Australian Indigenous Health Bulletin

Vol 18 No 1, January – March 2018



Minced words: the importance of widespread hearing loss as an issue in the mental health of Indigenous Australians

Howard D, Barney J (2018)

Corresponding author Dr Damien Howard, Phoenix Consulting, email: damien@phoenixconsulting.com.au, address: 1 Phoenix St, Nightcliff, Darwin, ph: 0412484487, fax: 0889140069

Suggested citation

Howard D, Barney J (2018) Minced words: the importance of widespread hearing loss as an issue in the mental health of Indigenous Australians. *Australian Indigenous Health Bulletin* 18(1)

Abstract

Objective

Many Indigenous people experience mild to moderate hearing loss and auditory processing difficulties from a very young age. They do so because of middle ear disease which is endemic in many Indigenous communities. The resulting communication problems often lead to the development of psycho-social difficulties which continue through adult life. This article seeks to examine this neglected issue that impacts on many Indigenous people around Australia.

Method

We describes the literature available on this topic and consider its implications for mental health practice.

Results

Indigenous people with early onset hearing loss and auditory processing problems face verbal communication challenges and use a variety of strategies to cope. Use of visual observation strategies is commonly used to assist understand what is said. Anticipation of what may be said helps to better understand what is later heard. Engaging with familiar people often helps provide 'social amplification' to assist understanding. Avoidance is the least successful coping strategy; it constrains access to needed opportunities.

Conclusions

Hearing loss and auditory processing problems from endemic childhood ear disease contribute to communication problems that have communications as well as social and emotional consequences.

Understanding and being responsive to compensatory coping strategies can help to miniise adverse consequences of early onset ear disease.

Implications

Indigenous hearing loss has been called the missing piece of the puzzle of Indigenous disadvanatge. We describe some of the processes through which widespread hearing loss and auditory processing problems contributes to Indigenous disadvantage. We also briefly describe some ways by which this disadvanatge can be minimised. A needed core competency of those working with Indigenous people with listening challenges is responsiveness to their communication needs.

Contents

Abstract1
Acknowledgements2
Introduction2
Acoustic environment2
Psycho-social outcomes related to early problems understanding what is said2
Issues in mental health practice
Identification of hearing loss and auditory processing problems5
Discussion 6
References7

Core funding is provided by the Australian Government Department of Health





Acknowledgements

The authors would like to thank Marianne Howard, Katherine Sillars, Christiana Pownell and Dennis McDermott for their helpful contributions.

Introduction

When we think of people who are hard of hearing, we generally think of someone over fifty who has noise-induced hearing loss. This stereotype is largely accurate for non-Indigenous Australians. Among this group, 85 per cent of people that are hard of hearing are over fifty [1]. The situation is very different for Indigenous Australians. Among them, hearing loss is far more pervasive and occurs across the entire age profile [2]. This is mainly due to the high incidence of middle ear disease among Indigenous children.

One of childhood's most common illnesses, otitis media often causes conductive hearing loss [3]. This condition may be temporary, but when it recurs persistently, the cumulative total of time that children spend with ear disease can be substantial. Crucially, the associated hearing loss occurs during critical periods of development in auditory, cognitive and psycho-social competencies [4, 5].

Persistent ear disease can damage the middle ear structures in ways that result in some degree of permanent mild-to-moderate conductive hearing loss [3]. Thus, from very early on in children's lives otitis media can result in fluctuating mild-to-moderate levels of hearing loss, auditory processing problems and even permanent hearing loss. Individually and in combination, these impacts can have adverse effects on the psycho-social development of a child, with significant lifelong consequences.

Conversely, people who experience hearing problems later in life have already acquired their language skills, coped with schooling and completed major stages of their family and occupational life. When children experience early onset hearing problems, their cognitive and psycho-social development and subsequent engagement in family life, education and employment can all be affected. The younger the age at which hearing loss occurs, the greater the impacts across life [4, 6]. A common consequence of frequent mild to moderate conductive hearing loss from childhood ear disease is auditory processing problems, which can manifest as greater difficulties understanding what is said when it is noisy [7]. Auditory processing has been described as 'what we do with what we hear'; how the brain processes the sounds perceived. Long periods of fluctuating hearing loss during critical developmental periods can impact markedly on a child's auditory processing skills development [7]. Auditory processing problems can exist after hearing loss from ear disease has been resolved, or co-exist with permanent hearing loss from persistent ear disease.

Acoustic environment

The acoustic environment greatly influences communication outcomes for people with hearing loss and auditory processing problems. In a good listening environment (where the signal being listened to is loud enough to be easily heard and there is little background noise), people with mild listening difficulties may cope almost as well as those with no hearing problems. In an adverse acoustic environment, however, people with hearing loss and/or auditory processing problems often find it more challenging to understand what is said as compared to others [15]. This discrepancy in performance can be difficult for others to understand and can give rise, firstly, to people with listening problems thinking they are less intelligent or less competent than others, and, secondly, to others thinking 'they can hear when they want to'. That is, they are judged as not motivated to listen or purposefully ignoring what is said. These kinds of damaging judgments can initiate a cascade of social and emotional problems. Children are often excluded from social connections with family and friends, may be blamed and punished for not listening, or develop self-damaging negative beliefs about their own capacity.

Psycho-social outcomes related to early problems understanding what is said

Non-Indigenous people with hearing loss describe experiencing more anxiety, depression and interpersonal problems [8, 9, 10]. Non-Indigenous Australian children with a history of middle ear disease also report more psycho-social problems [11]. Indigenous children and adults have been found to have more behavioural problems [12, 13] and social problems [14], whilst Indigenous adults with listening problems describe higher levels of psychological distress [6]. Many of Indigenous clients working with psychologists will have mild hearing loss and/or auditory processing problems that contribute to their presenting problems. In our experience, often neither the practitioner nor client are aware of this important factor influencing communication and presenting mental health problems. Cross cultural issues often contribute to this invisability.

Cross-cultural factors obscure hearing problems

Hearing loss and auditory processing problems among Indigenous people are often obscured by a focus solely on cultural differences as sufficient explanation for certain responses; responses that are in fact related to hearing loss and/or auditory processing problems. These include misunderstanding what is said, extreme shyness, taking longer to respond or not responding in conversations.

Indigenous people with communication problems related to hearing loss often experience greater difficulties in unfamiliar Western environments. These problems inhibit the ability to learn what is needed in order to operate effectively in non-Indigenous cultural domains [6]. People may avoid engagement with certain non-Indigenous people and contexts because the unfamiliar social processes are challenging. Regular avoidance of contact with non-Indigenous people and processes thus acts to restrict exposure to cross cultural experiences. Over time, this means that people with hearing problems don't have the same level of opportunity to develop a better understanding of Western cultural processes.

This regular avoidance and resulting limited cross-cultural understanding means that what begins as difficulties in understanding what is said, evolves into problems fully understanding what is heard and observed in culturally unfamiliar contexts. An implication of this is that achieving successful engagement with Indigenous people with hearing loss and/or auditory processing problems often requires facilitation by known Indigenous people within familiar cultural processes [12]. Family members and friends are often crucial to interpret and provide communication support to enable successful engagement.

Issues in mental health practice

Widespread hearing loss and auditory processing problems among Indigenous people have a number of implications for mental health practice.

Enabling Compensatory Strengths

There is inevitably a history of negative social experiences as a result of early and frequent hearing loss. A strengths focused approach is generally recommended for work with Indigenous clients [16]. This is especially important to counter the frequent criticisms from others and habitual negative self-perceptions when people have had longstanding difficulties in understanding what is said to them. Helping clients to recognise their strengths, including the compensatory strengths that are commonly developed in response to hearing difficulties can help to create a reframed self-perception. One that is more realistic, positive and resilient. Common compensatory strengths developed include the following.

Visual Observation

People with early onset hearing loss and auditory processing problems often develop sophisticated and astute powers of visual observation. Their skills include lip-reading, face-watching and reading body language, as well as a highly developed capacity to assess attitudinal and emotional reactions from these observations.

These skills develop both from the greater focus on the use of visual cues for communication in Indigenous cultures [17], as well to compensate for the challenges experienced because of listening problems. This means communication with them that is visually rich is more successful.

In addition to exploring and recognising a client's visual strengths, it can be helpful to make use of these skills for communication during sessions. For example, a practitioner can use visual materials to support explanations of different points; using a white board, or a tablet, or just pen and paper.

Social support

Indigenous cultures foster problem solving through mutual social support. Seeking help to clarify communications by familiar people who can be trusted not to judge or shame is one of the most common coping strategies used by Indigenous people with hearing loss.

Familiarity

Being familiar with people and social processes greatly reduces listening demands. Where one person has established a positive relationship with another, it provides a framework of shared knowledge that fosters successful use of a variety of communication skills.

"You have to know the person to read their expressions, not all mean exactly the same. With new people I can't judge what they mean, so it's hard to know when they're joking, angry, sad, etc. unless I know them." (Indigenous worker with auditory processing problems) [6, p23].

Anticipation

Being familiar with processes and people, enables people with hearing loss to make assumptions about topics that will be likely talked about. This involves habitually thinking ahead, trying to anticipate what will happen next, what will be said and to plan what they may want to say or ask in response. When they anticipate accurately, conversation is more predictable, and communication becomes more successful.

Anticipation is commonly used to cope with expressive language problems that often co-exist with comprehension problems because of hearing loss and/or auditory processing problems. People are often shamed if put on the spot in a conversation to speak about something. They have difficulties or need more time to formulate what to say. Being judged because of such difficulties in expressing themselves commonly prompts stress and anxiety.

Being able to anticipate what will be talked about helps to avoid being shamed by faltering efforts to express themselves. Expressive language problems related to childhood ear disease should be considered when clients display 'scripted monologues' during sessions or meetings. They may talk their way through the monologue, often ignoring or appearing discomfited by interruptions. It may be difficult for them to respond to questions until they have finished their prepared talk.

Avoidance

When dealing with unfamiliar people and unfamiliar processes, people with listening problems often experience anxiety and this can lead to using avoidance tactics to resolve their discomfit. For example, children with hearing loss may not answer a question in class [12, 14] or they may avoid going to school [18]; a patient may not attend an appointment with an unknown medical specialist [19]; or an employee with limited literacy may avoid literacy support training [6]. This type of avoidance limits engagement and the benefits to be gained from greater engagement with schooling, health, training, employment and psychological services.

Avoidance is the least successful of the above coping strategies and often contributes to limiting social, educational and occupational opportunities.

Managing listening overload

Whatever the setting, most psychologists tend to rely on 'talking therapies'. However, clients who make extensive use of the above cognitively demanding strategies will tire more quickly than others in intensive listening situations – there is a danger of experiencing 'listening overload'. People may listen for a time, then 'tune-out', too tired for further effort to understand. At these times, discussions are liable to be experienced as a sequence of poorly understood, disconnected verbal interactions; 'minced words'. The indication that someone is no longer 'listening effectively' is often that 'face-watching' ceases and is replaced by an unfocused gaze and minimal or 'off the topic' responsiveness.

Overall, it is often helpful to structure talk differently in sessions when working with clients with listening problems. The following list outlines some of these:

- Talk less and about what's most important.
- Where possible give an overview of what sessions will cover.
- If 'listening overload' is evident consider having shorter sessions or including activities that are less demanding on listening capacity.
- Highly visual pre-reading is helpful, if there are no literacy problems.
- Use diagrams and illustrations to help explain.
- Clearly indicate when you are changing the topic of conversation.
- Use language the client knows and consider the experiences that are familiar to them.
- Create pattern and structure in discussions where possible, to help clients anticipate.
- Give the client written notes, (text messages, email or hand written) about what was discussed in the session.
- In group work, give clients forewarning about being asked to speak publicly and on what topic.
- Also in group sessions actively minimise 'cross talk', where some participants have private conversations that create background noise that obscures the main conversation.

Therapy techniques that demand minimal listening (EMDR, art therapy) are often more comfortable for clients with listening problems than those that require a lot of listening and talking. Overall, consider that clients with listening problems may like to have clear expectations about what will happen next during sessions, so they can mentally anticipate what may be said to them and what they may like to say. When they know what is ahead they are more likely to return and participate in constructive ways.

The use of hand held amplification devices should also be considered with some clients, if acceptable to them. These are devices about the size of a mobile phone that amplify the speaker's voice to the client who listens through headphones. These devices are especially useful if discussions do take place in noisy environments. Amplification during any large group presentations, with a microphone that can be handed around, is highly desirable.

Assessment Issues

Some psychological assessment can involve methods of questioning that are particularly difficult for those with listening problems. Common mental health assessments (mental health examination and psychological questionnaires delivered verbally) typically ask a series of standard, disconnected questions which people with listening problems may struggle to understand. Resulting comprehension problems and anxiety can mean this type of assessment is uncomfortable, time consuming, and often provides information of dubious reliability. Allowing clients with listening problems to tell 'their own story', then ask questions based on the information they provide helps to minimise confusion. Then the context of the questions asked is familiar since it comes from the client's own narrative, and the process of providing information is both less stressful and more culturally comfortable for Indigenous clients.

Identification of hearing loss and auditory processing problems

The identification of hearing loss among clients is central to responding to client needs but presents a number of challenges. Foremost among these is that mild-to-moderate hearing loss or auditory processing difficulties often occur so early in people's lives that they think that the way they hear and listen is the same as for everyone else [20]. This means that they cannot alert others to their listening difficulties. Therefore, it is useful if practitioners use validated screening tools and have an awareness of indicators of listening problems for both children and adults. Two validated screening tests specifically developed for use with Indigenous people are 'Blind Man's Simon Says' for children [21] and the Phoenix Listening Survey for adults [22]. A positive indicator on these can help inform work with clients and prompt a formal hearing assessment. The following table also describes responses that may indicate listening problems among adults during face to face communication.

Not all of these signs will be present with every client with listening problems. But when a number are present, further confirmation can be gained by using screening tools.

Table 1: Indicators of hearing loss and/or auditory processing problems during face to face communication

Indicator	Association with listening problems
Intense face-watching	Face-watching and lip-reading to better understand what is said.
Misunderstands comments or questions	Often misunderstands key word and has difficulty understanding, or goes on a wrong conversational direction.
Long response times to questions	Taking longer to respond, compared with others from the same community, is common because more time is needed to understand what is said and construct a reply.
Speaks quietly, or loudly	It is difficult for people with hearing problems to judge the right level to speak at in different environments.
Displays signs of listening overload	Listening is harder work for those with listening problems. They may have to think intensely when listening and tire quickly. Towards the end of long sessions, they may develop a blank gaze and become minimally responsive.
Have difficulties in expressing what they want to say	The impact of listening problems on expressive language development can result in people experiencing difficulties in constructing what they want to say. This is especially so if they are put on the spot. They may prefer and need to prepare responses.
Scripted monologues	People sometimes cope with problems with verbal expression by developing a mental 'script' for what they want to say. They may follow this script and deliver a 'monologue' and ignore, or become discomfited by, interruptions.
Bring a family member or friend to help with communication	May rely on others to help with communication. This is an indicator of a possible severe hearing problem and/or major anxiety issues.

Discussion

Hearing loss is widespread among Indigenous people because of endemic childhood ear disease. This hearing loss has been described by a senate enquiry as 'the missing piece of the puzzle in Indigenous disadvantage' [20]. This article seeks to explore a too long neglected issue that, when addressed, has the capacity to improve life outcomes for many Indigenous Australians.

The neglect of this issue in part arises because these communication issues are not 'visible' to those affected or those they communicate with. The hearing loss happens so early and so pervasively that is often 'normalised' among those affected. These origins of communications problems are often obscured by a focus on cross cultural differences as sufficient explanation of communication difficulties that are evident. Most mental health workers are currently ill equipped to understand the communicative needs of people with listening difficulties and the common consequential psycho-social problems.

This article is one of the first (of hopefully many more to come) focusing on the interrelated communication and psycho-social issues arising from hearing loss and auditory processing problems among Indigenous people in Australia. What is discussed has also has relevance for many others around the world.

Middle ear disease is in large part a disease of disadvantage. It is commonly found around the world in underprivileged communities and in developing nations [23]. However, to date it has been only in 'first world' nations that research has mapped the prevalence of middle ear disease and associated hearing loss among disadvantaged Indigenous people. However, similar problems are likely to exist for approximately a billion people worldwide in developing nations [23]. A smaller but significant number of non-Indigenous people in Australia and elsewhere also are likely to have psycho-social problems that have been contributed to by chronic middle ear disease in childhood, or auditory processing problems from other origins. Aside from specific cultural issues described, the information in this article is also relevant for practitioners working with them.

References

- Access Economics. Listen Hear: The Impact and Cost of Hearing Loss in Australia. Access Economics Pty Ltd; 2006.
- Burns J, Thomson N. Review of ear health and hearing among Indigenous Australians. HealthInfoNet. 2013 [cited 2016 7 July]. Available from http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear/reviews/our-review
- Couzos S, Metcalf S, Murray RB. Systematic review of existing evidence and primary care guidelines on the management of otitis media in Aboriginal and Torres Strait Islander populations. Canberra: National Aboriginal Community Controlled Health Organisation and Commonwealth Department of Health and Aged Care; 2001. Report. Commonwealth Department of Health and Aged Care, Canberra, ACT, Australia.
- Burrow S, Galloway A, Weissofner N. Review of educational and other approaches to hearing loss among Indigenous people. Australian Indigenous Health Bulletin; 2009. Available from http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear/reviews/our-review-education
- Walker N, Wigglesworth G. The effect of conductive hearing loss on phonological awareness, reading and spelling of urban Aboriginal students. Australian and New Zealand Journal of Audiology. 2001;23(1),37-51.
- Howard D. Listening, learning and work: improving outcomes in Indigenous training and employment. Darwin: Phoenix Consulting; 2011.
- 7. Gannon M. A national strategic approach to ending chronic otitis media and its life-long impacts in indigenous communities. AMA Report Card on Indigenous Health. The Australian Medical Association, 2017. Available from https://ama.com.au/system/tdf/documents/2017%20Report%20Card%20on%20Indigenous%20Health.pdf?file=1&type=node&id=47575
- Li C, Zhang X, Hoffman HJ, Cotch M, Themann CL, Wilson M. Hearing impairment associated with depression in US adults, National Health and Nutrition Examination Survey 2005-2010. JAMA Otolaryngology-Head & Neck Surgery. 2010;140(4),293-302.
- 9. Monzani D, Galeazzi G, Genovese E, Marrara A, Martini A. Psychological profile and social behaviour of working adults with mild or moderate hearing loss. *Acta Otorhinolaryngologica Italica*. 2008;28(2),61–66.
- Theunissen SCPM, Rieffe C, Kouwenberg M, Soede W, Briaire JJ, Frijns JHM. Depression in hearing-impaired children. *International Journal* of *Pediatric Otorhinolaryngology*. 2011;75(10),1313-17.
- Hogan A, Howard D, Yiengprugsawan V. The Wellbeing of Children with Ear Infection – A Cross Sectional Study. Paper session presented at the OMOZ Conference; Perth; 2012 May.
- Howard D. Why we need more Aboriginal adults working with Aboriginal students. The Australian Journal of Teacher Education. 2004b;29(1), 14-22.
- Howard D. Conductive hearing loss and behaviour problems amongst urban Indigenous students [Unpublished doctoral dissertation]. Charles Darwin University, Darwin, NT; 2006a.

- Howard D. Mild hearing loss and Aboriginal children's learning. The Aboriginal Child at School. 1991;19(1), 33-51.
- McPherson DB. Identification of hearing loss in urban Indigenous school children [Unpublished doctoral dissertation]. University of Queensland, Brisbane, QLD; 1995.
- 16. Social Health Reference Group. Social and Emotional Wellbeing Framework: A National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Wellbeing 2004-2009. National Aboriginal and Torres Strait Islander Health Council and National Mental Health Working Group. [Internet]. Canberra: Dept. of Health and Ageing, c2004.; 2004. Available from: http://www.health.gov.au/internet/wcms/publishing.nsf/Content/F25CB4CC136ECC2DCA25705200015F85/\$File/wellbeing.pdf.
- Howard D. Mixed Messages: Cross-cultural management in Aboriginal community controlled health services. Darwin, NT: Phoenix Consulting; 2006b. Available from: http://www.amazon.com.au/MiXed-Messages-Cross-cultural-management-Aboriginal-ebook/dp/B00WGUC9Z6/ref=sr_1_1?s=digital-text&ie=UTF8&qid=145398-0288&sr=1-1
- Couzos S, Lea T, Mueller R, Murray R, Culbong M. NACCHO Ear Trial and School Attendance Project. Deakin, ACT: National Aboriginal Community Controlled Health Organisation; 2003 [cited 2003 July].
- Howard D. When Talking Fails: Hearing Loss and Chronic Disease.
 Paper session presented at the 14th Annual NT Chronic Diseases
 Network Conference, Darwin; 2010 September.
- Senate Community Affairs Committee Secretariat. (2010). Hear us: Inquiry into hearing health in Australia. Canberra: Senate Printing Unit.
- 21. Howard D. Knowing who may have a hearing loss: a simple speech reception game for use by teachers and parents. *The Aboriginal Child at School*. 1992;20(4), 37-47.
- Howard D. Phoenix Listening Survey. Darwin, NT: Phoenix Consulting,
 2011. Available from https://www.academia.edu/34825023/
 Phoenix Listening Survey
- 23. Berman S. Otitis media in developing countries. Pediatrics. 1995;96(1), 126-131.





The Australian Indigenous Health *Bulletin* (ISSN 1445-7253) is the electronic journal of the Australian Indigenous Health *InfoNet*.

The purpose of the Australian Indigenous Health *Bulletin* is to facilitate access to information of relevance to Australian Indigenous health. Reflecting the wide range of users – policy makers, service providers, researchers, students and the general community – the Health *Bulletin* aims to keep people informed of current events of relevance, as well as recent research. Research information is provided in two ways – the publication of original research and the presentation of abstracts of research published or presented elsewhere.

The Australian Indigenous Health Bulletin is published online as a Health Bulletin 'in progress', to allow readers to have access to new original articles, brief reports and other sources of information as soon as they come to hand. At the end of three months, the edition is closed and the next edition commences.

Director Professor Neil Drew

Address Australian Indigenous Health*InfoNet*

Edith Cowan University
2 Bradford Street

Mount Lawley, WA 6050

Telephone (08) 9370 6336

Facsimile (08) 9370 6022

Email healthbulletin@ecu.edu.au

Web www.healthbulletin.org.au

Core funding is provided by the Australian Government Department of Health

