



5<sup>th</sup> April 2010

Committee Secretary  
Senate Community Affairs References Committee  
PO Box 6100  
Parliament House  
Canberra ACT 2600    email [community.affairs.sen@aph.gov.au](mailto:community.affairs.sen@aph.gov.au)

Dear Committee Secretary,

Thank you for the opportunity to submit to the Senate Inquiry into Hearing. I will limit my submission to specific issues affecting Indigenous communities.

I am an audiologist. I earned a PhD in 1994 at the Menzies School of Health Research, Darwin (awarded by the University of Sydney). My thesis explored the early onset of otitis media (OM – middle ear disease) and associated hearing loss in Indigenous children. I have since provided extensive training to health staff in issues surrounding OM, its diagnosis, management and consequences.

As you will have received other submissions about the prevalence, aetiology and medical treatment of OM in Indigenous populations, my comments are primarily about the hearing and related problems common in this population.

## **Background**

The hearing loss associated with OM is typically described as 'mild' or 'moderate' in degree, reflecting descriptive categories more suited to adults (with established language skills) and to populations with adequate access to hearing and learning support services. However, the extent to which hearing loss affects communication, learning and social interaction is affected by the presence of exacerbating and protective conditions. Indigenous people (particularly those living in rural or remote areas) have many personal and environmental factors which compound their hearing loss. For Indigenous children, exacerbating conditions can include:

- early disease onset (in the first weeks of life)
- recurrent, persistent or chronically deteriorating OM and its physical sequelae
- fluctuations in hearing levels in one or both ears associated with OM
- multiple language demands in the home environment
- generational hearing loss
- generational educational disadvantage
- community 'normalisation' of hearing impairment
- frequent ill health

- social conditions, e.g. parental trauma, family adversity, welfare encounters
- inconsistent language exposure (multiple care-givers)
- lack of access to pre-school
- limited exposure to Standard Australian English prior to school-entry
- major grammatical and phonological differences between Indigenous Australian languages and Standard English
- limited access to hearing aids across the lifespan
- limited exposure to reading material in the home environment
- adverse acoustic conditions in classrooms
- mainstream student:teacher ratio, despite classrooms having high numbers of children who are learning English as a second (or foreign) language and a high prevalence of hearing loss (>30%)
- lack of coordinated access to specialist services and case management for children with otitis media
- difficulties of communicating hearing health information to family/caregiver with limited Standard English proficiency and hearing impairment

Hence, Indigenous Australian children with 'mild' hearing loss are often much more disadvantaged than other children with 'mild' hearing loss.

Hearing loss affects the development and learning of verbal and written communication. Especially when it is exacerbated by the conditions listed, above, it leads to:

- impaired first language acquisition
- impaired second (and later) language acquisition
- inability to follow complex verbal instructions and understand complex verbal information
- poor auditory attention – inability to sustain attention
- slow school progress leading to limited literacy and numeracy
- limited high school completion
- limited access to post-secondary education and training (because of poor primary/high school outcomes)
- high rates of unemployment or low employment status
- impaired social relationships leading to more encounters with the Criminal Justice System
- limited economic independence and community development and growth
- an ongoing cycle of poverty due to generational hearing impairment

### **What Can Be Done?**

Prevention: The high prevalence of OM in Indigenous people is a reflection of their environmental circumstances. When a community's living conditions improve, OM becomes less prevalent and less severe. There is little that individual people/families can do without a community-wide approach to improving living conditions (such as access to personal, domestic and community health hardware).

Early diagnosis and treatment: Treating early, acute episodes of disease can potentially reduce the development of chronic disease. This requires health staff to have a good awareness of the importance of ear disease and high level skills in diagnosis so they consistently apply the recommended treatments. Even so, acute medical/surgical intervention to prevent chronic disease in Indigenous children has had limited success, so far.

Prevention of adverse effects on hearing, language acquisition and learning: There are many children and adolescents (and adults) for whom treatment has failed and who have chronic hearing loss which limits their participation in learning and employment. Far more resources must be committed to providing hearing re/habilitation services to these people to enhance personal and community development. For instance, greater retention of Indigenous children in High School is an important objective but it will only come about by meeting specific learning needs in the early years, via improved school readiness and improved primary education.

Such services should include:

- support for the research and development of linguistically- and culturally-appropriate tools and techniques for assessing hearing, auditory processing and language skills in Indigenous children from non-Standard English-speaking backgrounds
- training for all personnel who work with young children to recognise signs/symptoms of hearing loss and slow language development, and to acquire skills in stimulating and strengthening language and listening development in young children and skills in supporting families to deliver such support
- give high priority to providing a suitable acoustic environment for learning when Day Care Centres, kindergartens and schools are renovated or constructed
- insist on regular school attendance for all children – enforce State/Territory laws on truancy , bullying etc
- give high priority to educating teachers in the critical skills for working with Indigenous children, especially skills in teaching hearing-impaired children, ESL teaching and explicit phonics teaching in early years of primary school
- give high priority to reducing class sizes in all schools with a high proportion of children from non-Standard English-speaking backgrounds and/or with high prevalence of hearing loss
- providing prompt access to hearing aids and devices, including allowing Australian Hearing (and/or other Providers under the Office of Hearing Services scheme) to install Sound-Field Amplification systems (cost-free) in classrooms as an alternative to individual hearing aids

Thank you for accepting this submission. I would be very happy to discuss any matter contained within.

Yours sincerely

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Audiologist