

Fetal alcohol spectrum disorder and Aboriginal and Torres Strait Islander men: A discussion to be had

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Abstract

Fetal alcohol spectrum disorder (FASD) is a lifelong disability of varying severity that occurs among individuals prenatally exposed to alcohol. Among Aboriginal and Torres Strait Islander (Indigenous) Australians, the effects of colonisation and ongoing racism could increase the risk of alcohol consumption during pregnancy. Much of the research and the effort towards prevention of and caring for people with FASD in Indigenous communities has been targeted towards women and children. More support and effort towards prevention of FASD is needed across the whole Indigenous community. In this paper, we discuss several areas for increased involvement by Indigenous men in future FASD research, prevention, care and support.

KEYWORDS

Aboriginal and Torres Strait Islander men, care and support, fetal alcohol spectrum disorder, health promotion, prevention

1 | INTRODUCTION

Fetal alcohol spectrum disorder (FASD) is for life, people with FASD can have tremendous strengths which can include being creative and artistic, determined and sociable, though some individuals with FASD face challenges that require on-going support [1]. FASD can affect any person exposed to alcohol while in utero with only a minimal amount of alcohol required [1]. Contributing factors for FASD occurrence among Indigenous Australians include intergenerational trauma from colonisation, and

the associated ongoing experiences of discrimination and racism which on an individual level can contribute to poorer mental health and possibly increased risky alcohol consumption [2, 3]. Addressing the underlying causes of risky alcohol consumption should be part of FASD interventions in Indigenous communities.

There has been a call internationally for more effort towards including men in FASD prevention [4]. In Australia the cultural separation between women's and men's business which is a commonality across our many Indigenous cultures may mean men are reluctant to be

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involved with FASD. This is particularly the case during pregnancy and early childcare which is often seen as women's business. However, the cultures of Australia's many Indigenous peoples are living and dynamic so the current generation of Indigenous fathers may have their own perspectives.

Efforts are needed to increase the involvement of Indigenous men in FASD research, prevention, screening and diagnosis, and the care and support programs. A systematic review of FASD prevention research in Indigenous communities internationally found 10 peer-reviewed studies ever published till 2017, with there being just 1 Australian study [5]. None of the studies were specifically related to men. In our paper, we discuss just a few of the areas that could benefit from greater involvement of Indigenous men.

2 | COMMUNITY-BASED PREVENTION

Further and better resourced health promotion aimed at Indigenous men about prevention during preconception and prevention during pregnancy is needed [6, 7]. To inform the development of health promotion resources and campaigns, more needs to be understood about the alcohol consumption of couples. A research project led by men using yarning and other culturally safe research methods could provide insights into perceptions of alcohol consumption during pregnancy [8]. This would be important because the alcohol consumption of men can influence that of their partner [9–11].

Prevention messages for FASD could help reduce occurrences and that of other cognitive issues. Alcohol consumption can cause changes to genetic material contributed by fathers and such changes could independently, from maternal alcohol consumption, result in cognitive and other physical health impacts similar to FASD [12]. Over consumption of alcohol can at times add to, or result in the creation of a stressful environment, with high levels of stress in utero posing a risk to an unborn child [13]. Additionally, high levels of stress in early childhood can increase the possibility of development of impulsive behaviour and increase the possibility of alcohol and/or other drug use issues later in life [14].

There are some FASD health promotion resources directed towards men [15, 16], though this is not generally the case [15]. A good example is a program in the Ord Valley area of the Kimberley region of Western Australia which had positive results from conducting education workshops and community outreach education programs [17]. This program was found to be valued by men, as it gave them information about FASD and

encouraged them to be actively involved in taking responsibility for pregnancy from conception and to actively support their partners by abstaining from alcohol [17]. Unfortunately, almost none of the current health promotion resources appear to have been evaluated, which is not uncommon in Indigenous health promotion more generally [18]. A scoping review could develop an understanding of what resources have been evaluated, what resources need updating and what resources have been designed by or co-designed with Indigenous men. The scoping review could be used to help with planning at regional, state and national levels to ensure complete coverage of the population in future health promotion campaigns. The lived experience and stories of Indigenous people with FASD has received some exploration and could provide important insights to assist with prevention messaging and health promotion campaigns [19].

A new national health promotion campaign for Indigenous men aimed at preventing FASD would be valuable. Such a campaign would need involvement of Indigenous men and women, as careful consideration and a risk management assessment is needed when developing health promotion programs and materials. This will minimise the potential for messages that could be unintentionally misconstrued and have an adverse effect [20, 21]. For example, careful consideration is needed to ensure that Indigenous fathers, or men generally, are not portrayed as all having drinking problems that need to be addressed. Another factor to consider is that health promotion alone is often not enough to change behaviour, and it is most effective when messaging is backed with easily accessible support from health professionals.

3 | CLINICAL CARE

Further understanding of how to optimise the attendance of Indigenous fathers at antenatal care appointments is needed. Additionally, a better understanding of how to provide culturally secure and suitable antenatal care for Indigenous fathers is needed. Often Indigenous fathers are not invited to attend, or when they are present, are not included in the discussion during the consultation [22]. This is unfortunate because many Indigenous fathers are willing to engage in antenatal care and to change their own health and social behaviour as needed [22, 23]. Another challenge is that many health professionals are reluctant to raise alcohol consumption during a standard consultation [24]. Culturally relevant screening tools that could help facilitate the conversation and more accurately gauge alcohol consumption for Aboriginal patients exist [25], however, there needs to be

support to make these screening tools widely available. It would be beneficial if there was a greater understanding of what types of brief interventions work best with Indigenous fathers and when and how to refer them onto support services.

For Indigenous men, just like other Indigenous and non-Indigenous community members, health education and brief interventions are most effective when they are conveyed at the right time [22, 23], which is often referred to as a teachable moment [23]. Indigenous men are likely the best at knowing when and what kind of messages need to be delivered to their peers [26]. However, having the resources to employ Indigenous men with the right qualifications could be a challenge, particularly in regional and remote areas where access to services, including antenatal care are often minimal.

4 | MEN WITH FASD AND THE CRIMINAL JUSTICE SYSTEM

Many men with FASD have healthy and fulfilling lives, though for some men with FASD could present lifelong challenges for them and their family. If FASD is not diagnosed during childhood, then it is less likely that any relevant supports will be provided [19]. Young people with FASD can and will thrive given the right conditions, however, such nurturing environments are not always present. Some men with FASD have low levels of formal education because the education system did not support their development in an optimal way. Often people with low levels of formal education have difficulty gaining employment, and this can mean they are more likely to have unstable accommodation. Other additional factors that increase likelihood of contact with the criminal justice system include that people with FASD can at times be unaware that their actions are not appropriate, for example being too affectionate [27]. Trusting in one's friends is generally a good quality; however, this may have negative effects if these friends do not have the same good intentions [27]. These and other factors can increase the risk of involvement in the criminal justice system [1].

With a lack of training and understanding, police and other statutory services may not suspect FASD as a possible reason why a young person is coming into frequent contact with the criminal justice system [27, 28]. Such a misunderstanding on the part of the adults can set up what could become a lifelong oppositional relationship between the young person and the criminal justice system [29]. A study of FASD prevalence in a Western Australian Juvenile Detention Centre, found nearly half

($n = 34$, 47%) of the 73 Indigenous participants had FASD, only two of who had been diagnosed with FASD prior to the study [30].

There have been no Australian studies into the occurrence of FASD in the Indigenous adult prison population. Research from Canada indicates an elevated prevalence of FASD among the adult prison population [31, 32]. A 2011 study reported 1 in 10 ($n = 9$, 9.9%) of 91 participants had FASD all of whom were Indigenous Canadian [31]. A 2017 study reported 14 (17.5%) of 80 participants had FASD with three-quarters being Indigenous Canadian [32]. Undertaking a similar study in Australia would seem prudent, particularly for Indigenous Australians who make up over 30% of all prison inmates [33]. If men with FASD are ending up in prison, then this needs to be addressed as an urgent matter of social justice.

5 | CONCLUSION

This article has raised just a few aspects of FASD that we believe require some further thought. We outline just three areas here for possible further research. Firstly, further research into FASD prevention initiatives directed at Indigenous men would be valuable, this should include evaluation of health promotion initiatives and a scoping review being conducted to identify gaps in health promotion coverage. Secondly, Indigenous men are often willing to engage in antenatal care, although they are often excluded, as such research is needed to better understand how to provide engaging and culturally secure antenatal care for Indigenous fathers. Part of this will be to understand how best to rollout the culturally appropriate and validated screening tools for alcohol consumption in health care clinics. And thirdly, research is needed to better understand the occurrence of FASD among men in prison, given the overrepresentation of Indigenous men in prison such a study would have particular importance for this group. If the occurrence of FASD in prison is found to be frequent, then research into how to prevent imprisonment of men with FASD would urgently be needed as a matter of human rights. We believe, the way forward for these areas is bringing together experts and Indigenous community members to co-design FASD prevention initiatives and encourage further engagement of Indigenous men in this work.

AUTHOR CONTRIBUTIONS

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CONFLICT OF INTEREST STATEMENT

There were no conflicts of interest held by any of the authors.

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REFERENCES

- Hamilton S, Doyle M, Bower C. Review of fetal alcohol Spectrum disorder (FASD) among Aboriginal and Torres Strait Islander people. *Aust Indig Health Bulletin*. 2021;2:1–40.
- Gentile V, Carter A, Jobson L. Examining the associations between experiences of perceived racism and drug and alcohol use in Aboriginal Australians. *J Aust Indig HealthInfoNet*. 2022;3:3–18.
- Skewes MC, Blume AW. Understanding the link between racial trauma and substance use among American Indians. *Am Psychol*. 2019;74:88–100.
- Gearing RE, McNeill T, Lozier F. Father involvement and fetal alcohol spectrum disorder: developing best practices. *J FAS Int*. 2005;3:1–11.
- Symons M, Pedruzzi RA, Bruce K, Milne E. A systematic review of prevention interventions to reduce prenatal alcohol exposure and fetal alcohol spectrum disorder in Indigenous communities. *BMC Public Health*. 2018;18:1227.
- Reid N, Schölin L, Erng MN, Montag A, Hanson J, Smith L. Preconception interventions to reduce the risk of alcohol-exposed pregnancies: a systematic review. *Alcohol Clin Exp Res*. 2021;45:2414–29.
- National Health and Medical Research Council, Australian Research Council, Universities Australia. Australian guidelines to reduce health risks from drinking alcohol. Canberra, Australia: Commonwealth of Australia; 2020.
- Geia LK, Hayes B, Usher K. Yarning/Aboriginal storytelling: towards an understanding of an Indigenous perspective and its implications for research practice. *Contemp Nurse*. 2013;46:13–7.
- Bakhireva LN, Wilsnack SC, Kristjanson A, Yevtushok L, Onishenko S, Wertelecki W, et al. Paternal drinking, intimate relationship quality, and alcohol consumption in pregnant Ukrainian women. *J Stud Alcohol Drugs*. 2011;72:536–44.
- Bartel SJ, Sherry SB, Molnar DS, Mushquash AR, Leonard KE, Flett GL, et al. Do romantic partners influence each other's heavy episodic drinking? Support for the partner influence hypothesis in a three-year longitudinal study. *Addict Behav*. 2017;69:55–8.
- Wolfson L, Harding K, Poole N. The role of partners in fetal alcohol spectrum disorder prevention. Vancouver, Canada: CanFASD; 2019.
- Ouko LA, Shantikumar K, Knezovich J, Haycock P, Schnugh DJ, Ramsay M. Effect of alcohol consumption on CpG methylation in the differentially methylated regions of H19 and IG-DMR in male gametes—implications for fetal alcohol spectrum disorders. *Alcohol Clin Exp Res*. 2009;33:1615–27.
- Talge NM, Neal C, Glover V. Antenatal maternal stress and long-term effects on child neurodevelopment: how and why? *J Child Psychol Psychiatry*. 2007;48:245–61.
- Archer T, Oscar-Berman M, Blum K, Gold M. Neurogenetics and epigenetics in impulsive behaviour: impact on reward circuitry. *J Genet Syndr Gene Ther*. 2012;3:1000115.
- Williams HM, Percival NA, Hewlett NC, Cassady RBJ, Silburn SR. Online scan of FASD prevention and health promotion resources for Aboriginal and Torres Strait Islander communities. *Health Promot J Austr*. 2018;29:31–8.
- Casey W. Strong Spirit strong mind model informing policy and practice. Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice. 2nd ed. Barton, ACT: Commonwealth of Australia; 2014. p. 588.
- Bridge P. Ord valley Aboriginal health service's fetal alcohol spectrum disorders program: big steps, solid outcome. *Aust Indig Health Bulletin*. 2011;11:1–8.
- McCalman J, Tsey K, Bainbridge R, Rowley K, Percival N, O'Donoghue L, et al. The characteristics, implementation and effects of Aboriginal and Torres Strait Islander health promotion tools: a systematic literature search. *BMC Public Health*. 2014;14:712.
- Williams RD. Understanding fetal alcohol spectrum disorder (FASD) through the stories of Nyoongar families and how can this inform policy and service delivery. Perth, Australia: Curtin University; 2018.
- Guttman N, Kegler M, McLeroy KR. Health promotion paradoxes, antinomies and conundrums. *Health Educ Res*. 1996;11:i–xiii.
- Gugglberger L. Can health promotion also do harm?. *Health Promotion International*. 2018;33:557–60.
- Carlin E, Cox Z, Spry E, Monahan C, Marley JV, Atkinson D. "When I got the news": Aboriginal fathers in the Kimberley region yarning about their experience of the antenatal period. *Health Promot J Austr*. 2021;32:513–22.
- Gould GS, Munn J, Avuri S, Hoff S, Cadet-James Y, McEwen A, et al. "Nobody smokes in the house if there's a new baby in it": Aboriginal perspectives on tobacco smoking in pregnancy and in the household in regional NSW Australia. *Women Birth*. 2013;26:246–53.
- Haber PS, Riordan BC. Guidelines for the treatment of alcohol problems. 4th ed. Sydney, Australia: The University of Sydney; 2021.
- Lee K, Conigrave JH, Callinan S, Wilson S, Room R, Perry J, et al. Asking about the last four drinking occasions on a tablet computer as a way to record alcohol consumption in Aboriginal and Torres Strait Islander Australians: a validation. *Addict Sci Clin Pract*. 2019;14:15.

26. Canuto K, Wittert G, Harfield S, Brown A. "I feel more comfortable speaking to a male": Aboriginal and Torres Strait Islander men's discourse on utilizing primary health care services. *Int J Equity Health*. 2018;17:185.
27. Gagnier KR, Moore TE, Green JM. A need for closer examination of FASD by the criminal justice system: has the call been answered? *J Popul Ther Clin Pharmacol*. 2011;18:e426–39.
28. Blagg H, Tulich T. Diversionary pathways for Aboriginal youth with fetal alcohol spectrum disorder. *Trends and Issues in Crime and Criminal Justice [Electronic Resource]*. Canberra, Australia: The Australian Institute of Criminology; 2018;557: 1–15.
29. Frick PJ, Lahey BB, Loeber R, Tannenbaum L, Van Horn Y, Christ MAG, et al. Oppositional defiant disorder and conduct disorder: a meta-analytic review of factor analyses and cross-validation in a clinic sample. *Clin Psychol Rev*. 1993;13:319–40.
30. Bower C, Watkins RE, Mutch RC, Marriott R, Freeman J, Kippin NR, et al. Fetal alcohol spectrum disorder and youth justice: a prevalence study among young people sentenced to detention in Western Australia. *BMJ Open*. 2018;8:e019605.
31. MacPherson PH, Chudley AE, Grant BA. In: Canada CS, editor. *Fetal alcohol spectrum disorder (FASD) in a correctional population: prevalence, screening and characteristics*. Ottawa: Canada. Addictions Research Centre; 2011.
32. McLachlan K. In: Justice YD, editor. *Fetal alcohol spectrum disorder in Yukon corrections*. Whitehorse, Canada: Addictions Research Centre is the publisher; 2017.
33. Australian Bureau of Statistics. *Prisoners in Australia 2022*. Canberra: Australia Australian Bureau of Statistics; 2023.

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