

# Submission to the Senate Inquiry into Hearing Health

**Australian Indigenous HealthInfoNet**  
**Edith Cowan University**  
**2 Bradford Street**  
**Mt Lawley, WA 6050**

24.11.09

The Australian Indigenous HealthInfoNet welcomes the opportunity to tender a submission to the Senate Inquiry into Hearing Health. We aim to increase awareness of Indigenous ear health issues and draw attention to the EarInfoNet project [www.earinfo.net.org.au](http://www.earinfo.net.org.au). The resource is useful for those providing ear health services to Indigenous people.

The EarInfoNet provides a rich and unique evidence base for the terms of reference in respect to Aboriginal and Torres Strait Islander peoples:

- a) **The extent, causes and costs of hearing impairment in Australia;**
- b) **The implications of hearing impairment for individuals and the community;**
- c) **The adequacy of access to hearing services, including assessment and support services and hearing technologies;**
- d) **The adequacy of current hearing health and research programs, including education and awareness programs; and**
- e) **Specific issues affecting Indigenous communities.**

## **The extent of Indigenous ear health problems**

The level of ear disease and hearing loss among Indigenous people remains substantially higher than that of the general Australian population, particularly among children and young adults [1, 2].

Otitis media (OM), particularly suppurative forms, is associated with impairment of hearing, particularly among children, with major implications for language development and learning difficulties [2]. This has knock on effects throughout life. The risk of permanent hearing loss increases if OM is not adequately treated and followed up. The hearing impairment associated with OM is generally conductive in nature and mild to moderate in degree, and may be intermittent or persistent depending on the middle-ear condition present at the time [3, 4][3, 4]. OM can affect Indigenous babies within weeks of birth and a high proportion of children will continue to suffer from chronic suppurative otitis media (CSOM) throughout their developmental years.

The National Aboriginal and Torres Strait Islander Social Survey 2008 collected information on the ear and hearing problems of Indigenous children, including: total or partial deafness; ringing in ears (tinnitus); runny ears or glue ear (otitis media); or tropical ear or swimmer's ear (otitis externa). One in ten (10%) Indigenous children aged 4-14 years were reported as having experienced an ear or hearing problem [5].

Ear/hearing problems were reported by 12% of Indigenous people who participated in the 2004-2005 National Aboriginal and Torres Strait Islander Health Survey [6]. These problems were reported slightly more frequently by Indigenous people living in remote areas (13%) than by those living in non-remote areas (12%), but the difference is not statistically significant. Complete or partial deafness was reported by 9% of Indigenous people living in both remote and non-remote areas, but the level of otitis media was higher for Indigenous people living in remote areas (4%) than for those living in non-remote areas (2%).

After adjusting for differences in the age structures of the two populations, otitis media was around 2.8 times more common for Indigenous people than for non-Indigenous people [6]. An overall comparative figure for complete or partial deafness was not published, but the levels were higher for Indigenous than for non-Indigenous people for all age groups except people aged 55 years or older, for which the levels were similar – 25% compared with 26%. The levels of complete or partial deafness among Indigenous people were around two times or more those among non-Indigenous people for age groups up to 34 years. The proportions of ear/hearing problems were similar for Torres Strait Islanders (11%) and Aboriginal people (12%) overall, but the proportion for Torres Strait Islanders living in the Torres Strait area was slightly lower (9%) [6]. The more detailed information collected by the Western Australian Aboriginal Child Health Survey (WAACHS) reveals that 18% of Indigenous children aged 0-17 years had recurring ear infections [7]. Children 0-11 years were more likely (20%) to have recurring ear infections than children aged 12-17 years (14%). Abnormal hearing was reported by carers for 7% of the children aged 4-17 years. Of children with recurring ear infections with discharge, 28% had abnormal hearing compared with 1% of those without ear infections.

Hospitalisation rates in 2007-08 for diseases of the ear were slightly higher for Indigenous people than non-Indigenous people, the age standardised separation rate of 3.3 per 1,000 for the Indigenous population was 1.3 times that of the non-Indigenous population (2.6 per 1000) [8].<sup>1</sup>

Individual studies have documented very high levels of CSOM in some Indigenous communities. The World Health Organisation has identified a prevalence of CSOM of greater than 4% as being 'a massive public health problem' requiring 'urgent attention' [9, p.29]: some Indigenous communities had a prevalence level up to 10 times higher than this [2].

As with many other areas of Indigenous health, this massive public health problem will be solved 'only with urgent attention to improving housing and access to running water, nutrition and quality of care, and giving communities greater control over these improvements' [10, p.178].

## **The EarInfoNet project**

The *EarInfoNet* is recognised as a source of up to date, evidence-based information about Indigenous otitis media and ear health. There is no other source of information online serving this purpose.

The *EarInfoNet* project's strength comes from its direct link to the expressed needs from people working in the field. The identified need was the availability of current, accessible information on otitis media and ear health.

The need for the *EarInfoNet* Project is also based on several other observations:

- The high prevalence of otitis media and related communication and learning problems among Indigenous children, particularly in rural and remote settings.

---

<sup>1</sup> As noted in the section entitled 'Hospitalisation', it is likely that the Australia-wide numbers and rates under-estimate Indigenous hospitalisation by as much as 25%.

- A strategy to tackle the enormous burden of ear infection and hearing loss in Aboriginal children has not been developed nationally.
- The expressed need by people (audiologists, ENT specialists, speech pathologists, Aboriginal Health Workers, etc) working in the field to access evidence based research, information and resources.
- The need to improve communication and collaboration between people working in ear health and education nationally.
- Endorsement of the project by numerous people including a number of prominent figures in the fields of Indigenous affairs and Indigenous health and ear health and hearing.

The Australian Indigenous *EarInfoNet* Project aims to improve the prevention and management of Indigenous ear health and hearing problems by; a) improved access to evidence-based information and educational resources, and; b) increased national communication and collaboration.

The specific objectives of this project are to:

1. Increase peoples access to high quality information (e.g. literature, recommendations, research) and other resources (e.g. key organisations, educational resources) for addressing ear health and hearing in Indigenous children;
2. Improve the confidence of practitioners to prevent and manage otitis media and the associated communication difficulties;
3. Promote national communication and collaboration that assists in addressing ear health and hearing in Indigenous children; and
4. Increase the quantity and the quality of ear health and hearing activities performed for the prevention and management of otitis media and the associated communication difficulties.

## **The target group**

The target group for the project is broad and includes:

- policy makers and project/program managers;
- health personnel including GPs, ENT specialists, paediatricians, nurses and Aboriginal Health Workers;
- early childhood workers, teachers and Indigenous education workers;
- audiologists, audiometrists and speech pathologists;
- researchers;
- students; and
- families and community members with Indigenous children affected by otitis media.

## **Content of the *EarInfoNet***

The web resource contains information under the following headings:

- Reviews
- Policies and strategies;
- Publications;
- Resources and equipment;
- Projects and programs;
- Services and organisations;
- About this web resource
- Workforce issues

The sub-sections:

**Reviews and other synthesised knowledge** – comprehensive, up to date reviews and other summaries of various aspects of Indigenous ear health to assist a wide variety of potential users, including policy-makers, managers and practitioners, general health-care and other providers, academics, researchers, teachers and students;

**Plain language information** – information prepared in a plain language format especially for people with limited literacy;

**Policies and strategies** – information about and, if possible, links to relevant policies and strategies, both Indigenous-specific and those with substantial content relating to Indigenous ear health;

**Programs and projects** – information about relevant programs, projects, etc. This section could include ‘lessons learned’ – summaries of effective programs/projects in the area of Indigenous ear health (in the form of case studies outlining factors contributing to their effectiveness) and evaluations;

**Resources** – details and, if possible, copies of health promotion resources addressing various aspects of Indigenous ear health to assist the sharing of information between different jurisdictions, agencies and regions. The section includes: (1) copies of and/or links to relevant prevention and management guidelines; (2) information about relevant training courses related to Indigenous ear health; and (3) information about potential sources of funds for research into various aspects of Indigenous ear health;

**Publications** – details of recent relevant publications, a list of key references in the area of Indigenous ear health and an Indigenous ear health bibliography.

**Organisations** - an inventory (including descriptions and contact details) of organisations and agencies involved in the area of the Indigenous ear health to assist coordination of efforts.

**Related HealthInfoNet pages** – direct links to relevant sections (such as the sections on social and emotional wellbeing); and

**About this resource** – information about why the resource is needed, the nature of the resource, funding for the resource, and oversight of the resource.

There is Indigenous artwork throughout the web resource which assists the purpose of ensuring the site is culturally relevant and user friendly.

Further enhancement of the HealthInfoNet’s coverage of Indigenous ear health in these and other ways would be a key strategy in developing the evidence base and ensuring that it was readily accessible to people involved in the area.

*Yarning Place (electronic discussion board)* - As well as enhancement of its work in knowledge utilisation/translation and dissemination, the HealthInfoNet also provides the capacity for people to share online their knowledge and experiences even when they live in different States, Territories and regions, come from different sectors (such as health, education and justice), and work for different organisations. By joining a yarning place - membership is free – users have access to electronic services that assist members to network, yarn and share information and experiences online.

Electronic services provided are:

- The e-mob list – members’ contact details (permission to display the details is obtained beforehand)
- The e-yarning board – electronic discussion board for debating relevant issues.
- The e-message stick – email list (listserve) for communicating with other members.

Members may use the yarning places to seek info about ear health issues or projects, advertise a job, or let others know about an upcoming event. There are also facilities to provide feedback about the site. The ultimate intention of the yarning place is to create a dynamic community of practice around Indigenous ear health.

(The HealthInfoNet also currently supports yarning places for people involved in cardiovascular disease, nutrition, road safety, social and emotional wellbeing and substance misuse, all areas for which supplementary funds have been acquired.)

## **The EarInfoNet Reference Group**

The EarInfoNet reference group is a group of experts in their field that oversee the project, teleconferences have been held 3 times a year.

The Australian Indigenous EarInfoNet Project commenced in December 2005. It has been funded to date by the Pratt Foundation with seed funding provided by the Cooperative Research Centre for Aboriginal Health and the Commonwealth Government Office for Aboriginal and Torres Strait Islander Health. The EarInfoNet also receives some funding from the Office for Aboriginal and Torres Strait Islander Health under its core contract. The project currently needs further funding to continue the vital work.

## **About the Australian Indigenous HealthInfoNet**

### **Introduction**

The Australian Indigenous HealthInfoNet is an innovative Internet resource that aims to inform practice and policy in Indigenous health by making the evidence base readily accessible via the Internet ([www.healthinfonet.ecu.edu.au](http://www.healthinfonet.ecu.edu.au)). In this way, the HealthInfoNet aims to contribute to 'closing the gap' in health between Indigenous and other Australians.

The HealthInfoNet is a 'one-stop info-shop' for people interested in improving the health and wellbeing of Indigenous Australians. It makes published, unpublished and specially-developed material about Aboriginal and Torres Strait Islander health available to people involved in the area of Indigenous health with the aim of enhancing their knowledge and skills, and improving their practice and/or policy work. For students and the general community, the knowledge available via the resource will improve their understanding of Indigenous health and related areas. Access to all information on the site is free and available to everyone. The HealthInfoNet also encourages and supports information-sharing among practitioners, policy makers and others working to improve Indigenous health.

The work of the HealthInfoNet is undertaken currently by a small team based in Kurongkurl Katitjin, the Centre for Indigenous Australian Education and Research at Edith Cowan University (ECU) in Perth. There are two concepts that underpin its work. The first is evidence-based or evidence-informed decision-making, whereby practitioners and policy makers have access to the best available research and other information. This concept is linked with that of knowledge utilisation/translation, which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge as part of an ongoing interaction with all stakeholders in Indigenous health.

### **Summary**

The Australian Indigenous HealthInfoNet aims to continue to provide the EarInfoNet as an evidence base about Indigenous hearing health depending on the ability to attract further funding.

### **References**

- 1 Burrow S, Thomson N (2003) Ear disease and hearing loss. In: Thomson N, ed. *The health of Indigenous Australians*. South Melbourne: Oxford University Press:247-272
- 2 Couzos S, Metcalf S, Murray R (2007) Ear health. In: Couzos S, Murray R, eds. *Aboriginal primary health care: an evidence-based approach*. 3rd ed. South Melbourne: Oxford University Press:265-307
- 3 Couzos S, Metcalf S, Murray R (2003) Ear health. In: Couzos S, Murray R, eds. *Aboriginal primary health care: an evidence-based approach*. 2nd ed. South Melbourne: Oxford University Press:193-250

- 4 Morris P (1998) A systematic review of clinical research addressing the prevalence, aetiology, diagnosis, prognosis and therapy of otitis media in Australian Aboriginal children. [review]. *Journal of Paediatrics and Child Health*;34(6):487-497
- 5 Australian Bureau of Statistics (2009) *National Aboriginal and Torres Strait Islander social survey, 2008*. Retrieved 30 October 2009 from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4714.0?OpenDocument>
- 6 Australian Bureau of Statistics (2006) *National Aboriginal and Torres Strait Islander Health Survey, Australia 2004-05*. (ABS Cat. no. 4715.0) Canberra: Australian Bureau of Statistics
- 7 Zubrick SR, Lawrence DM, Silburn SR, Blair E, Milroy H, et al. (2004) *The Western Australian Aboriginal Child Health Survey: the health of Aboriginal children and young people*. Perth: Telethon Institute for Child Health Research
- 8 Australian Institute of Health and Welfare (2009) *Australian hospital statistics 2007-08*. (Health services series no. 33 AIHW Catalogue no. HSE 71) Canberra: Australian Institute of Health and Welfare
- 9 World Health Organization and Ciba Foundation (1998) *Prevention of hearing impairment from chronic otitis media. Report of WHO/CIBA Foundation Workshop, London, 19-21 November 1996*. Retrieved 11 July 2003 from [http://www.who.int/pbd/deafness/en/chronic\\_otitis\\_media.pdf](http://www.who.int/pbd/deafness/en/chronic_otitis_media.pdf)
- 10 Coates HL, Morris PS, Leach AJ, Couzos S (2002) Otitis media in Aboriginal children: tackling a major health problem [editorial]. *Medical Journal of Australia*;177(4):177-178

This submission is on behalf of the Australian Indigenous HealthInfoNet and has been approved by the Director, Professor Neil Thomson and the Deputy Director, Assoc. Professor Richard Midford.

**Contact person:**

Jane Burns (Senior Research Officer)

Australian Indigenous HealthInfoNet

Kurongkurl Katitjin: Centre for Indigenous Australian Education and Research

Edith Cowan University 2 Bradford Street, Mt Lawley WA 6050

Ph: (08) 9370 6136, Fax: 08 9370 6022, Email: jane.burns@ecu.edu.au