

Introduction

Hearing and ear health research for Aboriginal and Torres Strait Islander people in Australia is mainly child-focussed. Child middle ear disease and associated hearing loss is amongst the world's highest ^94%.¹ High rates are influenced by social and economic factors, environmental factors, and barriers to healthcare^{2,3} that are adverse consequences of colonisation and ongoing systemic racism.⁴ Inequities in access to ear-related healthcare, can result in chronic middle ear disease, undiagnosed and untreated permanent hearing loss.^{5,6}

Social isolation, stigmatisation, occupational stress, limited job opportunities, lower income, increased risk of abuse, psychiatric disturbance, depression, and family relationship difficulties can stem from hearing loss.⁷



Aim

Examine hearing & ear health research for Aboriginal and Torres Strait Islander people in Australia aged 15+ years.



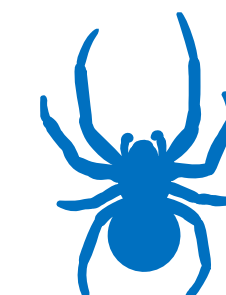
Objectives

1. Identify rates of hearing loss.
2. Identify the views, attitudes, experiences, and perceptions on the management of hearing loss for Aboriginal and Torres Strait Islander adults and health professionals.
3. Identify how the reviewed evidence can inform diagnosis and management of hearing loss and influence policy and practice.

Methods

- We searched every paper written on hearing in Aboriginal and Torres Strait Islander adults!
- We searched 4 databases, all relevant websites, and Google (Advanced).
- We used the SPIDER tool search strategy

Sample population = Aboriginal or Torres Strait Islander adults
Phenomenon of
Interest = ear health or hearing
Designs = all
Evaluations = rates, views & attitudes
Research type = all qualitative, quantitative & mixed methods studies



Discussion

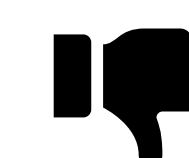
- A lack of appropriate & accessible screening and management pathways for Aboriginal and Torres Strait Islander adults exists. Improvement is needed in service provision: awareness of services, capacity strengthening for primary health care staff or detecting hearing loss, health promotion, & hearing loss prevention.⁷
- Many Aboriginal & Torres Strait Islander adults with hearing loss self-manage (e.g. Some Northern Territory Aboriginal groups communicate through "Hand Talk" a sign language).⁸ These communication strategies could be useful in developing & improving management of hearing loss.
- This review highlights a grave neglect of the needs of Aboriginal and Torres Strait Islander people in contact with the criminal justice system. Improved communication, awareness programs with criminal justice system staff (police officers, lawyers, magistrates, and prison guards) and hearing screens for prisoners are needed.

1st review in hearing and ear health of Aboriginal and Torres Strait Islander adults

Results

- Rates of hearing loss in Aboriginal and Torres Strait Islander adults varied from 8 -100%.
- Rates of middle ear dysfunction in Aboriginal and Torres Strait Islander adult populations varied from <1 - 56%.
- Hearing loss negatively impacts individual health and justice systems experiences.
- Health professionals have limited understanding of the socioeconomic risk factors of middle ear disease.
- All studies scored poorly on Aboriginal and Torres Strait Islander Quality Appraisal Tool used to assess the quality of health research from an Indigenous perspective.
- The poor quality of studies limits the usefulness of the research in providing evidence to inform management of hearing loss.

Identified 16,373 studies → 21 met inclusion criteria



All studies failed to address important aspects of health research from an Indigenous perspective.

- 14 studies measured prevalence of hearing loss or middle-ear dysfunction
- 5 studies reported views, attitudes, and experiences of hearing loss
- 0 articles directly reported on hearing loss management.

Conclusion

- **Lacking hearing health research** for Aboriginal and Torres Strait Islander people in Australia, despite its critical importance addressing health and social inequities.
- **Urgent action needed** to obtain accurate prevalence estimates and identify the best methods of screening and managing hearing loss.
- Research **must be driven by and conducted in partnership with Aboriginal and Torres Strait Islander communities.**

References

1. Senate Community Affairs References Committee. 2010. Hear Us: Inquiry into Hearing Health in Australia. Edited by Senate Community
2. Burns, J., and N. Thomson. 2013. "Review of Ear Health and Hearing among Indigenous Australians." Australian Indigenous HealthBulletin 13 (4):1–22
3. Burrow, S., and N. Thomson. 2003. "Ear Disease and Hearing Loss." In The Health of Indigenous Australians, edited by N. Thomson, 247–272. South Melbourne: Oxford University Press.
4. King, M., A. Smith, and M. Gracey. 2009. "Indigenous Health Part 2: The Underlying Causes of the Health Gap." The Lancet 374 (9683):76–85. doi: 10.1016/S0140-6736(09)60827-8. (AIHW 2017;
5. Jensen, R. B., A. Koch, and P. Homoe. 2013. "The Risk of Hearing Loss in a Population with a High Prevalence of Chronic Suppurative Otitis Media." International Journal of Pediatric Otorhinolaryngology 77 (9):1530–1535. doi:10.1016/j.ijporl.2013.06.025.
6. Shield, B. 2019. "Hearing Loss Numbers and Costs. Evaluation of the Social and Economic Costs of Hearing Impairment." Brunel University. <https://www.hear-it.org/sites/default/files/BS%20-%20report%20files/HearitReportHearingLossNumbersandCosts.pdf>
7. Siggins Miller. 2017. "Examine Australian Government Indigenous Ear and Hearing Health Initiatives - Final Report." Australian Government Department of Health. <https://vdocument.in/examine-australian-govern-ment-indigenous-ear-and-hearing-of-equipment-this.html>
8. Jassar, P., and G. F. Hunter. 2006. "The Importance of Hand Talk in Communication Rehabilitation among Aboriginal Australians in the Northern Territory." The Medical Journal of Australia 184 (10):532. <http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L43732946> doi:10.5694/j.1326-5377.2006.tb00355.x

