

CHAPTER 8

SPECIFIC HEARING HEALTH ISSUES AFFECTING INDIGENOUS COMMUNITIES

I believe that hearing loss is a missing piece of the puzzle of Indigenous disadvantage, and while it remains a missing piece of the puzzle viable solutions are not easy to come by.

Dr Damien Howard, *Committee Hansard*, 16 February 2010, p. 100.

Introduction

8.1 The committee has heard evidence from a wide range of individuals and organisations about the particular hearing health issues affecting Indigenous Australians. Of great significance is the fact that a higher proportion of Indigenous Australians experience hearing problems than non-Indigenous Australians across nearly all age groups, in remote, rural and metropolitan areas.¹

8.2 The causes and consequences of large scale hearing impairment for Indigenous Australians are not yet fully understood. Evidence presented to the committee strongly suggests that its roots lie in poverty and disadvantage, that it impacts on education and employment outcomes, and that it has a strong association with Indigenous engagement with the criminal justice system.

8.3 The large body of evidence before the committee in regard to Indigenous hearing health largely falls under three broad categories, which will form the framework of this chapter:

- (a) the causes and dimensions of high levels of Indigenous hearing impairment;
- (b) the specific implications of hearing impairment for Indigenous education outcomes; and
- (c) engagement with the criminal justice system.

Hearing loss among Indigenous Australians

8.4 Indigenous Australians experience ear disease and associated hearing loss at up to ten times the rate of non-Indigenous Australians.² In 2004-05, 10 per cent of Indigenous children aged zero to 14 years were reported as having ear or hearing

1 Australian Hearing, *Submission 38*, p. 19.

2 Australian Hearing, *Submission 38*, p. 19.

problems, compared to three per cent of non-Indigenous children.³ The Department of Health and Ageing (DOHA) noted that: 'It is important to note that the survey is not a measure of the national prevalence of otitis media. In fact there is [no] national data collection for this purpose.'⁴

8.5 The committee heard evidence that these figures may under represent the actual rates of hearing problems in Indigenous children.⁵ It has been estimated that some form of hearing loss may affect up to 70 per cent of Indigenous adult people.⁶

8.6 DOHA noted in a question on notice that:

The Menzies School of Health Research recently reported that in a recent survey of 29 communities throughout the Northern Territory, 25% of young Aboriginal children had either chronic suppurative otitis media (CSOM) or acute otitis media with perforation; 31% had bilateral otitis media with effusion; and only 7% of children had bilaterally normal middle ears.⁷

8.7 The major factor behind such high rates of hearing loss amongst Indigenous Australians is a higher prevalence of conductive hearing loss caused by otitis media.

Otitis media

8.8 Otitis media is the term used to describe an infection in the middle ear. Other terms commonly used include 'glue ear' or 'runny ear', both references to the fluid discharge that can sometimes be a symptom of otitis media.

8.9 Middle ear infections cause a fluid build up in the middle ear. This build up creates pressure on the ear drum, sometimes to the point where it bursts. It is the presence of fluid, and in some cases the resulting perforation of the ear drum, which inhibits the conduct of sound through the middle ear.⁸

Types of Otitis Media

Acute otitis media (AOM) without perforation: acute inflammation of the middle ear and eardrum (tympanic membrane), usually with signs or symptoms of infection. AOM is characterised by the presence of fluid behind the eardrum, combined with one or more of the following: bulging eardrum, red eardrum, recent discharge of pus, fever, ear pain, and irritability.

3 Department of Health and Ageing (DOHA), *Submission 54*, p. 62.

4 DOHA, answer to question on notice 19 March 2010 (received 6 May 2010), Question 22.

5 See for example Dr Chris Perry, Clinical Director, Deadly Ears Program, *Committee Hansard*, 7 December 2009, p. 2.

6 DOHA, *Submission 54*, p. 62.

7 DOHA, answer to question on notice 19 March 2010 (received 6 May 2010), Question 22.

8 Phoenix Consulting, *Submission 112*, p. 6.

Acute otitis media with perforation: discharge of pus through a perforation (hole) in the eardrum within the previous 6 weeks.

Recurrent acute otitis media (RAOM): more than three attacks of AOM within six months, or more than four in 12 months.

Chronic otitis media: a persistent inflammation of the middle ear – it can occur with or without perforation, either as chronic suppurative otitis media, or as otitis media with effusion (respectively).

Chronic suppurative otitis media (CSOM): recurrent or persistent bacterial infection of the middle ear, with discharge and perforation of the ear drum (CSOM is distinguished from acute perforation with discharge in that the discharge persists). Symptoms include hearing loss – pain is not a feature. CSOM has been identified on the basis of discharge persisting for 6 weeks or more, but an expert panel convened by the World Health Organization defined it recently as discharge for at least 2 weeks.

Otitis media with effusion (OME): an inflammation of the middle ear characterised by fluid behind the eardrum, without signs or symptoms of acute otitis media; also sometimes referred to as serous otitis media, secretory otitis media, or (more colloquially) 'glue ear'.

Dry perforation: perforation of the eardrum, without any signs of discharge or fluid behind the eardrum.

Source: EarHealthInfoNet, viewed 23 March 2010,

http://archive.healthinonet.ecu.edu.au/html/html_community/ear_health_community/reviews/ear_background.htm

8.10 Otitis media is a common, short-term childhood ailment amongst Australian children. It is usually self-limiting, and resolved by the time children start school. However for Indigenous children in Australia, Canada and the Americas, as well as Pacific Island and Maori children, otitis media is more persistent.⁹ Of these, evidence before the committee stated that Indigenous Australian children have the highest rates:

High levels of middle ear disease and related hearing loss are observed in a number of indigenous populations around the world, however those of indigenous children in remote Australia are consistently higher than elsewhere.¹⁰

8.11 Another witness testified in a similar vein:

In most populations in developed countries now it is very unusual to get chronic suppurative otitis media unless you have some form of immunodeficiency, yet we see it in about 20 per cent of Aboriginal children [between 6 months and two and a half years of age].¹¹

9 Phoenix Consulting, *Submission 112*, p. 6.

10 Associate Professor Linnett Sanchez, School of Medicine, Flinders University, *Submission 31*, p. 3.

11 Professor Peter Morris, Associate Professor Child Health Division, Menzies School of Health Research, *Committee Hansard*, 16 February 2010, p. 57.

8.12 Many submitters noted that the World Health Organisation considers rates of chronic otitis media above four per cent in children to be '...a massive public health problem...which needs urgent attention in targeted populations'.¹²

8.13 Indigenous children in Australia experience an average of 32 weeks of middle ear infections between the ages of two and 20 years, compared to just two weeks for non-Indigenous children.¹³ The committee heard a lot of evidence about the very high levels of hearing impairment among children in remote communities:

Another Menzies [School of Health Research] study revealed that in remote communities in the Northern Territory only one per cent of Indigenous kids had normal appearing eardrums at three years of age, which would be indicative of repeated bouts of otitis media and/or long-term otitis media. Although the Indigenous adult data is less certain, it is estimated that up to 60 per cent of Indigenous adults have hearing loss—in many cases due to the effects of otitis media in childhood.¹⁴

8.14 Evidence presented to the committee suggests that the prevalence of otitis media in Indigenous communities ranges between 10 per cent and 54 per cent.¹⁵ Some witnesses testified that even these rates, based on state and territory surveys, understate the prevalence of the problem:

Otitis media affects 90 per cent of Indigenous babies [in the NT].¹⁶

Case Study: Onset of Otitis Media in Indigenous Children in a Remote Northern Territory Community

A recent longitudinal study of 41 Aboriginal infants from a northern tropical island community off the coast of the Northern Territory revealed the endemic nature of OM in some communities.

The study examined infants shortly after birth and monthly thereafter.

By 8 weeks of age, 21 of 22 Aboriginal infants had clinical or audiological signs of effusion or acute inflammation, while only three of 10 non-Aboriginal infants had signs of OME and none had signs of AOM.

12 World Health Organisation, *Prevention of hearing impairment from chronic otitis media* (November 1996), p. 29, viewed 20 April 2010, http://www.who.int/pbd/deafness/en/chronic_otitis_media.pdf.

13 Australian Bureau of Statistics (ABS), *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008*, April 2008, p. 134.

14 Mr Louis Leidwinger, Regional Audiologist, Kimberley Aboriginal Medical Services Council, *Committee Hansard*, 16 February 2010, p. 31.

15 DOHA, *Submission 54*, p. 62.

16 Ms Kathy Currie, Hearing Health Program Leader, Northern Territory Department of Health and Families, *Committee Hansard*, 16 February 2010, p. 2; see also Dr Chris Perry, Clinical Director, Deadly Ears, *Committee Hansard*, 7 December 2009, p. 1.

By 3 months of age, otitis media was present in the entire Aboriginal cohort, with acute inflammation identified in 28 per cent of infants and effusion in 72 per cent.

All Aboriginal infants experienced repeated or persistent infections throughout their first year of life.

Overall, Aboriginal infants were four times more likely than a comparison group of non-Aboriginal infants to develop AOM and three times more likely to develop OME. Over the course of the study, 37 per cent of all Aboriginal infants experienced a perforation at least once, with the mean age of first perforation being 5.6 months. Of those infants who had reached 6 months of age or more by the end of the study, 33 per cent had experienced perforation of the eardrum within their first 6 months. Among those infants who experienced perforation, one-third had perforations that persisted for more than 60 days.

Australian Indigenous HealthInfoNet, Review of ear health and hearing among Indigenous peoples, retrieved 23 March 2010 from <http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear/reviews/our-review>. The study referred to is Boswell JB, Nienhuys TG, Rickards FW, Mathews JD (1993) 'Onset of otitis media in Australian Aboriginal infants in a longitudinal study from birth' *Australian Journal of Otolaryngology*; 1: 232-237

The causes of high rates of otitis media among Indigenous Australians

8.15 Whilst otitis media is common amongst all children, it is the early onset, severity and persistence of infections in Indigenous children that can lead to longer term hearing loss.¹⁷ The reasons for this are complex, and tied to environmental and social factors that may impact on the lives of Indigenous Australians. These factors are usually more pronounced in remote areas, and may include poor housing, overcrowding, limited access to nutritious food and exposure to passive smoking.¹⁸

8.16 As one audiologist based in a remote area commented:

I am often asked, 'Why is the rate of otitis media and hearing loss so high in Indigenous people?'...speculation that I hear...[is that] there must be some genetic predisposition to otitis media in Indigenous people. But there is no proof of this. The more likely causes of otitis media and hearing loss among Indigenous Australians would be related to the myriad social determinants of health, some of which are housing overcrowding, nutrition, sanitation, education, marginalisation and so on.¹⁹

8.17 Another witness summed up his view of the causes of otitis media:

17 DOHA, *Submission 54*, p. 62.

18 Australian Indigenous HealthInfoNet, *Review of ear health and hearing among Indigenous peoples*, retrieved 23 March 2010 from <http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear/reviews/our-review>.

19 Mr Louis Leidwinger, *Committee Hansard*, 16 February 2010, p. 32.

...severe otitis media—and by that I mean otitis media associated with perforation of the eardrum—is a complex medical condition caused by poverty and poor living conditions.²⁰

8.18 Resolving these underlying, environmental causes of otitis media will be the solution for Indigenous Australians in the long term. Taking the long view, Professor Peter Morris believed that when environmental factors are addressed the situation would improve for remote areas as it has for other parts of the country:

In the poorer areas of, say, Melbourne—the Fitzroy slums and that sort of thing—in the prewar years we saw a very similar pattern of respiratory disease: kids with discharging noses, discharging ears and a chronic wet cough. That does not happen much now in [mainstream] Australia, which gives us the belief that you can see dramatic improvements in remote communities. We believe that what remote community children experience is similar to what we saw in poor communities 100 years ago.²¹

8.19 Other factors can act to compound the impact of such environmental and social influences. These often include inadequate primary health care services, poor access to specialist services, poor compliance with medical interventions and a poor understanding among medical staff of the role of social and environmental conditions on hearing loss.²²

8.20 One witness commented that clinical staff in remote areas are not always aware of the importance of addressing hearing health:

Ear disease is one of many conditions competing for the attention of health staff and it perhaps lacks the consideration it deserves to manage acute infections aggressively because the association with longer term ear disease and risk of permanent hearing loss is not always made by the health practitioner.²³

8.21 Another view presented to the committee was that clinical staff in remote communities are all too aware of ear health issues, and in fact may be so overwhelmed by the volume of health issues they face each day that they are unable to respond effectively.²⁴

20 Associate Professor Peter Morris, Deputy Division Leader Child Health Division, Menzies School of Health Research, *Committee Hansard*, 16 February 2010, p. 56.

21 Professor Peter Morris, Menzies School of Health Research, *Committee Hansard*, 16 February 2010, p. 66.

22 Australian Indigenous HealthInfoNet (2004) *Review of ear health and hearing among Indigenous peoples*, retrieved 23 March 2010 from <http://www.healthinonet.ecu.edu.au/other-health-conditions/ear/reviews/our-review>.

23 Ms Kacy Kohn, East Arnhem Regionalisation Coordinator, Northern Territory Department of Health and Families, *Committee Hansard*, 19 March 2010, p. 24.

24 DOHA, *Submission 54*, p. 63.

8.22 In some cases ear infections in Indigenous children go unreported and untreated, leading to damaged hearing. The committee heard evidence that whereas many children experience pain associated with ear infections (thereby prompting medical examination of their ears), recent studies found this was not always the case among Indigenous children.²⁵ Whilst the reason for this is not known, there was some speculation that early onset of otitis media may be a factor:

...a normal eardrum is like a very thin sheet of glass and you can see through it, with a lot of nerve fibres running through it. When the eardrum bulges we think that is what causes the pain. Because when you examine these children they have red bulging drums.

Interestingly, we know that in non-Aboriginal children the pain usually only lasts six to 12 hours, and the bulging does not resolve in that time, so it seems that it is the stretching of the nerves that is painful. It is the initial stretching that causes the pain. We think that in Aboriginal children, who have already had the fluid there for a long time, the drum is much thicker and the nerves just cannot be stretched as much.²⁶

8.23 The committee also heard that another reason for low reporting of ear disease may be that due to its high prevalence, ear disease among Indigenous Australians has become accepted as a normal and inevitable part of life.²⁷ Kacy Kohn, a remote hearing health practitioner, remarked to the committee that she had:

...never had an adult Aboriginal client approach me complaining of a hearing deficit, and I wonder if this is because they have normalised their hearing loss or because of a lack an awareness of what assistance may be available to them.²⁸

8.24 One witness commented that she had seen no improvement in Indigenous hearing health outcomes in Central Australia:

I have been an audiologist for 15 years and [nearly] all of that time has been spent working with Indigenous ear health. Unfortunately, I have to say that I have not seen any improvements in hearing health or ear health over that time.²⁹

25 Associate Professor Peter Morris, Deputy Division Leader Child Health Division, Menzies School of Health Research, *Committee Hansard*, 16 February 2010, p. 56.

26 Associate Professor Peter Morris, *Committee Hansard*, 16 February 2010, p. 60.

27 See for example Ms Kathy Currie, Hearing Health Program Leader, Northern Territory Department of Health and Families, *Committee Hansard*, 19 March 2010, p. 16.

28 Ms Kacy Kohn, East Arnhem Regionalisation Coordinator, Northern Territory Department of Health and Families, *Committee Hansard*, 19 March 2010, p. 25.

29 Mrs Rebecca Allnutt, *Committee Hansard*, 18 February 2010, p. 9.

The impact of hearing loss among Indigenous Australians on education

8.25 As noted above Indigenous children, especially those from remote areas, suffer very high rates of ear disease and hearing impairment. The committee heard a considerable amount of evidence which strongly suggests a link between hearing impairment among Indigenous school children and poor educational outcomes. This link has been made in the past,³⁰ though the problem appears to be still widely in evidence today.

8.26 The Northern Territory Department of Education and Training (NT DET) described the issues of hearing impairment in classrooms as being threefold:

Looking at the implications of hearing impairment for individuals and the community, as well as the large number of children suffering from otitis media and having conductive hearing loss we also have the added issue of the majority of them having English as a second language [ESL] or developing English as a second language at a time when they may not have already developed their first language because of the hearing issues. In addition, a lot of our teachers, if not most, come from interstate and are therefore dealing with the situation of teaching perhaps the first time in a cross-cultural situation. Those three things—the conductive hearing loss, the ESL issue and the cross-cultural issue—impact greatly on the provision of education.³¹

8.27 NT DET's view was shared by another Northern Territory (NT) submitter, who expanded on these difficulties:

In Australia, most Indigenous children are taught in standard Australian English by a non-Indigenous teacher. In this setting certain factors appear to compound the difficulties associated with hearing loss for Indigenous children.

They face culturally unfamiliar and highly verbal teaching styles that require students to learn from listening to teachers and peers in an artificial classroom environment.

Their classrooms are often noisy and seldom have adequate acoustics or appropriate amplification for Indigenous children with hearing loss.³²

8.28 These problems are not limited to the NT. Evidence was heard about similar conditions in South Australia (SA), Western Australia (WA) and Queensland.³³ The

30 See in particular Northern Territory Department of Education, *Learning Lessons: an independent review of Indigenous education in the Northern Territory*, (1999), viewed 20 April 2010, http://www.det.nt.gov.au/_data/assets/pdf_file/0005/7475/learning_lessons_review.pdf

31 Ms Denyse Bainbridge, Hearing Team Coordinator, Student Services, NT Department of Education and Training, *Committee Hansard*, 16 February 2010, p. 40.

32 Phoenix Consulting, *Submission 112*, p. 9.

impacts of these factors on the children's engagement with their schooling can include disengagement:

The main problems are language delay, schooling delay and truancy—you just cannot keep up with what the teachers say, so you switch off. And what do you do if you are switched off and you are bored? You start mucking around with the kid next to you. When you muck around with the kid next to you, you get a pattern of behaviour of being a bit of a rebel or you get into trouble. You say, 'I do not want to come to school,' so you have truancy issues.³⁴

8.29 One researcher found that once the number of hearing impaired Indigenous children in a classroom went above a certain level, the non-hearing impaired children's education also suffered, as the teacher's time was taken up providing individualised support and managing behaviour.³⁵

8.30 Some studies have shown that Indigenous children suffering from chronic ear disease may become disengaged from their learning, sometimes with big consequences:

Learning within the school environment relies on language and communication skills, and children who have experienced hearing loss in early life are likely to struggle with most aspects of schooling. Children who have difficulty performing tasks that require literacy and numeracy skills may become disinterested in learning and attend school less regularly. Consequently, they are less familiar with classroom routines and less able to interpret and participate in classroom activities when they do attend school. Ultimately, hearing loss may lead to school failure, absenteeism, early school dropout, and reduced employment opportunities.³⁶

8.31 Early onset hearing loss can have a great impact on a child's ability to acquire language as they grow older. This is a critical issue for children for whom the language of instruction is different from their native language, as was noted in one submission:

Children on the [Anangu Pitjantjatjara Yankunytjatjara] Lands learn English as a second language and this usually commences when they start school. It is overwhelmingly the language of instruction in schools, yet the primary language of use is Pitjantjatjara. Hearing impairment at the levels we record will impact significantly on a child's ability to learn, particularly

33 See for example, respectively, Professor Linnett Sanchez, Flinders University School of Medicine, *Submission 31*; Professor Harvey Coates, *Committee Hansard*, 9 December 2009; and Dr Chris Perry, Clinical Director, Deadly Ears, *Committee Hansard*, 7 December 2009.

34 Dr Chris Perry, Clinical Director, Deadly Ears, *Committee Hansard*, 7 December 2009, p. 5.

35 Phoenix Australia, *Submission 112*, p. 5.

36 Burrow S, Galloway A, Weisssofner N, *Review of educational and other approaches to hearing loss among Indigenous people*. Retrieved 24 March 2010 from <http://www.healthinonet.ecu.edu.au/other-health-conditions/ear/reviews/our-review-education>

where a second language is the means of instruction, with global consequences for the acquisition of basic literacy and numeracy. Hearing impairment thus contributes to the cycle of poverty and disadvantage so common in remote indigenous communities.³⁷

8.32 Indigenous children who experience hearing loss at a young age, and who do not have English language skills will also have difficulty accessing and using a sign language, such as Auslan, to communicate. The committee heard from several witnesses that people often develop their own idiosyncratic sign language to communicate with family and community groups, which is of little use outside those groups:

[Hearing impaired Indigenous people from remote communities] learn in their own communities not in the [English] language or Auslan; they have their own sign in that particular community. Once they get out of that community, if they do not speak English and they do not read, they do not know.³⁸

8.33 The committee heard evidence that communication difficulty caused by hearing loss can sometimes be misinterpreted as being caused by language or cross-cultural communication issues. One witness, an audiologist, provided an example of the consequences of this confusion in a classroom setting:

What I found in...one school was a young Indigenous girl. They thought English was her second language and that therefore she could not understand English, so her older sister was interpreting for this young girl. When we did the hearing assessment, we found she needed hearing aids. So her problem was not that English was her second language; it was simply that she could not hear.³⁹

8.34 NT DET described to the committee how it employs a team of people which works across the NT to help coordinate hearing services to schools, and support teaching and school staff to teach hearing impaired children.⁴⁰

8.35 Nevertheless, the committee heard from an Aboriginal Health Worker who specialises in hearing health who gave evidence that, in her experience, teachers are not trained to understand the implications of hearing loss for individual students.⁴¹

8.36 In Queensland the Deadly Ears program also emphasises the importance of preparing teachers:

37 Professor Linnett Sanchez, Flinders University School of Medicine, *Submission 31*, p. 3.

38 Mrs Dorothy Fox, *Committee Hansard*, 16 February 2010, p. 86.

39 Ms Sandra Nelson, *Committee Hansard*, 16 February 2010, p. 80.

40 Ms Denyse Bainbridge, *Committee Hansard*, 16 February 2010, pp 39-41.

41 Ms Sandra Nelson, *Committee Hansard*, 16 February 2010, p. 79.

You have to teach the teachers who are going out to these communities how to teach a classroom where they are all deaf. You do not talk while you are writing on the blackboard. You have to sit down with individual kids and say, 'Did you take in what I just said to you?'⁴²

Good practice in the education of hearing impaired Indigenous children

8.37 The committee heard from a wide range of individuals and organisations engaged in addressing Indigenous hearing health issues. Witnesses testified to the effectiveness of different approaches.

Sound field systems

8.38 A sound field system is a low power public address system with a wireless microphone for the teacher to wear. The committee heard evidence that the installation of a sound field system in classrooms where a significant proportion of students are hearing impaired has been shown to provide educational benefits. Teachers who have used the systems report they are helpful because students are able to hear and follow instructions, they behave better, and they are less distracted by outside noises.⁴³

8.39 Evidence was also presented that the sound field system is most effective when the classroom has acoustic conditioning features.⁴⁴

8.40 Witnesses noted that whilst children are able to access hearing aids under the Australian Government Hearing Services Program, the program does not support the purchase of sound field systems.⁴⁵ This is despite the fact that Indigenous children do not always wear their hearing aids: 'Hearing aids are often strongly disliked and cause acute embarrassment and shame.'⁴⁶

8.41 The committee was unable to identify any systemic, centralised program in any state or territory, for funding, installing and maintaining sound field systems in classrooms.⁴⁷

8.42 It was suggested to the committee that providing funding for sound field systems makes more economic and social sense than providing funding for individual

42 Dr Chris Perry, Clinical Director, Deadly Ears Program, *Committee Hansard*, 7 December 2009, p. 7.

43 Australian Hearing, *Submission 38*, p. 20.

44 Professor Harvey Dillon, Director, National Acoustic Laboratory (NAL), *Committee Hansard*, 19 March 2010, p. 22.

45 Australian Hearing, *Submission 38*, p. 20.

46 Australian Hearing, *Submission 38*, p. 20.

47 DOHA, answer to question on notice 19 March 2010 (received 3 May 2010).

hearing aids. Sound field systems do not involve the stigma of hearing aids, and they benefit all children in the class. In the words of an Alice Springs-based audiologist:

We know for a fact that if you have got a classroom of children with, say, four hearing aids in there, it would probably be more expensive than having one sound field system that is going to help all of those kids.⁴⁸

8.43 Professor Harvey Coates was unequivocal about installing sound field systems in classrooms:

Starting with every new school that is built, every classroom should have a sound field system using the new infrared system so that you do not have the problems we had in the Kimberley, where the rats would eat the wiring to the speakers and so forth. I think that is the first step—no doubt whatsoever. The second step then is to retrofit those classrooms where there are children identified as at risk.⁴⁹

Deadly Ears (Queensland)

8.44 As has been noted above, part of the reason for continuing high levels of ear disease and hearing loss among Indigenous Australians is the poor access to primary and specialist healthcare services in remote areas. The issues of remote health delivery are summed up in Ear Science Institute Australia's submission:

...a reliance on face-to-face contact with scarce specialists to assess children [in remote areas] and manage ear conditions cannot be sustained. Visits by these specialists to regional centres are infrequent, whilst visits to towns and communities are very rare. Delays in receiving treatment results in complications including permanent hearing loss, cholesteatoma and even risk of death. Pre- and post-surgical assessments are often difficult to arrange as well, and there are significant barriers for children to travel to the regional centres for medical care.⁵⁰

8.45 In addition, the committee heard evidence that if Indigenous people from remote areas have to travel for an hour or more for an operation or medical services, only one in three will make the trip.⁵¹

8.46 The Queensland Government has responded with the Deadly Ears initiative. Deadly Ears provides a combination of fly-in fly-out Ear, Nose and Throat (ENT) specialists conducting minor surgery on site, health promotion and education

48 Mrs Rebecca Allnutt, *Committee Hansard*, 18 February 2010, p. 17.

49 Professor Harvey Coates, *Committee Hansard*, 9 December 2010, p. 24.

50 Ear Science Institute Australia, *Submission 66*, p. 2.

51 Dr Chris Perry, Clinical Director, Deadly Ears Program, *Committee Hansard*, 7 December 2009, p. 4.

programs, and health worker training all underpinned by community engagement and consultation.⁵²

8.47 Dr Chris Perry, Clinical Director of Deadly Ears, told the committee that one of the great strengths of the Deadly Ears approach is to engage with community leadership about the type of services they need and the best approach for delivery before sending teams of specialists in to a community.⁵³

Ear telehealth

8.48 The committee also heard evidence that technology is being employed to address remote servicing issues.

8.49 Ear telehealth (sometimes called 'teleaudiology')⁵⁴ involves training local health workers to use specialised equipment to take high quality images of the ear drum and ear canal. These images are then assessed remotely by a specialist, who can provide health management advice for the health worker.⁵⁵

8.50 Dr Chris Perry remarked on the advantages of using ear telehealth:

[the local health worker] takes pictures and he sends them back to us. You can see 27 kids in about an hour and a half that way. You cannot see them in remote communities but you can with telehealth.⁵⁶

8.51 Ear telehealth can be more sophisticated than just reviewing images, with advanced diagnostic assessments being undertaken by specialists in Queensland remotely via computer.⁵⁷ In his evidence to the committee, Professor Harvey Dillon of NAL was supportive of the ear telehealth approach,⁵⁸ as was Professor Harvey Coates in WA.⁵⁹

8.52 The Ear Science Institute Australia has estimated that the economic benefits of a large scale rollout of ear telehealth to remote Australia could be around one

52 Allied Health, Clinical Support and Rehabilitation Services: Deadly Ears State-wide Aboriginal and Torres Strait Islander Ear Health Program, viewed 29 March 2010, http://www.health.qld.gov.au/rch/professionals/ah_ats_earhealth.asp

53 Dr Chris Perry, Clinical Director Deadly Ears Program, *Committee Hansard*, 7 December 2009, pp 6, 9.

54 Professor Harvey Dillon, Director, NAL, *Committee Hansard*, 19 March 2010, p. 11.

55 Ear Science Institute Australia, *Submission 66*, pp 2-3.

56 Dr Chris Perry, Clinical Director, Deadly Ears Program, *Committee Hansard*, 7 December 2009, p. 8.

57 Professor Harvey Coates, *Committee Hansard*, 9 December 2010, p. 14.

58 Professor Harvey Dillon, Director, NAL, *Committee Hansard*, 19 March 2010, p. 11.

59 Professor Harvey Coates, *Committee Hansard*, 9 December 2010, p. 15.

billion dollars over 25 years.⁶⁰ However it was pointed out to the committee that under existing arrangements, ENT specialists are unable to access funding through Medicare for telehealth consultations.⁶¹

Taking an holistic approach to hearing health

8.53 The committee heard from a range of witnesses that treating ear health in isolation from the other realities of people's lives may inhibit the effectiveness of treatments. It was suggested that Indigenous people's cultural, social, environmental, and economic circumstances should be part of the solution. In the words of one witness:

You cannot necessarily target hearing health or optical health or oral health as in the [Northern Territory Emergency Response] because they have the same underlying causes anyway [i.e. poverty and overcrowding and much more general health issues]. These programs really need to involve and empower Indigenous people to long-term strategies.⁶²

8.54 The evidence suggests that a large part of a successful solution lies in educating and engaging families:

In dealing with and treating otitis media and hearing damage, across the board everybody has said that working with and engaging directly with the families of kids is the approach that will make a difference in the long term. It means educating the carers and the parents, the people who are around those kids, the young mums.⁶³

8.55 A number of witnesses referred the committee to the work of the Aboriginal Resource and Development Services (ARDS), an organisation based in Arnhem Land which has worked for many years with Yolngu people of the area on health issues. According to one witness:

The interesting thing about [about ARDS] is because they are working only in [Indigenous] language they have to restrict themselves to the words that are already known by the community and to the concepts that are already known by the community. They find out what is known about whatever the health topic is and then they build onto that in language, using concepts that are already understood. So if they are trying to teach about bacteria, they look around and see what is similar in concept and build onto that. In that way, community members get a greater understanding about what is

60 Ear Science Institute Australia, *Submission 66*, p. 3.

61 Ear Science Institute Australia, *Submission 66*, p. 3; see also Professor Harvey Dillon, Director of Research, Australian Hearing, *Committee Hansard*, 19 March 2010, p. 12.

62 Mr Derek Moule, *Committee Hansard*, 16 February 2010, p. 22.

63 Mr Tristan Ray, Manager, Central Australian Youth Link Up Service, *Committee Hansard*, 18 February 2010, p. 1.

underpinning all these health problems, and with that knowledge are better able to manage their own environment and to manage their own health.⁶⁴

8.56 Ms Ann Jacobs provided evidence about the effectiveness of the primary healthcare model in addressing Indigenous hearing health. She explained that:

The primary healthcare model has a community focus. It looks at prevention, identification, control of the transmission of the disease and management from prenatal to adults. It has got a community focus and it recognises that you do not have individual children with conductive children; you have families and communities—because it is so infectious.⁶⁵

8.57 The committee heard evidence from Ms Jacobs about her experience of harnessing strong Indigenous family ties to make a difference in addressing children's hearing health:

One man I worked with recently was a single parent who had recently been released from jail. He was illiterate and he had three children. All had middle ear disease, and unfortunately the middle ear disease of the middle [child] was so bad that he was mute; he could not speak at all. He was five. I explained the whole thing to [the father], and the next week he brought me five additional children. He collected up all the little kids and brought them all in. He was a wonderful dad. Each week I would teach him something new and each week he would bring these kids back...So there is a level of community and family that exists within Aboriginal families that we can really use, and we need to build capacity and knowledge. To me, that is the way forward...⁶⁶

The Goldfields Ear Health Conference

8.58 The committee heard evidence that the Goldfields Ear Health Conference, held biennially in Kalgoorlie since 2005, is the 'only Australian conference that brings together leaders in the field of [ear health] research and service provision from both health and education [perspectives].'⁶⁷ The conference is focused on improving ear health for Indigenous Australians in remote areas.

8.59 Australian Hearing gave evidence about the value of the conference, especially for people who work in isolated communities:

I think it does play a valuable role. I think any opportunity to get together and talk about strategies and experiences is valuable. Outreach audiologists,

64 Ms Samantha Harkus, Manager Indigenous Services, Australian Hearing, *Committee Hansard*, 19 March 2010, p 21; for further information visit the ARDS website at <http://www.ards.com.au/>

65 Ms Ann Jacobs, *Committee Hansard*, 9 December 2009, p. 55.

66 Ms Ann Jacobs, *Committee Hansard*, 9 December 2009, p. 64.

67 Phoenix Consulting, *Submission 112*, p. 55.

whether they work for Australian Hearing or for NT Hearing, often work in isolation. It is good to bring them together.⁶⁸

8.60 One Alice Springs-based audiologist was enthusiastic about the conference, and noted that the Ear Health Infonet is an outcome of that conference:

For us it is all about having hearing people together to talk about these issues and to find out what others are doing and to let them know what we are doing, what has worked for us and what has not. The one great thing that has come out of it is the ear Infonet.⁶⁹

8.61 Whilst many witnesses similarly testified about the great value of this conference to educators and ear health professionals, its future is in doubt as it is run by volunteers and has no secure funding. In the opinion of Dr Damian Howard 'unless it gets national support I think it is going to fall over.'⁷⁰

Ear Health Infonet

8.62 The Ear Health Infonet is a web-based resource which:

...aims to increase evidence-based prevention and management of Indigenous ear health and hearing problems by improving access to relevant evidence-based information and educational resources and increasing national collaboration and communication in this area.⁷¹

8.63 As with the Goldfields Ear Health Conference, the Ear Health Infonet links practitioners and researchers with quality, evidence-based information and resources. Menzies School of Health Research, a key partner of Ear Health Infonet, testified that whilst the site has been around for over three years it is based on a need that has existed longer than that.⁷²

8.64 According to Miss Felicity Ward of Menzies School of Health Research:

[Ear Health Infonet] was about providing research evidence online for all people working in the area. We have a yarnning space as well, which is a forum for people working in the area. So ENTs, speech pathologists, audiologists, teachers and everyone can communicate across the country about issues that come up working in the area of ear health and hearing. It is guided by a national reference group that has Judith Boswell, Harvey Coates and a few other people. They guide the process of how it works, what it looks like and the way they would like to see it. They inform us of

68 Ms Sam Harkus, Manager Indigenous Services, Australian Hearing, *Committee Hansard*, 19 March 2010, p. 23.

69 Mrs Rebecca Allnutt, *Committee Hansard*, 18 February 2010, p. 16.

70 Dr Damien Howard, *Committee Hansard*, 16 February 2010, p. 112.

71 Menzies School of Health Research, viewed 7 April 2010, <http://menzies.edu.au/research/child-health/ear-and-oral-health/-australian-indigenous-earinfonet-ear-health-and-hearing-w>

72 Miss Felicity Ward, Menzies School of Health, *Committee Hansard*, 16 February 2010, p. 68.

different ways that we can make it more accessible to people out there at the level of working in the communities, working in ear health and hearing. I think there are about 360 members on the yarning board.⁷³

8.65 One witness, an audiologist based in Alice Springs, commented on the value of Ear Health Infonet to her work:

It is absolutely fantastic. I have that on my desktop because it is just such a valuable resource. I am constantly going there and making sure that people are aware of it because it is a great thing. In this day and age, realistically, it is very hard logistically for us all to get together so when we have that kind of resource available it is really important that we use it and that it is supported by the government, both Territory and federal.⁷⁴

Earbus

8.66 Telethon Speech and Hearing run the Earbus initiative in WA. Earbuses are mobile children's ear clinics which provide hearing assessment and management for school children in Perth and South-West WA. The Earbus model not only provides hearing assessments, it also refers children to a GP and, if necessary, an ENT specialist for follow up.⁷⁵

8.67 Telethon Speech and Hearing noted in their submission the major success factors for the Earbus project. These factors may be of broader application for all service providers working in Indigenous hearing health, and therefore are reproduced in the box below.

Ten 'indispensable elements' of a WA hearing services delivery model

- Middle ear screening via Earbus using a range of instruments – otoscopy, tympanometry, Pure tone audiometry screening, otoacoustic emissions and acoustic reflexometry.
- School or district-based Aboriginal Liaison Officers to work with Aboriginal families to elicit their cooperation, support and consent for the screening program.
- Professional Development for school staff to increase their understanding of the impact and causes of middle ear disease; support for staff to develop intervention approaches.
- Community Development (Education and Awareness) for families, health workers and allied health professionals to engage them as informed supporters and participants.

73 Miss Felicity Ward, Menzies School of Health Research, *Committee Hansard*, 16 February 2010, p. 68

74 Mrs Rebecca Allnut, *Committee Hansard*, 18 February 2010, p. 16.

75 Telethon Speech and Hearing, *Submission 11*, [pp 3-5].

- Infrastructure investment and support advice for communities that can invest in value adding such as soundfield amplification, swimming pools, personal FM systems etc.
- GP services delivered directly into the schools wherever possible based on close liaison and collaboration with existing Aboriginal Medical Services and GP divisions.
- ENT liaison and local hospital support to expedite surgery for children in urgent need.
- School nurses as key support personnel in administering medication, following up GP treatment regimes and liaising with families.
- Follow up audiology services where required using community resources (eg UWA Masters of Clinical Audiology students), Australian Hearing and local area health services.
- Data capture for research purposes to evaluate the success of the program in reducing the incidence of middle ear disease in Aboriginal children and of primary school age.

Telethon Speech and Hearing, Submission 11, [p. 6].

Swimming Pools

8.68 A number of witnesses expressed the belief that swimming pools in remote communities are likely to reduce the incidence of ear disease among children.⁷⁶ Specifically, people argued that a regular swim in a properly maintained pool helps to keep the ear canal and outer ear clean, and may even wash away biofilm and prevent damaging infections taking hold.⁷⁷

8.69 The committee notes the release of a recent report which tested, among other things, the effects of swimming pools in remote Indigenous communities on ear health,⁷⁸ and found that:

...swimming pools have not had an impact on the ear health at this stage. However the initiation of a further study funded through the Department [of

76 See for example: Dr Chris Perry, Clinical Director, Deadly Ears, *Committee Hansard*, 7 December 2009, p. 10; Professor Harvey Coates, *Committee Hansard*, 9 December 2010, p. 18; Telethon Speech and Hearing, *Submission 11*, [p. 7].

77 See Ms Kathy Currie, Hearing Health Program Leader, Northern Territory Department of Health and Families, *Committee Hansard*, 19 March 2010, p. 28.

78 Healthcare Planning and Evaluation, *Evaluation of the sustainability and benefits of swimming pools in the Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands) in South Australia*, July 2009, viewed 1 April 2010, [http://www.health.gov.au/internet/main/publishing.nsf/Content/AE9490AB62641D4BCA2576CC00205A5A/\\$File/hpe_swimmingpercent20pools_SA.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/AE9490AB62641D4BCA2576CC00205A5A/$File/hpe_swimmingpercent20pools_SA.pdf)

Health and Ageing] that commenced in March 2009 provides an opportunity to monitor changes over the longer term.⁷⁹

Indigenous hearing health and the criminal justice system

The link between hearing impairment and criminal activity

8.70 It has been noted at chapter four of this report that the committee heard evidence of a link between early onset hearing impairment and increased engagement with the criminal justice system. The committee further heard that there are several factors which exacerbate this connection as it applies to Indigenous people, particularly Indigenous people from remote areas who do not speak English as their first language.

8.71 Evidence was heard that the factor between linking impairment with criminal activity is poor educational outcomes. In its submission, the Northern Australian Aboriginal Justice Association (NAAJA) cited research which shows that Indigenous people who have completed school at Year Nine level or below are twice as likely to be charged with an offence, and three times more likely to be imprisoned than Indigenous people who have completed Year 12.⁸⁰

8.72 Language development is often impaired among people with a hearing impairment, especially if hearing impairment is early onset and undiagnosed. One witness testified that there is evidence showing a correlation between language development and criminal activity:

It is...interesting that the *Early years study 2* report has shown that language skills at six, 18 and 24 months strongly correlate with criminal charges in adolescence.⁸¹

8.73 Other witnesses emphasise that there is a demonstrable link between hearing impairment and criminal activity:

We believe that hearing impairment is a significant contributor to the causal pathway that represents a failure basically of education and health to deal with those issues and they get picked up by the justice system.⁸²

79 Healthcare Planning and Evaluation, *Evaluation of the sustainability and benefits of swimming pools in the Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands) in South Australia*, July 2009, p.1., viewed 1 April 2010, [http://www.health.gov.au/internet/main/publishing.nsf/Content/AE9490AB62641D4BCA2576CC00205A5A/\\$File/hpe_swimmingper cent20pools_SA.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/AE9490AB62641D4BCA2576CC00205A5A/$File/hpe_swimmingper cent20pools_SA.pdf)

80 Northern Australian Aboriginal Justice Agency (NAAJA), *Submission 170*, p. 3.

81 Ms Ann Jacobs, *Committee Hansard*, 9 December 2009, p. 54.

82 Mr Paul Higginbotham, CEO, Telethon Speech and Hearing, *Committee Hansard*, 9 December 2009, p. 39.

Hearing loss may not *cause* criminal activity, but when considering the stigmatising effects of hearing impairment on self-concept, educational attainment and social skills, there is a causal link to criminal activity.⁸³

The extent of hearing impairment among Indigenous prisoners

8.74 The committee heard evidence that there have been no large scale, formal studies undertaken into the question of prevalence of hearing impairment among Indigenous prisoners. Dr Damian Howard, who has been actively engaged in this issue, gave evidence to the committee that:

There have never been any formal studies into [the extent of hearing loss among Indigenous people engaged with the justice system], despite the attempts on numerous occasions to get some going, particularly by me and a number of other people. When trying to attempt to get these studies going, the response has generally been people from the criminal justice system saying that it is a health issue and people from the health system saying that it is a criminal justice issue...when a problem is everyone's issue, it very easily becomes no-one's issue.⁸⁴

8.75 The committee heard preliminary results from one study which found high levels of hearing loss and unhealed ear perforations among female Indigenous inmates. The preliminary results of that study indicate that 46 per cent of the women had a significant hearing loss, and that of those failing a hearing screening, 30 per cent had perforations of one or both eardrums.⁸⁵

8.76 Notwithstanding the lack of hard data, anecdotal evidence from the NT seems to indicate that in that jurisdiction at least the prevalence may be very high indeed:

Limited research work suggests that 85 to 90% of Indigenous prisoners have hearing loss.⁸⁶

We know for a fact that out at the jail here [i.e. in Alice Springs] out of the 90 per cent of the Indigenous people who would be out there, 99 per cent of those would have a hearing loss. It is quite scary.⁸⁷

8.77 Researchers in other jurisdictions that have large populations of remote Indigenous people have also given evidence about the high prevalence of hearing impairment among Indigenous prisoners, and in one case their attempts to quantify its extent.⁸⁸

83 NAAJA, *Submission 170*, p. 4.

84 Dr Damien Howard, *Committee Hansard*, 16 February 2010, p. 101.

85 Telethon Speech and Hearing, *Submission 11*, additional information provided 7 May 2010.

86 Dr Damien Howard, *Committee Hansard*, 16 February 2010, p. 100.

87 Mrs Rebecca Allnutt, *Committee Hansard*, 18 February 2010, p. 12.

88 See for example Mr Paul Higginbotham, CEO, Telethon Speech and Hearing, *Committee Hansard*, 9 December 2009, p. 49.

8.78 Dr Stuart Miller, President of the Australian Society of Otolaryngology Head and Neck Surgeons (ASOHNS), offered his opinion that the extent of hearing impairment amongst Indigenous prisoners is likely to be the same as it is for Indigenous people who are not in prison.⁸⁹

Communication difficulties between police and Indigenous people

8.79 The committee heard that:

...hearing difficulties often lead to difficulties similar to those that arise from cultural and linguistic barriers. This means that issues of understanding and miscommunication are attributed to linguistic difficulties, while the hearing impairments, which may really cause this, are often unrecognised.⁹⁰

8.80 Dr Damien Howard explained further in Phoenix Consulting's submission:

Difficulties with inter-cultural communication processes, the perceptions and responses of non-Indigenous staff and background noise levels, in combination with Conductive Hearing Loss, can and do lead to significant communication problems.

Linguistic and cultural differences are frequently presumed to be the reason why an Indigenous witness may misinterpret a question, give an inexplicable answer, remain silent in response to a question or ask for a question to be repeated. The potential contribution of hearing loss to a break down of communication is generally not considered. However, it is probable that the distinctive demeanour of many Indigenous people in court is related to their hearing loss. Where this is the case there is a very real danger that the courtroom demeanour of Indigenous people (not answering questions, avoiding eye contact, turning away from people who try to communicate with them) may be being interpreted as indicative of guilt, defiance or contempt.⁹¹

8.81 One witness testified about the potential consequences of poor communication caused by hearing loss:

One audiologist talked to me about dealing with a client who had recently been convicted of first-degree murder and had been through the whole criminal justice process. That had happened and then she was able to diagnose him as clinically deaf. He had been through the whole process saying, 'Good' and 'Yes'—those were his two words—and that process had not picked him up. Given the very high rates of hearing loss, you have to wonder about people's participation in the criminal justice system as being

89 Dr Stuart Miller, President of the Australian Society of Otolaryngology Head and Neck Surgery (ASOHNS), *Committee Hansard*, 9 December 2010, p. 12.

90 NAAJA, *Submission 170*, p. 5.

91 Phoenix Consulting, *Submission 112*, pp 26-27.

fair and just if in cases like that people simply are not hearing or understanding what is going on.⁹²

8.82 The committee notes that there is legal precedent which suggests that undiagnosed hearing impairment in a convicted person could, in some circumstances, render that conviction unsafe on the grounds that it is an essential principle of the criminal law that accused persons not only be present at trial, but that they be able to understand what is going on and make decisions about the conduct of proceedings.⁹³

8.83 Evidence was also presented to the committee that prison life for people with a hearing impairment, including Indigenous people, can be harder than it is for people with normal hearing ability. NAAJA noted in their submission that:

It is unquestionably the case that the experience of jail is significantly more severe on people with hearing impairments. Prisons operate with a heavy reliance on prisoners hearing commands, and responding as required. This includes the use of bells and sirens and following oral instructions.⁹⁴

8.84 One witness supported NAAJA's view when he reported on his conversations with hearing impaired prisoners at Alice Springs Correctional Centre:

Several of the guys...told me that, because of their hearing loss, they often did not understand what guards wanted them to do, so they were in constant strife with the guards in the prison. We had a program to provide hearing aids to these guys, because they did not qualify for hearing aids from any other sources. Thank goodness, the Office of Hearing Services would donate returned hearing aids. We used those, and it made quite a difference in a lot of individual guys' lives now that they could hear and understand things. Their perception by guards and their perceived behaviour improved

92 Mr Tristan Ray, Manager, Central Australian Youth Link Up Service, Tangantyerre Council, *Committee Hansard*, 18 February 2010, pp 1-2.

93 In *Ebatarinja v Deland* [1998] HCA 62; (1998) 194 CLR 444 (<http://www.austlii.edu.au/au/cases/cth/HCA/1998/62.html>) the High Court accepted the reasoning of the Judicial Committee of the Privy Council in the case of *Kunnath v The State* [1993] 4 All ER 30 that it is a necessary condition of a fair trial that an accused be not only present at trial, but that they "be able to understand the proceedings and decide what witnesses ...to call, whether or not to give evidence and, if so, upon what matters relevant to the case against him." Physical presence of the accused is insufficient. The case of *Ebatarinja* concerned a mute, deaf and illiterate Indigenous man charged with murder who was unable to understand the committal proceedings or even the fact that he had been charged. Although it concerns the committal process, the Court's reasons are directed to criminal trial procedures generally. It is arguable from this case that a defendant's previously undiagnosed and untreated hearing loss or impairment may, in some circumstances, constitute a failure to comply with what the Court describes as an "essential principle of the criminal law". If that failure constitutes a "substantial miscarriage of justice", it could be grounds for an appeal.

94 NAAJA, *Submission 170*, p. 6.

because they knew what was expected of them. So it all has to do with proper and clear communications.⁹⁵

8.85 Ms Amarjit Anand, NT Government Principal Audiologist, testified that arrangements have been in place in the past to conduct hearing assessments and provide follow up services for prisoners in the NT, though she was uncertain as to the present arrangements. Ms Anand also noted that the Northern Territory Correctional Services had requested professional development for their officers to help them work more effectively with hearing impaired prisoners.⁹⁶

Assistance and support

8.86 The committee heard from several witnesses that the use of technologies and assistive devices can be of great assistance in police station and courtroom environments. NAAJA submitted that whilst currently used infrequently:

...amplifiers have an immediate positive impact on both the ability of Aboriginal defendants to communicate and the demeanour of clients.⁹⁷

8.87 Phoenix Consulting provided a case study to the committee which highlights the benefits of assistive technologies for one Indigenous man:

Case study: Barry, a rehabilitation success story

Barry was in his forties and suffered from persistent middle ear disease in both ears which caused severe hearing loss which continued to as he got older. He also had a long history of involvement with the criminal justice system, had been to jail a number of times, and had a very negative relationship with police.

Police who had pulled Barry over in his car would tend to raise their voices when it was clear Barry had trouble understanding them. However, this often provoked anger and aggression from Barry who felt they were shouting at him. On a number of occasions this resulted in his arrest.

Barry was often excluded from family conversations, sitting with family members but rarely included in the discussion. He had found it too stressful to join in [Community Development Employment Program] ('work for the dole') activities, because of the communication difficulties he experienced in working in teams.

Barry had been trying to get a hearing-aid for 20 years without success. When his hearing loss was first identified as an adult, he was too young to qualify for a free hearing-aid and too poor to afford to buy one. When Barry finally became eligible to receive a free hearing-aid, the complex bureaucratic processes involved were a major obstacle, because it required literacy and phone communication skills that Barry did not have. Barry was given a personal

95 Mr Louis Leidwinger, *Committee Hansard*, 16 February 2010, p. 37.

96 Ms Amarjit Anand, Principal Audiologist, Northern Territory Hearing, *Committee Hansard*, 16 February 2010, p. 18.

97 NAAJA, *Submission 170*, p. 7.

amplification device while he waited hopefully for a hearing-aid, which a year later had yet to happen.

After Barry had used the relatively inexpensive hand held or 'pocket talker' amplification device for a month, he and his wife described the changes that the device had made in Barry's life.

He was generally much less stressed.

He was able to participate in family discussions, and was now much more engaged in family life.

He was able to establish a more positive relationship with local police, as he could now have a conversation with them.

He was able to participate more easily in culturally important hunting and fishing activities because he could hear people when they called out in the bush.

When Barry was finally fitted with hearing-aids he was a changed man. He found the hearing aid even better than the portable amplification device. He was successful in gaining a supervisory position in his workplace. He described how both he and his family experienced much less stress and frustration now he had a hearing-aid.

Source: Phoenix Consulting, *Submission 112*, pp 28-29.

8.88 NAAJA noted the absence of hearing loops in police stations and courtrooms. Having argued that there are links between hearing loss and criminal activity, they conclude that assistive technologies such as hearing loops in these places should be 'compulsory'.⁹⁸

8.89 The committee also heard evidence about the use of legal interpreters for people with a hearing impairment. The use of interpreters is complicated by three factors. Firstly, as has been noted elsewhere, Indigenous people from remote areas, especially among those who suffered hearing loss at a young age, often have low levels of English language and literacy skills. This limits the capacity of many deaf interpreters to assist. Secondly, even if deaf interpreters can be found with Indigenous language skills, they would need to understand the particular language of the person they have been called to assist, which is not always the case. And thirdly there are very few interpreters available in the NT,⁹⁹ arguably the jurisdiction with the greatest need.

8.90 The case study in the box below was provided to the committee by NAAJA. This case illustrates the complexity of the challenges facing hearing impaired Indigenous people engaged with the criminal justices system.

98 NAAJA, *Submission 170*, p. 7.

99 Ms Elizabeth Temple, NAAJA, *Committee Hansard*, 16 February 2010, pp 94-96.

Case Study – N

N is charged with several serious driving offences, including driving under suspension. He is deaf, and does not know sign language. N has significant difficulties explaining himself and will often nod during conversations, which leads to people to believe he is replying 'yes', when, in fact, he does not understand. He has a very limited and idiosyncratic form of sign language. Every now and then he does something that resembles signing.

N is not able to communicate with his lawyer. An AUSLAN interpreter has been utilised, but because N cannot sign, he is not able to convey instructions to his lawyer of any complexity. N's lawyer sought to arrange a Warlpiri finger talker through the Aboriginal Interpreter Service, but the interpreter concerned was not willing or able to come to court. It was also not known if N would even be able to communicate using Warlpiri finger talking.

The witness statements disclosed to defence included a statement from a police officer describing how she came upon a group of men in a park drinking. She ran a check on N, to discover he had warrants for his arrest, at which time she arrested him. Her statement reads: "It is my belief that he understood as he looked at me and became quite distressed. I asked (N) verbally if he understood and he nodded and turned his head away from me while raising his arms in the air."

N is currently on bail, but has spent significant periods on remand at Darwin Correctional Centre. His charges are yet to be finally determined, and an application for a stay of proceedings is pending. N is effectively trapped in the criminal justice system. He cannot plead guilty or not guilty because he is not able to communicate with his lawyer and provide instructions.

He had previously been granted bail, but after failing to attend court as required, his bail was revoked. Significantly, his inability to convey information (or to understand what his lawyer was trying to tell him) in relation to his charges has also been highly problematic in relation to bail. For example, when he was explaining to his lawyer with the assistance of the AUSLAN interpreter where he was to reside, both the interpreter and lawyer understood N to be referring to a particular community. It was only when the interpreter was driving N home, with N giving directions on how to get there, that it was discovered that he was actually referring to a different community altogether.

It has arguably been the case that N was not able to comply with his bail because he did not understand what his bail conditions were. N has subsequently spent a lengthy period of time remanded in custody as a result.

Whilst in custody, N is not provided appropriate services or assistance. He relies heavily on relatives who are also in custody. He is unable to hear bells, officers' directions and other essential sounds in the prison context. At one point, it was alleged that N was suicidal and he was moved to a psychiatric facility as a result. N denied the allegation but was unable to properly explain himself to resist his transfer.

Case study included in NAAJA, *Submission 170*, p. 8.

8.91 The committee notes that the 1991 report of the Royal Commission into Aboriginal Deaths in Custody did not identify or remark on any relationship between ear health, hearing impairment and Indigenous Australians' engagement with the

criminal justice system. The very few notes pertaining to ear health were made in the context of overall Indigenous health programs, and not in relation to criminal justice.¹⁰⁰ The report did comment on communication difficulties between medical professionals and Indigenous Australians from non-English speaking backgrounds. These difficulties were attributed by the report to language and inter-cultural issues.¹⁰¹

Committee comment

8.92 The committee has considered a large amount of evidence on the particular hearing health issues facing Indigenous Australians, and is alarmed at the ongoing disparities between Indigenous and non-Indigenous hearing health in Australia. The committee recognises that the particular hearing issues affecting Indigenous Australians are in addition to those facing all Australians, and that the combined weight for Indigenous Australians is great.

8.93 The committee would like to take this opportunity to acknowledge the commitment, dedication and passion of the many people and organisations working with Indigenous communities to address hearing health problems. They exhibit great resilience and energy in the face of a seemingly intractable problem, and continue to seek innovative solutions and set in place evidence-based good practice.

8.94 The committee understands that Indigenous hearing and health outcomes are intrinsically bound up in a complex array of social, economic, cultural and historical factors. No single clinical, pharmaceutical or technological intervention can provide a 'magic bullet' solution for otitis media and its effect on people's lives. This is not to say that interventions should not be targeted and specific, but rather that they should be undertaken holistically, within the social and medical realities of the day to day lives of Indigenous Australians. It is for this reason the committee's recommendations emphasise the importance of cross-agency and inter-jurisdictional efforts, and of putting research and information in the public sphere wherever possible.

8.95 The committee is deeply concerned about the impact of hearing impairment on Indigenous education outcomes, and is persuaded by the weight of evidence that its impact may be very great indeed, particularly for children from remote areas where English is a second language.

8.96 The committee has formed the view that there are practicable, evidence-based approaches being implemented in some places, and that there is a need for a single national body to facilitate the sharing of good practice in education of hearing impaired Indigenous children, and develop long term planning that will meet the future needs of children and educators.

100 See for example Report of the Royal Commission into Aboriginal Deaths in Custody (1991), Vol.4, 31.2.34 (Northern Territory); and 31.2.26 (Western Australia); and 31.2.24 (Queensland), viewed 22 April 2010, <http://www.austlii.edu.au/au/other/IndigLRes/rciadic/>

101 Report of the Royal Commission into Aboriginal Deaths in Custody (1991), Vol.4, 31.3.20-1.3.24, viewed 22 April 2010, <http://www.austlii.edu.au/au/other/IndigLRes/rciadic/>

8.97 The committee was persuaded by the evidence that there are demonstrable educational benefits for all children to installing sound field systems and acoustic conditioning, particularly in classrooms where there is a significant number of Indigenous children.

8.98 The committee further believes that families of hearing impaired children choosing schools for their children should be able to easily find out where such facilities exist.

8.99 The committee notes that many education providers, school leaders and teachers are aware of hearing impairment issues in education. Nonetheless, the experiences of parents and hearing health professionals attempting to engage the support of schools suggest to the committee that more needs to be done to raise hearing impairment issues with educators. The committee believes that some teachers may be unaware that they are dealing daily with behaviours in children that are symptomatic of hearing impairment. Furthermore, that even if teachers are aware they may lack the appropriate skills, resources and support to address them.

8.100 The committee believes that the Goldfields Ear Health Conference is of enormous value to ear health research and professional development in Australia, especially in regard to Indigenous ear health and education. This event should be a fixture in the calendar of people working in this field, and in light of the crisis in Indigenous ear and hearing health its future should be guaranteed.

8.101 The committee believes that Menzies School of Health Research and Australian Health Infonet are making a vital contribution to Indigenous ear health research and practice through the Ear Health Infonet. This resource makes evidence based good practice and resources available to even the most remote practitioner, and provides a site where people can share ideas and seek help. The sharing of knowledge will be crucially important in improving Indigenous health outcomes, and in light of the crisis in Indigenous ear and hearing health the future of Ear Health Infonet should be guaranteed.

8.102 The committee is gravely concerned about the potential implications of hearing impairment on Indigenous Australians' engagement with the criminal justice system. Those most vulnerable are Indigenous people from remote areas who do not have English as their first language, or indeed who, due to early onset untreated hearing loss, have little means of communication at all.

8.103 The case has been made to the committee's satisfaction that there is likely to be a link between hearing impairment and higher levels of engagement with the criminal justice system. The committee believes that any improvements in overall Indigenous hearing health may also come to be seen 'downstream' in lower engagement with the criminal justice system, improved educational outcomes, and improvements in other health and social wellbeing indicators.

8.104 Witnesses gave evidence that communication difficulties between Indigenous people, the police and the courts may, in some cases, be caused by hearing

impairment, and that it could be mistaken for cross-cultural or language communication difficulties. Poor communication at a person's first point of contact with the criminal justice system can have enormous implications for that person, and indeed for the integrity of the system as a whole. As has been noted above, the High Court has set a precedent that a conviction where the accused was not able to hear or understand the proceedings is not safe.

8.105 The committee also heard evidence that hearing assistance devices in police stations and courtrooms are not always available, and believes that with the very high levels of hearing impairment amongst Indigenous Australians these facilities should be available as a matter of course. This is particularly the case for jurisdictions which have high numbers of Indigenous people from remote areas engaging with police and courts.

8.106 The committee heard that prison life is particularly difficult for hearing impaired Indigenous Australians serving a custodial sentence. In a world managed by bells and verbal instructions, daily life for the hearing impaired is an extra challenge, especially if their impairment is undiagnosed. The committee hopes that improved awareness of the level of hearing impairment among Indigenous people serving custodial sentences will drive improvements to the way correctional facilities are designed and run.

Recommendations

8.107 The committee is making this series of recommendations in the hope that it will prompt the Australian Government to work closely with relevant authorities in all jurisdictions to review the convictions of hearing impaired Indigenous prisoners to ensure that they can be considered safe. The committee further hopes that systemic and procedural changes will follow that guarantee the protection of this vulnerable section of our community in future.

8.108 The committee notes that recommendations 23, 25, 26, 27, 28, 30 and 33 are directed at making improvements for all hearing impaired Australians. Whilst the weight of evidence which informed these recommendations was presented in the context of hearing impaired Indigenous Australians, the committee believes all Australians will benefit from their broad implementation.

Recommendation 21

8.109 The committee recommends that the Department of Education, Employment and Workplace Relations and Department of Health and Ageing jointly establish a task force to work across portfolios and jurisdictions on a plan to systemically and sustainably address the educational needs of hearing impaired Indigenous Australian children.

Recommendation 22

8.110 The committee recommends that Australian Hearing be enabled under the *Australian Hearing Services Act 1991* to supply and maintain sound field

systems for classrooms in all new classrooms, and in all existing classrooms where there is a significant population of Indigenous children.

Recommendation 23

8.111 The committee recommends that the Department of Health and Ageing work with the Department of Education, Employment and Workplace Relations to develop a program with Australian Hearing to:

- (a)** supply and maintain sound field amplification systems and acoustic conditioning in all new classrooms, and in all existing classrooms where there is a significant population of Indigenous children; and
- (b)** report publicly on where sound field amplification systems and acoustic conditioning are installed to assist parents in making informed choices about schools for their children.

Recommendation 24

8.112 The committee recommends that education providers ensure that teacher induction programs for teachers posted to schools in Indigenous communities emphasise the likelihood that hearing impairment among their students will be very high. Induction programs for these teachers must include training on the effects of hearing health on education, and effective, evidence-based teaching strategies to manage classrooms where a majority of children are hearing impaired.

Recommendation 25

8.113 The committee recommends that the Department of Education, Employment and Workplace Relations work with jurisdictions to develop accredited professional development programs for teachers and school leaders on the effects of hearing health on education, and effective evidence-based teaching strategies to manage classrooms with hearing impaired children.

Recommendation 26

8.114 The committee recommends that the Department of Health and Ageing make the changes to Medicare necessary to enable specialists and practitioners to receive public funding support for ear health services provided remotely via ear telehealth.

Recommendation 27

8.115 The committee recommends that the Department of Health and Ageing work closely with state and territory jurisdictions to develop and implement a national plan which:

- (a)** provides resources to conduct hearing assessments for all Australians serving custodial sentences who have never received such an assessment, including youths in juvenile detention; and
- (b)** facilitates prisoner access to those hearing assessment; and

- (c) encourages a high level of participation in those hearing assessments; and**
- (d) makes the findings of the hearing assessments available to the public (within privacy considerations).**

Recommendation 28

8.116 The committee recommends that the relevant ombudsman in each state and territory conduct an audit of Australians serving custodial sentences, including youths in juvenile detention, and consider whether undiagnosed hearing impairment may have resulted in a miscarriage of justice and led to any unsafe convictions.

Recommendation 29

- 8.117 The committee recommends that the Department of Health and Ageing:**
- (a) provide funding and resources to manage a national biennial Indigenous ear health conference; and**
 - (b) make the outcomes of those conferences publicly available to assist researchers and practitioners in the field of hearing health.**

Recommendation 30

8.118 The committee recommends that the Department of Health and Ageing work with state and territory health agencies to provide funding to support the continuation, promotion and expansion of the Ear Health Infonet.

Recommendation 31

8.119 The committee recommends that guidelines for police interrogation of Indigenous Australians in each state and territory be amended to include a requirement that a hearing assessment be conducted on any Indigenous person who is having communication difficulties, irrespective of whether police officers consider that the communication difficulties are arising from language and cross-cultural issues.

Recommendation 32

8.120 The committee recommends that the National Judicial College of Australia work with state and territory jurisdictions to develop and deliver accredited professional development programs for judges, lawyers, police, correctional officers and court officials on the effects of hearing impairment on Indigenous engagement with the criminal justice system, and effective evidence-based techniques for engaging effectively with people with a hearing impairment in courtroom environments.

Recommendation 33

8.121 The committee recommends that hearing loops are available in interview rooms and public counters of all police stations, and in all courtrooms, and that loop receiver devices be made available for people without hearing aids.

Recommendation 34

8.122 The committee recommends that correctional facilities in which greater than 10 per cent of the population is Indigenous review their facilities and practices, and improve them so that the needs of hearing impaired prisoners are met.

Senator Rachel Siewert
Chair

