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Intellectual Disability in the Australian Aboriginal Population: A Critical Review

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Introduction

Modern Australian Aboriginal people directly descended from the original human inhabitants of Australia (Rasmussen et al., 2011). Aboriginal people historically lived in distinct hunter-gatherer communities with unique languages, cultural practices and beliefs (Roy and Balaratnasingam, 2011). The Australian Aboriginal culture places great importance on “The Dreaming” as the origin of the known universe and gives emphasis to an individual’s spiritual connection to the terrain. The arrival of British Colonial Forces, on Australian soil, on the First Fleet in 1788 is identified as the starting point of a traumatic experience for the Australian Aboriginal peoples. The colonization of Australia and the spread of illness and conflict were major contributing factors to a significant death toll in the Australian Aboriginal population from 1778 to 1900 (Healey, 2014; Roy and Balaratnasingam, 2011). The introduction of substances such as alcohol and tobacco have led to substance misuse in the Australian Aboriginal population that persist to this day. Surviving Australian Aboriginal people were segregated to reserves and had their rights administered by Aboriginal Protection Boards (Commonwealth of Australia, 1997; Healey, 2014). Australian Aboriginal children were forcefully separated from their families in what is known as the “Stolen Generation” (Commonwealth of Australia, 1997). These mistreatments have since been acknowledged by the government of Australia with a formal apology in 2008.

Today, there remains a significant difference in the socioeconomic and health status of Aboriginal Australians and non-Indigenous Australians (Australian Institute of Health and Welfare, 2018, 2019; Healey, 2014; Roy and Balaratnasingam, 2011). This is thought to be attributable to the historical traumatic experiences of the Australian Aboriginal people and perpetuated today due to socioeconomic factors (Healey, 2014). People caught up in the “Stolen Generation” were twice as likely to have their income consist mainly of government payments, having been incarcerated or having objectively measured poor health indicators (Australian Institute of Health and Welfare, 2018). There is also an established difference in life expectancy between Aboriginal Australians and non-Indigenous Australians of approximately 8 years (Australian Institute of Health and Welfare, 2019). A national effort to eliminate inequalities between Indigenous and non-Indigenous Australians known as “Closing the Gap” was started in 2007. It has been reported in 2018 that Australia has met targets for improvement in Aboriginal child mortality rates and education rates in children, but is not on track to meet other targets including the target to “close the gap in life expectancy by 2031” (Commonwealth of Australia and Turnbull, 2018: pp. 9).

Intellectual Disability is defined by the World Health Organization (2021) in the International Classification of Diseases and Related Health Problems, 11th Revision (ICD-11) as:

a group of etiologically diverse conditions originating during the developmental period characterised by significantly below average intellectual functioning and adaptive behaviour that are approximately two or more standard deviations below the mean (approximately less than the 2.3rd percentile), based on appropriately normed, individually administered standardized tests.

Intellectual Disability is diagnosed before the age of 18. It is measured by the Intelligence Quotient via a standardized assessment tool but must also take into account the behavioural and social difficulties associated with cognitive deficits. In most cases of Intellectual Disability, no specific cause is found. There may be a complex interplay of multiple

factors linked to Intellectual Disability such as perinatal infections, maternal substance use in pregnancy, genetic conditions and trauma (Roy and Balaratnasingam, 2014).

It is thought that psychiatric disorders are more commonly diagnosed in patients with Intellectual Disability as compared to the general population. It has been noted that “up to two-thirds of children and adults with Intellectual Disability have co-morbid psychiatric disorders” (Sadock et al., 2015: pp. 1121). White et al. (2005) noted similarly in the general Australian population that people with Intellectual Disability are more likely to develop co-morbid psychiatric disorders.

As of the 2016 Australian Census, Aboriginal and Torres Strait Islanders are estimated to represent 3.3% of the total population of Australia (Australian Bureau of Statistics, 2018). However, it is reported that 5.9% of Aboriginal and Torres Strait Islanders disproportionately suffer from an Intellectual Disability as opposed to 2.5% of non-Indigenous Australians (Australian Bureau of Statistics, 2017). No specific cause has been noted that would explain why the prevalence of Intellectual Disability in Australian Aboriginal population is more than double that of the non-Indigenous Australian population.

Of note, Roy and Balaratnasingam (2014) have completed a literature review on this topic in 2014. It summarizes the known evidence base at the time and provides areas for further research. This review aims to build on the current evidence base for Intellectual Disability specific to the Australian Aboriginal population summarized by Roy and Balaratnasingam in 2014, to investigate if any changes to the evidence base have occurred and to identify areas where further research is required.

Method

Literature Review

A search of MEDLINE and PsycINFO was conducted with Ovid. The search terms used were “Intellectual Disability” AND “Aborigi\$” AND “Australia\$”. The results were limited to the English Language and humans only. This yielded 43 results. Including the search term “Indigenous” using the AND function with the above terms yielded only 12 results, and these results can all be found in the previous 43 results.

Of the 43 results, 17 results were excluded because 7 results were duplicates, 6 results were not specifically related to the field of psychiatry, and 4 results were of articles published more than 30 years ago. Of the 26 relevant results included in the search, there were 3 literature reviews, 2 editorials, 1 qualitative analysis, 7 cross-sectional studies, 7 ecological studies and 6 retrospective cohort studies. All abstracts of these results were reviewed, and most full texts were reviewed. 16 studies are included in this review, comprising of 4 cross-sectional studies, 7 ecological studies and 5 retrospective cohort studies. 2 studies, a retrospective cohort study and a cross-sectional study were excluded as they involved the Australian Aboriginal population but were not specific to Intellectual Disability. 2 cross sectional studies were excluded as they investigated coding and data collection in Intellectual Disability in the Australian Aboriginal population. In comparison, the literature review by Roy and Balaratnasingam (2014) included 19 studies in their review.

Results

We identified 3 main topics that the 16 studies encompassed.

Disproportionate Representation of Intellectual Disability in Australian Aboriginal Population

We identified 7 studies generally discussing the prevalence of Intellectual Disability in the Australian Aboriginal population as compared to the general Australian population.

Chronologically, Hayes (1997) first noted in a forensic sample that there was a high proportion of Australian Aboriginal people who could be classified as having an Intellectual Disability using the Kaufman Brief Intelligence Test. However, no specific comparison was made with the general Australian population.

Leonard et al. (2003) first made the comparison by identifying that the prevalence of Intellectual Disability in “Aboriginal children was 2.3 times those of Caucasian origin” (Leonard et al., 2003: pp. 64) in Western Australia.

Glasson et al. (2005) found that “Aboriginal Australians represented 7.4% of all people registered for ID services” in Western Australia despite “comprising 3.5% of the population” (Glasson et al., 2005: pp. 626), which demonstrates a disproportionate representation but does not correlate to a similar prevalence rate noted by Leonard et al. (2003), later ecological studies and the statistics from the Australian Bureau of Statistics (2018).

Frize et al. (2008) found that in a forensic sample population from New South Wales, “Indigenous young offenders were significantly more likely to have an IQ below 70 than non-Indigenous young offenders (27.1% vs 11.9%, respectively)” (Frize et al., 2008: pp. 514), approximately a ratio of 2.3 similar to that of Leonard et al (2003).

More recently, Leonard et al. (2011) identified that the Australian Aboriginal population is generally at an “increased risk for mild-moderate and severe ID” (Leonard et al., 2011: pp 5) while investigating the relationship between Autism Spectrum Disorder and Intellectual Disability, and Bourke et al. (2016) found that “Aboriginal children are at a 2.5-fold increased risk of ID” (Bourke et al., 2016: pp 6).

The Australian Institute of Health and Welfare and O’Rance (2007) published that the approximate prevalence of Intellectual Disability in the Australian Aboriginal population was 7.0% in 2002, but did not go further to make any comparison with the prevalence of Intellectual Disability in the general Australian population.

Predisposing Risk Factors for Intellectual Disability

We identified 7 studies generally discussing predisposing risk factors for Intellectual Disability in the Australian Aboriginal population as compared to the general Australian population.

Leonard et al. (2005) completed an ecological study via analysis of records in Western Australia and found that socioeconomic disadvantage significantly increases the risk of Intellectual Disability in children. It was found that mild to moderate ID was associated with multiple factors such as:

younger maternal age, smaller maternal height, higher birth order, sole parent status (single, widowed, divorced or separated), lack of private health insurance, Aboriginal status of the mother, non-participation in the labour force or lower job classification

levels for the father, and lower indices of area education and occupation (Leonard et al., 2005: pp 1506).

It is important to note that this study was completed with a sample from the general Australian population in Western Australia and was not specific to the Australian Aboriginal population. To our knowledge, no study found specifically investigated the role of socioeconomic disadvantage on Intellectual Disability in the Australian Aboriginal population.

Haysom et al. (2014) similarly noted in a forensic sample population from New South Wales, that after adjusting for the disparity in socioeconomic status, “Aboriginality itself conferred no greater risk for possible ID” (Haysom et al., 2014: pp 1010). However, Fairthorne et al. (2020) while investigating the effect of Intellectual Disability in pregnancy outcomes, did not find a statistically significant difference between the socioeconomic status of Australian Aboriginal mothers with and without Intellectual Disability. Fairthorne et al. (2020) concluded that this is most likely due to pre-existing socioeconomic disadvantage facing the Australian Aboriginal population in general.

Leonard et al. (2008) identified that “inappropriate intrauterine growth is associated with development of intellectual disability” in Australian Aboriginal children, however the retrospective cohort study involved both Australian Aboriginal and non-Aboriginal children with Intellectual Disability, with findings mainly drawn from the much larger non-Aboriginal sample population.

Frize et al. (2008) found that Indigenous juvenile offenders were twice as likely to suffer from an Intellectual Disability than juvenile offenders of non-Indigenous descent.

O’Leary et al. (2012) noted that maternal alcohol use disorder contributed to 15.6% of Intellectual Disability in Australian Aboriginal children but was not able to find a statistically significant difference between alcohol related incidence of Intellectual Disability in Aboriginal children and non-Aboriginal children.

Consequential Risks associated with Intellectual Disability

We identified 3 studies discussing Intellectual Disability as a predisposing risk factor for other health and socioeconomic outcomes.

O’Donnell et al. (2010), in a study investigating risk factors predisposing to child maltreatment, identified that in the Australian Aboriginal population, “children with an intellectual disability had almost double the risk of a substantiated allegation” (O’Donnell et al., 2010: pp 924) of child maltreatment.

Bourke et al. (2017) conducted a retrospective cohort study in Western Australia and found that “children with Intellectual Disability experience higher mortality at all ages” (Bourke et al., 2017: pp 232), and that “Aboriginal children with Intellectual Disability were not at any greater risk of mortality, compared with non-Aboriginal children with Intellectual Disability” (Bourke et al., 2017: pp 238).

Fairthorne et al. (2020) conducted a retrospective cohort study on the effect of Intellectual Disability in pregnancy outcomes and found that Australian Aboriginal mothers are at twice the risk of experiencing a preterm birth. The study also found that infants born to Australian Aboriginal mothers with Intellectual Disability were more likely to have sub-optimal head circumference and birth weight (Fairthorne et al., 2020).

Discussion

The current literature has corroborated that there is a disproportionately high prevalence of Intellectual Disability in the Australian Aboriginal population as compared to the general population. Leonard et al. (2003), Frize et al. (2008) and Bourke et al. (2016) reported a prevalence of at least twice that of the general population, which is in keeping with the current known statistics provided by the Australian Bureau of Statistics (2017). Other studies similarly point towards a general preponderance of Intellectual Disability in the Australian Aboriginal population, such as Hayes (1997) and Glasson et al. (2005).

Roy and Balaratnasingam (2014) completed a literature review which summarized the evidence base at the time. The review details their search strategy and that they identified 19 studies of relevance at the time to include in the literature review. However, there is no specific review of the articles forming the evidence base. A comparison of references highlights journal articles shared between our review and that from Roy and Balaratnasingam (2014). The common references found are Hayes (1997), Frize et al. (2008), Glasson et al. (2005), Leonard et al. (2003), Leonard et al. (2005), Roy and Balaratnasingam (2011) and O'Leary et al. (2012). There are 10 articles in our review that could form a larger evidence base when combined with the evidence base found by Roy and Balaratnasingam (2014). With this in mind, the topic of Intellectual Disability in the Australian Aboriginal population could benefit from a systematic review completed by a wider team in order to solidify the evidence base and provide concrete direction for areas of future research.

Balaratnasingam and Roy (2015) highlighted in a separate article that “most psychometric instruments developed for cognitive assessments in Indigenous Australian populations have been inadequately validated” (Balaratnasingam and Roy, 2015: pp. 641). 3 identified studies have been published in this domain since 2015, Bourke et al. (2016), Bourke et al. (2017) and Fairthorne et al (2020). Despite the fact that this preponderance was first identified by Leonard et al. in 2003 with a summary completed by Roy and Balaratnasingam in 2014, we did not find any current evidence-based research on specific interventions targeting Intellectual Disability in the Australian Aboriginal population. We agree with Roy and Balaratnasingam that further research should be carried out on culturally appropriate interventions for people of the Australian Aboriginal population suffering with Intellectual Disability. We agree that this should include an evidence base for a culturally appropriate, evidence-based assessment tool for Intellectual Disability in the Australian Aboriginal population.

Our review initially identified disparity in socioeconomic determinants as a contributing factor to the disproportionately high prevalence of Intellectual Disability in the Australian Aboriginal population. Given that Australia has implemented the “Closing the Gap” programme, however, further research can be carried out to investigate the effect of achieved goals on the prevalence of Intellectual Disability in the Australian Aboriginal population. Further research can also be carried out in the future to confirm if the prevalence of Intellectual Disability in the Australian Aboriginal population returns to that of the general population after the “Closing the Gap” programme has fulfilled its purpose.

From our current interactions with Australian Aboriginal people with Intellectual disability, mental health clinicians should always adopt a culturally sensitive approach when engaging with patients of Australian Aboriginal background. They should have an understanding of the significant traumatic events that the Australian Aboriginal population have suffered throughout their history. They should have an awareness of appropriate spiritual

experiences related to the Australian Aboriginal culture to avoid misinterpretation of these experiences as psychotic symptoms. We suggest that mental health clinicians should ensure that they undergo training on cultural sensitivity, and to ensure that it is applied when interacting with any client of Australian Aboriginal background. This is supported by the standardized recommendation from the Australian National Safety Standards that healthcare services develop and implement a cultural competency program (Wardliparingga Aboriginal Research Unit, 2017).

Australian Aboriginal people place great significance on their connection to their community. The Aboriginal Liaison Officer should be the first point of contact within a health service to provide valuable advice on available supports within the health service and in the community. This is again supported by the standardized recommendation by the Australian National Safety Standards to engage Australian Aboriginal Liaison services and local organizations (Wardliparingga Aboriginal Research Unit, 2017). Thus, we suggest that all health services ensure that an Aboriginal Liaison Officer is available, and that all Australian Aboriginal patients are referred to the Aboriginal Liaison Officer. This would allow health services to ensure that all Australian Aboriginal patients are linked into their local community as appropriate to their cultural beliefs. The Aboriginal Liaison Officer is also crucial in identification of local Australian Aboriginal communities and can also act as an advocate for cultivation of local communities if these are not available.

As was noted in a recent report by the Australian Housing and Urban Institute, Australian Aboriginal people living with disabilities experience geographical displacement in order to access accommodation suitable for their disabilities (Grant et al., 2017). Australian Aboriginal people place great emphasis in their connection to their land, thus it is important to have appropriate accommodation in proximity to their community. Thus, we suggest that suitable accommodation appropriate for Australian Aboriginal people living with disability be built in Victoria as it is currently not available.

It has been identified in multiple studies that there exists an increased prevalence of Intellectual Disability in the Australian Aboriginal population. Given that Intellectual Disability increases the risk of mortality as noted by Bourke et al. in 2016, we wonder if there is a correlation between the known difference in life expectancy and the known higher prevalence of Intellectual Disability in the Australian Aboriginal population when compared to the general Australian population.

Conclusion

Through a critical narrative review of the current evidence base, we find that Intellectual Disability in the Australian Aboriginal population is an area where a systematic review has not been completed, a specific cause for increased prevalence has not been identified, and where evidence-based interventions have not been studied. This is despite a literature review already completed by Roy and Balaratnasingam in 2014 suggesting similarly. Australian Aboriginal people disproportionately suffer from Intellectual Disability which, as mental health practitioners in Australia, we believe is an area that urgently requires further research and redress.

References

- Australian Bureau of Statistics. (2018) *Estimates of Aboriginal and Torres Strait Islander Australians, June 2016*. Canberra, ACT, Australia: Australian Bureau of Statistics. ABS Cat. No.: 3238.0.55.001. Available at: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3238.0.55.001Main+Features1June%202016?OpenDocument> (accessed 21 Jun 2020).
- Australian Bureau of Statistics. (2017) *Disability, Ageing and Carers, Australia: Summary of Findings, 2015*. Canberra, ACT, Australia: Australian Bureau of Statistics. ABS Cat. No.:4430.0. Available at: <https://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/4430.0Main%20Features802015?opendocument&tabname=Summary&prodno=4430.0&issue=2015&num=&view=#> (accessed 21 Jun 2020).
- Australian Institute of Health and Welfare. (2018) *Aboriginal and Torres Strait Islander Stolen Generations aged 50 and over*. Canberra, ACT, Australia: Australian Institute of Health and Welfare. Cat. No. IHW 199. Available at: <https://www.aihw.gov.au/getmedia/32bddc34-2f4a-49d9-8f15-4e32bf2edcc1/aihw-ihw-199.pdf.aspx?inline=true> (accessed 5 Jul 2020).
- Australian Institute of Health and Welfare. (2019) *Deaths in Australia*. Canberra, ACT, Australia: Australian Institute of Health and Welfare. Cat. No. PHE 229. Available at: <https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia> (accessed 5 Jul 2020).
- Australian Institute of Health and Welfare and O'Rance L. (2007) Intellectual disability in Australia's Aboriginal and Torres Strait Islander peoples. *Journal of Intellectual & Developmental Disability* 32: 222-225.
- Balaratnasingam S and Roy M. (2015) Intellectual disability in Indigenous Australians: Issues and Challenges. *Australasian Psychiatry* 23(6): 641 – 643.
- Bourke J, de Klerk N, Smith T, et al. (2016) Population-based prevalence of intellectual disability and autism spectrum disorders in Western Australia: a comparison with previous estimates. *Medicine* 95(21): e3737. Available at: https://journals.lww.com/md-journal/Fulltext/2016/05240/Population_Based_Prevalence_of_Intellectual.29.aspx (Accessed 10 Jul 2021)
- Bourke J, Leonard H, Nembhard WN, et al. (2017) Twenty-Five Year Survival of Children with Intellectual Disability in Western Australia. *The Journal of Pediatrics* 188: 232-9.
- Commonwealth of Australia. (1997) *Bringing them home: report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families*. Sydney: Human Rights and Equal Opportunity Commission. Available at: https://humanrights.gov.au/sites/default/files/content/pdf/social_justice/bringing_them_home_report.pdf (accessed 15 Aug 2020).
- Commonwealth of Australia, Department of the Prime Minister and Cabinet author, issuing body and Turnbull M. (2018) *Closing the Gap Prime Minister's Report 2018*. ACT, Australia: Barton. Available at:

<https://www.pmc.gov.au/sites/default/files/reports/closing-the-gap-2018/sites/default/files/ctg-report-20183872.pdf?a=1> (accessed 5 Jul 2020).

- Frize M, Kenny D and Lennings C. (2008) The relationship between Intellectual Disability, Indigenous status and risk of reoffending in juvenile offenders on community orders. *Journal of Intellectual Disability Research: JIDR* 52(6): 510-9.
- Glasson EJ, Bittles AH, Hussain R, et al. (2005) An Assessment of Intellectual Disability Among Aboriginal Australians. *Journal of Intellectual Disability Research: JIDR* 49(8): 626-634.
- Grant E, Chong A, Srivastava A, et al. (2017) *Housing and Indigenous disability: lived experiences of housing and community infrastructure*. Melbourne, Victoria, Australia: Australian Housing and Urban Research Institute Limited. AHURI Final Report; No. 283. Available at: https://www.ahuri.edu.au/_data/assets/pdf_file/0028/13699/AHURI-Final-Report-283-Housing-and-Indigenous-disability-lived-experiences-of-housing-and-community-infrastructure.pdf (accessed 15 Aug 2020).
- Hayes, SC. (1997) Prevalence of intellectual disability in local courts. *Journal of Intellectual and Developmental Disability*, 22(2): 71-85.
- Haysom L, Gaskin C, Indig D, et al. (2014) Intellectual Disability in Young People in Custody in New South Wales, Australia - Prevalence and Markers. *Journal of Intellectual Disability Research: JIDR* 58(11): 1004-1014.
- Healey J, editor. (2014) *Aboriginal and Torres Strait Islander Health*. Thirroul: The Spinney Press.
- Leonard H, Bower C, Petterson B, et al. (2003) Prevalence of Intellectual Disability in Western Australia. *Paediatric and Perinatal Epidemiology* 17(1): 58-67.
- Leonard H, Bower C, De Klerk N, et al. (2005) Association of Sociodemographic Characteristics of Children with Intellectual Disability in Western Australia. *Social Science & Medicine* 60(7): 1499-1513.
- Leonard H, Glasson E, Nassar N, et al. (2011) Autism and intellectual disability are differentially related to sociodemographic background at birth. *PLoS ONE* 6: e17875. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0017875> (Accessed 10 Jul 2021)
- O'Donnell M, Nassar N, Leonard H, et al. (2010) Characteristics of non-aboriginal and aboriginal children and families with substantiated child maltreatment: a population-based study. *International Journal of Epidemiology*, 39: 921-8.
- O'Leary C, Bartu A, Bourke J, et al. (2013) Intellectual Disability: Population-based Estimates of the Proportion Attributable to Maternal Alcohol Use Disorder During Pregnancy. *Developmental Medicine and Child Neurology* 55(3): 271-277.
- Rasmussen M, Albrechtsen A, Ávila-Arcos MC, et al. (2011) An Aboriginal Australian genome reveals separate human dispersals into Asia. *Science* 334(6052): 94-8. Available at:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3991479/pdf/nihms467162.pdf>
(accessed 15 Aug 2020).

Roy M and Balaratnasingam S. (2011) Intellectual disability and Aboriginal Australians - training needs for psychiatrists. *International Psychiatry: Bulletin of the Board of International Affairs of the Royal College of Psychiatrists* 8(2): 31-33.

Roy M and Balaratnasingam S. (2014) Intellectual disability and Indigenous Australians: an overview. *Asia-Pacific Psychiatry: Official Journal of the Pacific Rim College of Psychiatrists* 6(4): 363-72.

Sadock BJ, Sadock VA and Ruiz P. (2015) *Kaplan & Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry* (Eleventh edition.). Philadelphia: Wolters Kluwer.

The Wardliparingga Aboriginal Research Unit of the South Australian Health and Medical Research Institute. (2017) *National Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health*. Sydney, NSW, Australia: Australian Commission on Safety and Quality in Health Care. Available at: <https://www.safetyandquality.gov.au/sites/default/files/migrated/National-Safety-and-Quality-Health-Service-Standards-User-Guide-for-Aboriginal-and-Torres-Strait-Islander-Health.pdf> (accessed 21 Jun 2020).

White P, Chant D, Edwards N, Townsend C and Waghorn G. (2005) Prevalence of intellectual disability and comorbid mental illness in an Australian community sample. *Australian and New Zealand Journal of Psychiatry* 39:395-400.

World Health Organization. (2021) *International statistical classification of diseases and related health problems* (11th ed.). Available at: <http://id.who.int/icd/entity/605267007> (accessed 20 June 2021).