumption

25. There is little evidence that prison provides benefit to individuals with severe alcohol use disorder. Diversion into treatment or to constructive activity, and use of the banned drinker register, offer greater promise.
26. It is ethically concerning to imprison people who are dependent on alcohol purely for alcohol consumption, when continued drinking and loss of control over drinking are features of this condition.
27. Where people are imprisoned they should have access to quality treatment that is evidence-based for alcohol use and for mental health disorders.
28. Any compulsory treatment initiative should be administered jointly via the health system and the justice system. The justice system should not be responsible for deciding on the best treatment options.
29. Individuals with FAS and FASD should be directed to therapy rather than punishment.

Evaluation and monitoring

30. Quality data collection is needed on alcohol sales, alcohol consumption patterns and alcohol-related harms. These should then, along with alcohol sales data, be made available to researchers, policy makers, the licensing commission and community to better inform and monitor efforts to reduce harms from alcohol.
31. Further investment is needed in quality research into developing or evaluating promising prevention and treatment efforts.

Political decision making

32. The economic value of alcohol sales must come second to the value of health and quality of life.

33. The economic value of alcohol sales, and of employment in the hospitality industry, must be balanced against cost to individuals and families, health, police, the justice system and the social welfare system from alcohol-related harms.
34. Given the magnitude of alcohol-related harms in the Territory in both economic and human terms, there should be a ban on political donations from the alcohol industry. This will help ensure decision-making is in the best interest of the general population.
35. Decisions which disproportionately affect Aboriginal communities should be made in partnership with these communities. General decisions which impact on Aboriginal communities should be respectfully and carefully discussed with and (where possible) negotiated with these communities.
36. Community consultation should be conducted in a way that allows input from vulnerable sub-populations, for example, allowing safety for input from women who may be victims of alcohol-fuelled violence.
37. No solution should be discriminatory: It should be applied equally to Aboriginal or non-Aboriginal Territorians. Any solution which is discriminatory may contribute to marginalisation or disempowerment and so may increase the risk factors for alcohol-use disorders.
38. Alcohol-specific 'solutions' should be accompanied by measures which address risk factors for alcohol use disorders, such as poverty, shortage of quality housing, limited recreational and employment opportunities and (particularly among Aboriginal Australians) over-incarceration

SUBMISSION

Reducing alcohol-fuelled crime and improving safety of entertainment precincts

Alcohol is a major contributor to both public and domestic violence. Around Australia, alcohol is commonly associated with crime, including violent crime. In keeping with this, risky alcohol consumption is common among prison inmates. In NSW nearly two thirds (62%) of male and 40% of female inmates were drinking alcohol at risky levels in the year before imprisonment². A high proportion of men (35%) of men and of women (16%) were drinking at levels suggestive of alcohol dependence.

There is little evidence to suggest that imprisonment helps reduce alcohol-related recidivism. There is far greater evidence that treatment improves outcomes.³ In addition, the high prevalence of alcohol dependence among prisoners highlights the need for expansion of programs for diversion into treatment rather than into the criminal justice system. It also highlights the need for greater availability of comprehensive treatment options among the prison population, with quality aftercare⁴. In the NT, treatment also needs to be culturally appropriate and accessible to those for whom English is not their language at home. In addition voluntary treatment options in the community need to be readily available and high in quality.

In contrast, simple supply restrictions on alcohol, whether in urban or remote areas have shown marked reductions in alcohol-related crime (see below).

Fetal Alcohol Spectrum Disorders (FASD) and offending and crime

In Western Australia, a recent study of young people in juvenile justice detention found that up to a third have FASD.⁵ Some NT communities have a high prevalence of FASD⁶ and so FASD is likely to be a significant issue among offenders in the NT also.

Prevention efforts via community education on the risks of alcohol in pregnancy need to continue. Given that alcohol is a known teratogen, all containers of alcohol and all licensed premises should be required to display clear visual warnings about the risks of drinking while pregnant. Systematic screening and early discussion of risky alcohol misuse in women of childbearing age is needed in primary health care settings.

Throughout Australia there is a lack of access to treatment services for pregnant women who are dependent on alcohol. This situation is worse in remote settings. Pregnant women who are dependent on alcohol need access to quality treatment, including residential withdrawal management and rehabilitation where needed⁷. This requires appropriate funding and staffing of residential services and partnership between these and antenatal services. There is also a

pressing need for support for carers of children with FAS and FASD, improved detection and early intervention for individuals suffering FASD.

When individuals with FASD come before the courts, there is a need for more appropriate and compassionate handling of offenders with FASD by the justice system. The justice system needs access to quality screening for FASD, and appropriate services for care of inmates with cognitive impairment. Recurrent offenders with alcohol use disorders or FASD and cognitive or behavioural disorders, need long term support and appropriate accommodation and supervision.

Strategies to reduce alcohol-related crime and violence

Supply reduction initiatives: Have the best evidence base for effectiveness in reducing risky use of alcohol in any population.

There are many examples of successful community efforts to reduce supply of alcohol, either in urban non Indigenous^{8,9} or remote Indigenous settings^{10,11} around Australia. These have often resulted in striking reductions in crime or other harms¹⁰⁻¹². Such measures have included simple approaches such as limiting hours for sale of alcohol of licensed premises in urban areas^{8,9}, through to more complex methods such as permit systems^{10,11} in remote areas.

The rate of alcohol-related crime in a region can be used to regularly review licensing conditions for both on premise and off-premises liquor outlets, and to inform decisions for new liquor outlets. However if supply control is discriminatory (e.g. based on race) it could potentially increase sense of stress and disempowerment and disconnectedness. This may in fact result in increased risk of hazardous drinking.¹³⁻¹⁷

Pricing measures: Measures to regulate the minimum price for each standard drink of alcohol have a good evidence base.^{18,19}

Complete bans on alcohol for regions: In cases of severe alcohol-related violence, a community may request a total ban on alcohol, or it may be appropriate for an entire region to be declared alcohol-free by the liquor licensing authority. However where alcohol is banned completely, it becomes like an illicit drug with high profits to be made from 'sly grogging'. A complete alcohol ban can be difficult to enforce, particularly in less remote regions. There also can be flux of drinkers away to 'wet' towns, and risk of motor vehicle accidents related to drink driving on the return trip. Online ordering of alcohol raises additional challenges.

Supporting communities to challenge inappropriate supply of alcohol: It can be very difficult for a community to challenge inappropriate supply of alcohol or to seek supply reduction. The legal and

licensing environment is complex. This can be a particularly large barrier for disadvantaged communities. In NSW, a pilot project, the *Alcohol Community Action Project*²⁰ provided free legal support to communities which wished to address alcohol concerns.

It is important that if there is any objection to a new licensed premises that a public hearing be held. It can be challenging for women affected by alcohol-related violence to safely have a say in alcohol supply control hearings. Special arrangements may need to be made to hear their voice adequately. This occurred with the hearings for the Groote Eylandt alcohol management plan, where there were closed and secret hearings for women to allow them to safely speak out.¹⁰

Addressing social determinants of risky drinking, particularly among Aboriginal peoples:

Available data suggest that there are less current drinkers among Indigenous Australians than the remainder of the Australian population, but that those who do drink, are more likely to consume in a way that puts them at risk of long-term health problems (e.g. cancers, high blood pressure, diabetes and alcohol-related brain damage). This pattern of drinking has been linked to experience of trauma, loss, stress, unemployment, social disadvantage and racism²¹⁻²⁴. Indigenous communities themselves have identified limited employment, recreational and cultural opportunities as risk factors for substance misuse.²⁵

Experience of stress, particularly in childhood, can predispose an individual to alcohol use disorders.^{24,26,27} Even in animal experiments, stress induces craving for alcohol^{13,26}. Some of these effects are mediated through alterations to gene expression (i.e. epigenetic changes)^{26,27}. These new understandings are important reminders of the importance of addressing the root causes of stress and disadvantage and marginalisation among Aboriginal peoples.

In contrast to the role of stress and disempowerment in predisposing to alcohol use disorders, interventions that make young people (in the general population) feel more connected and empowered can make them less likely to develop substance use problems later in their teenage years²⁸. This is in keeping with reports from Indigenous communities that interventions to prevent or treat substance use that involve a broad range of approaches to engage and empower young people are more likely to prevent substance misuse.²⁹

Demand reduction among young people

In the past, many interventions that have attempted to reduce the demand for alcohol (or other drugs) among young people have focused on education about alcohol in schools^{30,31}. However there is variable evidence on the value of facts-based education to reduce alcohol-related harms³². Interventions which are skills-based, which increase connectedness, and prompt reflection, have shown greater evidence of effectiveness.³³ Indeed, several promising substance use prevention

initiatives internationally have little or no focus on education about substance use. Instead they are broader and include family-based or social influence and social competence interventions.³²

Building young people's connectedness in the school, family or community environment decreases the likelihood of engaging in risky behavior such as substance use.²⁸

Where supply control measures are combined with other broader efforts, (e.g. with cultural or recreational or training opportunities) these are likely to be beneficial.²⁹ The local community should be involved in program design, delivery and evaluation of such initiatives.³⁴

Programs need to be longer term rather than one-offs and should consider young people in and out of the school system.²⁹ Promising approaches for young people who already have substance use disorders, typically combine separation from the supply source of the substance combined with measures to increase resilience and sense of connection and identity, and control.^{29,35}

Many treatment and prevention programs initiated by Aboriginal communities include elements of cultural or spiritual enhancement,²⁹ and/or sport and recreational or training opportunities.^{29,35,36}

This fits well with international evidence on the importance of connectedness in building resilience in preventing alcohol problems among young people.²⁸ Programs also often offer young people alternatives to AOD use.²⁹

Alcohol advertising

There is growing evidence of the importance of alcohol advertising in its different forms in encouraging drinking among young people³⁷. Advertising in sport is of particular concern, given the importance of sporting heroes as role models to young people. Initiatives should provide alternatives to sports sponsorship by the alcohol industry, similar to support for replacement of tobacco sponsorship of sport.

Treatment

Increased access to evidence-based treatments for alcohol use disorders: There is an extensive international literature on best practice detection and management of alcohol misuse. The literature up to 2009 was summarised in the Australian national alcohol treatment guidelines.³⁸ These guidelines^{38,39} set out elements of evidence-based alcohol treatment. These include screening and early intervention, management of alcohol withdrawal, and the range of relapse prevention approaches including skilled counselling, relapse prevention medications and group-based approaches.

There is a need for expanded access to this full range of treatment options for all Territorians, including for Aboriginal peoples.⁴⁰ According to recurrent verbal reports from NT health

professionals, there is a lack of access to residential treatment, including for both withdrawal management (i.e. detoxification) and rehabilitation. This is worse for remote communities. Coordination is needed between withdrawal management and rehabilitation services, so that drinkers are not required to return home after detoxing while they await a bed in a rehabilitation unit. General hospitals should be able and willing to manage alcohol withdrawal as with any other medical condition, unless a more suitable detoxification service is available.

Lack of childcare is a recognised barrier to residential treatment⁴¹, and only limited NT treatment programs provide accommodation for women (or men) with children in their care. Many services target the individual drinker, whereas drinkers often consume alcohol with family or friends. Having treatment available to families (or groups) may increase chance of success.

Treatment services need to be funded and planned to be able to offer comprehensive care to individuals with mental and physical co-morbidity⁴². Well-defined links to specialist mental health and addiction services are also required (e.g. psychology, psychiatry, addiction medicine). There are severe shortages in specialist care, particularly in remote areas. Telehealth and training and support initiatives are needed to support workers in the field.

Services also need to be staffed and skilled to be able to accept clients with a criminal history. Otherwise clients with a history of alcohol-fuelled violence can be excluded from treatment programs that might help prevent future violence. There is a strong association between mental health disorders and alcohol use disorders. Each can exacerbate or cause the other. However, treatment of alcohol use disorders and mental health co-morbidity is typically poorly coordinated⁴³, with separate funding allocated for mental health and alcohol and other drug (AOD) services. This often results in considerable barriers for clients navigating health systems.^{43,44} Treatment needs to consider underlying issues of trauma, stress and grief, and be offered in a culturally appropriate framework.⁴⁵

Treatment initiatives in Aboriginal communities

Role of the Indigenous health professionals: Indigenous AOD workers are often the first point of contact for Indigenous people seeking help for AOD-related issues⁴⁶ and their relationship with local community can be a significant factor influencing whether individuals seek help⁴⁷. Indigenous workers also play a key role in tailoring AOD services to Indigenous peoples⁴⁸⁻⁵⁰ and making services more culturally secure.³⁴

However the roles of Indigenous AOD workers are typically diverse, complex and poorly defined.⁵¹ The demands placed on these workers are considerable^{52,53} and they are often asked to provide

help outside business hours.⁴⁶ Quality workplace training and support are needed⁵⁴⁻⁵⁶ to optimise the contribution of frontline health professionals, to reduce undue strain and burnout.⁵⁷

Aboriginal community controlled health services (ACCHSs) are particularly well placed to engage Indigenous people at risk of drinking problems. However, as with mainstream primary health services^{58,59}, there can be many barriers to providing evidence-based care for unhealthy alcohol use. This includes the complexity of physical, mental and social disorders that clients present with and time pressures. Further support and appropriate funding is needed to enhance the implementation of quality diagnosis and care of alcohol use disorders in ACCHS settings.

Mainstream (specialist) AOD treatment services have reported on the benefits of working in partnership with Aboriginal community controlled organizations or community representatives to improve the accessibility and appropriateness of service delivery.^{50,60} This approach should be supported to enhance two-way exchange of knowledge and skills.

The legal system and mandatory treatment

Mandatory treatment and imprisonment of banned drinkers

There is minimal evidence that imprisonment of problem drinkers is an effective way of changing their drinking or reducing recidivism. Furthermore, laws which punish a drinker with imprisonment simply for consuming alcohol raise serious ethical concerns. One reason for this is that a defining feature of alcohol dependence is loss of control over drinking⁶¹, if a person who is dependent on alcohol sees alcohol they may have a strong, and sometimes overpowering desire to consume it. Even when a dependent drinker can stop drinking it is hard for that person to maintain continuous abstinence. Periods of relapse to drinking are the norm. For example in one UK study, only one in six (15%) patients with alcohol dependence were able to maintain continuous abstinence for the 90 days after completing detoxification treatment, despite receiving ongoing counselling and social support⁶². The percentage who could maintain continuous abstinence was higher (41%) if relapse prevention medicines were provided, but still comprised under half the participants. Individuals with alcohol-related cognitive impairment have a further diminished capacity to control their urge to drink.

On the other hand, laws which prohibit such a dependent drinker from purchasing alcohol are less of a concern – as they may help reduce that strong desire, by reducing proximity to alcohol. Another concern with criminalising drinking is that sanctions are more likely to be applied to Indigenous Australians because of their lesser access to private locations for drinking compared to non-Indigenous Australians. Hence the law is also likely to be unevenly applied.

Where alcohol abstinence is required, e.g. as part of any law or as a condition of parole or bail conditions, it is essential that quality and appropriate alcohol treatment services be readily accessible, including residential services. Community-based treatment and support programs to support individuals after release from prison, or after leaving a residential treatment facility are important.

Political decision making

The economic value of alcohol sales must come second to the value of health and quality of life. Furthermore, economic income from sales or employment in the hospitality industry must be balanced against cost to individuals and families, health, police, the justice system and the social welfare system from alcohol-related harms.

Given the magnitude of alcohol-related harms in the Territory in both economic and human terms, there should be a ban on political donations from the alcohol industry. This will help ensure decision-making is in the best interest of the broader population.

Decisions which directly or disproportionately affect Aboriginal communities should be made in partnership with these communities. General decisions which impact on Aboriginal communities should be respectfully and carefully discussed with and (wherever possible) negotiated with these communities. Community consultation should be conducted in a way that allows input from vulnerable sub-populations, for example, allowing safety for input from women who may be victims of alcohol-fuelled violence.

As discussed above, no solution should be discriminatory: It should be applied equally to Aboriginal or non-Aboriginal Territorians. Any solution which is discriminatory may contribute to marginalisation or disempowerment and so may increase the risk factors for alcohol-use disorders.

Alcohol-specific 'solutions' should be accompanied by broader measures which address risk factors for alcohol use disorders, such as poverty, shortage of quality housing, limited recreational and employment opportunities and (particularly among Aboriginal Australians) over-incarceration

Monitoring and evaluation of efforts, and research

- Many past promising initiatives to address alcohol misuse have either not been evaluated, or evaluations have been inadequate (e.g. not planned from the start of initiatives, limited in scope, or done in an unrealistic time frame). Hence the literature has been slow to develop. Further funding for systematic and quality research in the field is needed.

- Evaluations should be designed and conducted in partnership with the relevant communities or community controlled health organisations, and in partnership with organisations with expertise in evaluation such as universities.
- Currently surveys that measure alcohol consumption and harms are severely limited, for example, with individuals needing to estimate drinking according to a measure of 'standard' drinks. Improved measures are needed to collect these data, then the data should help inform efforts for prevention and treatment of unhealthy drinking.
- Sales data and data on alcohol-related harms, including injury: should be publically available, and available to licensing authorities to inform decisions on new or existing licensing conditions.

References

1. Australian Institute of Health and Welfare. *2013 National Drug Strategy Household Survey*. Canberra: AIHW, 2014.
2. Indig D, Topp L, Ross B, et al. 2009 NSW inmate health survey: key findings report. *Justice Health, Sydney* 2010; 16.
3. Deloitte Access Economics. An economic analysis for Aboriginal and Torres Strait Islander offenders: prison vs residential treatment. ANCD research paper 24. A report prepared for the National Indigenous Drug and Alcohol Committee, Australian National Council on Drugs. Canberra, 2012.
4. National Indigenous Drug and Alcohol Committee. *Bridges and barriers: addressing Indigenous incarceration and health*. Canberra: Australian National Council on Drugs, 2009.
5. Telethon Kids Institute. 1 in 3 young people in detention has alcohol-related brain damage. Secondary 1 in 3 young people in detention has alcohol-related brain damage 2017. <https://www.telethonkids.org.au/news--events/news-and-events-nav/2017/march/1-in-3-young-people/>.
6. Elliott EJ, Payne J, Morris A, et al. Fetal alcohol syndrome: a prospective national surveillance study. *Archives of Disease in Childhood* 2008; 93: 732-737.
7. Conigrave KM, Lee KSK. Smoking or alcohol dependence among Indigenous Australians: treatment may be needed, not just education. *Heart, Lung and Circulation* 2012; 21: 626-631.
8. Menendez P, Tusell F, Weatherburn D. The effects of liquor licensing restriction on alcohol-related violence in NSW, 2008–13. *Addiction* 2015; 110: 1574-1582.
9. Menendez P, Weatherburn D, Kypri K, et al. Lockouts and last drinks: The impact of the January 2014 liquor licence reforms on assaults in NSW, Australia. *BOCSAR NSW Crime and Justice Bulletins* 2015: 12.
10. Conigrave KM, Proude E, d'Abbs P. An evaluation of the Groote Eylandt and Milyakburra Island Alcohol Management System. Darwin, NT: A report produced for the Department of Justice, Northern Territory Government, July 31, 2007 by University of Sydney, Menzies School of Health Research, Darwin, and James Cook University, 2007:68.
11. Gray D, Siggers S, Sputore B, et al. What works? A review of evaluated alcohol misuse interventions among Aboriginal Australians. *Addiction* 2000; 95: 11-22.
12. Elliott E, Latimer J, Fitzpatrick J, et al. There's hope in the valley. *Journal of Paediatrics and Child Health* 2012; 48: 190-192.
13. Enoch MA. The role of early life stress as a predictor for alcohol and drug dependence. *Psychopharmacology* 2011; 214: 17-31.
14. Casement MD, Shaw DS, Sitnick SL, et al. Life stress in adolescence predicts early adult reward-related brain function and alcohol dependence. *Social cognitive and affective neuroscience* 2014: nsu061.
15. Koob GF, Buck CL, Cohen A, et al. Addiction as a stress surfeit disorder. *Neuropharmacology* 2014; 76: 370-382.

16. Bond L, Patton G, Glover S, et al. The Gatehouse Project: can a multilevel school intervention affect emotional wellbeing and health risk behaviours? *Journal of Epidemiology and Community Health* 2004; 58: 997-1003.
17. Cheng H-L, Mallinckrodt B. Racial/ethnic discrimination, posttraumatic stress symptoms, and alcohol problems in a longitudinal study of Hispanic/Latino college students. *Journal of counseling psychology* 2015; 62: 38.
18. Hunt P, Rabinovich L, Baumberg B. Preliminary assessment of economic impacts of alcohol pricing policy options in the UK. Santa Monica, CA RAND Corporation, 2011.
19. Hogan E, Boffa J, Rosewarne C, et al. What price do we pay to prevent alcohol-related harms in Aboriginal communities? The Alice Springs trial of liquor licensing restrictions. *Drug and Alcohol Review* 2006; 25: 207-212.
20. ACAP. ACAP: Alcohol community action project. Secondary ACAP: Alcohol community action project 2014. <http://acap-nsw.org.au/>.
21. Marmot MG, Stansfeld S, Patel C, et al. Health inequalities among British civil servants: the Whitehall II study. *The Lancet* 1991; 337: 1387-1393.
22. Mulia N, Ye Y, Zemore SE, et al. Social disadvantage, stress, and alcohol use among black, Hispanic, and white Americans: findings from the 2005 US National Alcohol Survey. *Journal of studies on alcohol and drugs* 2008; 69: 824.
23. Australian Institute of Health and Welfare. *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples : an overview 2011*. Canberra: ABS, 2011.
24. Nadew G. Exposure to traumatic events, prevalence of posttraumatic stress disorder and alcohol abuse in Aboriginal communities. *Rural and Remote Health* 2012; 12.
25. Lee KSK, Conigrave KM, Clough AR, et al. Evaluation of a community driven preventive youth initiative in Arnhem Land, Northern Territory, Australia. *Drug and Alcohol Review* 2008; 27: 75-82.
26. Spanagel R, Noori HR, Heilig M. Stress and alcohol interactions: animal studies and clinical significance. *Trends in Neurosciences* 2014.
27. Niwa M, Jaaro-Peled H, Tankou S, et al. Adolescent stress-induced epigenetic control of dopaminergic neurons via glucocorticoids. *Science* 2013; 339: 335-339.
28. Bond L, Butler H, Thomas L, et al. Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health* 2007; 40: 357. e359-357. e318.
29. Lee KK, Jagtenberg M, Ellis CM, et al. Pressing need for more evidence to guide efforts to address substance use among young Indigenous Australians. *Health Promotion Journal of Australia* 2013; 24: 87-97.
30. Johnston F, Beecham R, Dalgleish P, et al. The Maningrida 'Be Smoke Free'Project. *Health Promotion Journal of Australia* 1998; 8: 12-17.
31. Sheehan M, Schonfeld C, Hindson E, et al. Alcohol education in an Indigenous community school in Queensland, Australia. *Drugs: Education, Prevention, and Policy* 1995; 2: 259-273.
32. Foxcroft D, Ireland D, Lowe G, et al. Primary prevention for alcohol misuse in young people. *The Cochrane Library* 2011.
33. Teesson M, Newton NC, Barrett EL. Australian school-based prevention programs for alcohol and other drugs: A systematic review. *Drug and Alcohol Review* 2012; 31: 731-736.
34. [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.
35. Preuss K, Napanangka Brown J. Stopping petrol sniffing in remote Aboriginal Australia: key elements of the Mt Theo Program. *Drug and Alcohol Review* 2006; 25: 189-193.
36. Cairnduff S. *Sport and recreation for Indigenous youth in the Northern Territory: scoping research priorities for health and social outcomes*. Darwin: Cooperative Research Centre for Aboriginal and Tropical Health and Australian Sports Commission, 2001.
37. Paschall MJ, Grube JW, Kypri K. Alcohol control policies and alcohol consumption by youth: a multi-national study. *Addiction* 2009; 104: 1849-1855.

38. Haber P, Lintzeris N, Proude E, et al. Guidelines for the treatment of alcohol problems. Canberra: Prepared for the Australian Government Commonwealth Department of Health and Ageing, 2009:232.
39. Haber P, Lintzeris N, Proude E, et al. Quick reference guide to the treatment of alcohol problems: companion document to the guidelines for the treatment of alcohol problems. Canberra: Prepared for the Australian Government Commonwealth Department of Health and Ageing, 2009:9.
40. Brett J, Lee KSK, Gray D, et al. Mind the gap: What is the difference between alcohol treatment need and access for Aboriginal and Torres Strait Islander Australians? *Drug and Alcohol Review* 2015; 35: 456–460.
41. Conigrave K, Freeman B, Carroll T, et al. The Alcohol Awareness project: community education and brief intervention in an urban Aboriginal setting. *Health Promotion Journal of Australia* 2012; 23: 219-225.
42. Nagel T, Kavanagh D, Barclay L, et al. Integrating treatment for mental and physical disorders and substance misuse in Indigenous primary care settings. *Australasian Psychiatry* 2011; 19: S17-S19.
43. Canaway R, Merkes M. Barriers to comorbidity service delivery: the complexities of dual diagnosis and the need to agree on terminology and conceptual frameworks. *Australian Health Review* 2010; 34: 262-268.
44. Holt M, Australian Injecting and Illicit Drug Users League. *Barriers and incentives to treatment for illicit drug users with mental health comorbidities and complex vulnerabilities*. Canberra: Australia. Department of Health and Ageing, 2007.
45. Berry SL, Crowe TP. A review of engagement of Indigenous Australians within mental health and substance abuse services. *Australian e-Journal for the Advancement of Mental Health (AeJAMH)[serial on the Internet]* 2009; 8.
46. Ella S, Lee K, Childs S, et al. Who are the New South Wales Aboriginal drug and alcohol workforce? A first description. *Drug and alcohol review* 2015; 34: 312-322.
47. Mitchell M, Hussey LM. The Aboriginal health worker. *Medical Journal of Australia* 2006; 184: 529.
48. Williams N, Nasir R, Smither G, et al. Providing opioid substitution treatment to Indigenous heroin users within a community health service setting in Adelaide. *Drug and Alcohol Review* 2006; 25: 227-232.
49. Taylor K, Bessarab D, Hunter L, et al. Aboriginal-mainstream partnerships: exploring the challenges and enhancers of a collaborative service arrangement for Aboriginal clients with substance use issues. *BMC Health Services Research* 2013; 13.
50. Teasdale KE, Conigrave KM, Kiel KA, et al. Improving services for prevention and treatment of substance misuse for Aboriginal communities in a Sydney Area Health Service. *Drug and Alcohol Review* 2008; 27: 152-159.
51. Rose M, Pulver LRJ. Aboriginal Health Workers: professional qualifications to match their health promotion roles. *Health Promotion Journal of Australia* 2004; 15: 240-244.
52. Roche A, Tovell A, Weetra D, et al. *Stories of resilience: Indigenous Alcohol and Other Drug Workers' wellbeing, stress, and burnout*. Adelaide SA: National Centre for Education and Training on Addiction (NCETA), Flinders University, 2010.
53. Roche AM, Duraisingam V, Trifonoff A, et al. Sharing stories: Indigenous alcohol and other drug workers' well-being, stress and burnout. *Drug and Alcohol Review* 2013; 32: 527–535.
54. Ask A, Roche A. Clinical supervision: A practical guide for the alcohol and other drugs field. *National Centre for Education and Training on Addiction, Flinders University, Adelaide, Australia* 2005.
55. Kavanagh DJ, Spence SH, Wilson J, et al. Achieving effective supervision. *Drug and Alcohol Review* 2002; 21: 247-252.
56. Health Workforce Australia. *National Clinical Supervision Support Framework*. Adelaide: Health Workforce Australia, 2011.
57. Brunero S, Stein-Parbury J. The effectiveness of clinical supervision in nursing: an evidenced based literature review. *Australian Journal of Advanced Nursing* 2008; 25: 86-94.
58. Anderson P, Kaner E, Wutzke S, et al. Attitudes and management of alcohol problems in general practice: descriptive analysis based on findings of a World Health Organization international collaborative survey. *Alcohol & Alcoholism* 2003; 38: 597-601.

59. Reid ALA, Webb GR, Hennrikus D, et al. General practitioners' detection of patients with high alcohol intake. *British Medical Journal* 1986; 293: 735-737.
60. Allan J, Campbell M. Improving access to hard-to-reach services: a soft entry approach to drug and alcohol services for rural Australian Aboriginal communities. *Social Work in Health Care* 2011; 50: 443-465.
61. World Health Organization. *The ICD-10 classification of mental and behavioural disorders. Clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization, 1992.
62. Pelc I, Verbanck P, Le Bon O, et al. Efficacy and safety of acamprosate in the treatment of detoxified alcohol-dependent patients. A 90-day placebo-controlled dose-finding study. *The British Journal of Psychiatry* 1997; 171: 73-77.