



discovery for a healthy tomorrow

Senate Community Affairs Reference Committee
Inquiry into Hearing Health in Australia
PO Box 6100
Parliament House
CANBERRA ACT 2600

Response to the Terms of Reference

The Ear Health Unit of the Child Health Division of the Menzies School of Health Research appreciates the opportunity to comment on Hearing Health in Australia (see Appendix 1 for some information about Menzies). We understand the Inquiry is focusing on:

- 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.

Ear health research (and specifically otitis media research in young Aboriginal children) began at the Menzies School soon after its formation in 1985. Peter Morris (presenting to the Senate Inquiry on behalf of Menzies) joined the research program in 1994. Peter has the pleasure of working with a committed team over this time. He is grateful to all staff for their support and recognises the enormous contribution of Professor John Mathews, Assoc Professor Amanda Leach, Ms Gabrielle McCallum, Dr Heidi Smith-Vaughan, and Ms Kim Hare to the research program since 1994. The program has been well supported by the National Health and Medical Research Council and the Federal Government. Menzies School of Health Research http://www.menzies.edu.au now has a long history of trying to find solutions to middle ear infection in Aboriginal children. Unfortunately, severe otitis media (associated with perforation of the eardrum) is a complex medical condition caused by poverty and poor living conditions. A "quick fix" is not likely to be discovered in the near future.

According to the World Health Organization, rates of chronic middle ear infection (with eardrum perforation and pus draining out of the ear) greater than 4% represent a serious public health problem¹. In some remote Aboriginal communities, rates of eardrum perforation exceed 60% and up to 50% of school children are eligible for hearing aids. Some Indigenous children have pus discharging from their ears for years. The overall rate in the NT is around 20%. From an infectious disease perspective, this is unacceptable.

Unfortunately, otitis media also impairs hearing. This may affect essential early childhood development (particularly speech development). It can also lead to permanent hearing loss when parts of the middle ear and eardrum are damaged. Hearing loss in children can adversely affect a child's educational and social potential and this affect can be lifelong.

Previous research at Menzies has described the early onset of disease, the association with early onset bacterial infection, and the clinical spectrum of disease. More recently. Menzies has focused on high quality randomized controlled trials that test interventions. Proposed interventions all have the potential to substantially reduce the burden of disease but it is also possible that they may do more harm than good. To date, we have identified interventions associated with immunisation, family education, additional hygiene practices, appropriate antibiotic use, and case management as being suitable for further investigation. We also recognise that any intervention that improves the general health of Aboriginal children will reduce rates of severe ear infection.

A recent summary of otitis media research in Australia emphasized that most medical research is exploratory in nature. The authors stated "It is important to recognize that only a small proportion of the medical literature should be applied in clinical practice. Clinical epidemiologists have estimated that approximately 2% of publications are methodologically rigorous and useful to clinicians." (publication attached). Our aim is to increase the amount of research that is relevant to Aboriginal children and can be implemented immediately.

While specific funding for research synthesis is difficult to obtain, we believe this is often where we can make our greatest contribution. Collaboration with the NT Department of Health and Families is ongoing. The Child Health Division within Menzies is actively looking at ways of increasing our

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.* http://www.who.int/pbd/deafness/en/chronic_otitis_media.pdf

capacity for even greater teamwork. For Menzies', I believe the Child Health Division priorities should be:

1. Working with the Department to provide an up to date summary of what is currently known (and more importantly, what is not known) about all the common causes of mortality and morbidity in children in the NT (specifically covering disease definition, burden, diagnosis, prognosis,

treatment).

2. Supporting clinicians, public health specialists, and policy makers in the production of evidence-based practice guidelines (see attached information on the Ear*InfoNet* and the 2001 clinical

practice guidelines- currently being updated).

3. Advising on research methods to ensure that all research in the NT is high quality and relevant.

4. Ensuring the group is aware of Menzies' current contribution (including studies underway or

planned) to the best available evidence on each topic discussed.

Our current studies include: PneuMum (vaccinating Mums), AAAOM (antibiotics for asymptomatic children), MARSii (monitoring bacteria in the nose), Close the Perf (supporting better management of perforations), COMBO (combining 2 new pneumococcal vaccines), and SSSOM (swimming with perforations). A brief description of each study will be provided. We are also receiving funding to update the 2001 clinical practice guidelines and we are currently seeking funding to continue the

EarInfoNet.

Yours sincerely,

Dr. Peter Morris

Associate Professor

Child Health Division

Menzies School of Health Research

Appendix 1

Menzies School of Health Research

Vision

To improve the health outcomes, particularly for Aboriginal and Torres Strait Islander communities

and disadvantaged populations, through excellence and leadership in research and training.

Mission Statement

Menzies was established in 1985 as a body corporate of the Northern Territory Government under the Menzies Act 1985. This Act was amended in 2004 to formalise the relationship with CDU. Menzies is now a controlled-entity of CDU and constitutes a school within the university's Institute

of Advanced Studies.

The Menzies Act as amended also provides that the School will be accountable to its own Board

and establishes the functions of the School as:

 to promote improvement in the health of all people in tropical and central Australia by establishing and developing a centre of scientific excellence in health research and

health education;

• to advance knowledge in the fields of health research and health education, particularly

in relation to human health, and to seek and discover the origins and causes of

diseases and ill health:

to use the knowledge so gained to improve methods of prevention, diagnosis and

treatment of disease and ill health in both humans and animals;

to serve as a centre for learning and training in health research and health education;

• to promote and encourage post graduate research into matters relating to the functions

of the School within CDU as a research school of that University or in co-operation with

other medical or educational institutions; and such other functions as the Board thinks

fit.

Appendix 2

EarInfoNet

Otitis media is a complex medical condition caused by poverty and poor living conditions. Better health outcomes will be associated with the application of the best available evidence in a practical way. In recognition of this, Menzies and the Australian Indigenous Health *InfoNet* (based at Edith Cowan University) have developed a website to help communities tackle ear disease and hearing impairment on the ground. The Ear *InfoNet* - www.earinfonet.org.au - ensures access to evidence-based information about current strategies, policies, guidelines, resources, reviews and services.

Development of this web resource and the associated yarning place is guided by a national reference group. The Ear*InfoNet* Reference Group, comprises of people working as practitioners, and/or researchers in the area of ear health and hearing among Indigenous peoples. The Reference Group provides advice on:

- o content of the web resources, including the co-opting of people for expert advice;
- o priorities for future development of content areas;
- organisations involved in areas that address the ear health and hearing among Indigenous peoples. This includes the development and enhancement of linkages with relevant organisations/agencies. They will also look at aspects of the associated 'yarning places' electronic networks based on the 'community of practice' (CoP) model in their area(s) of interest (including how to promote their use, providing contact details for potential members, etc);
- appointment of Health InfoNet Consultants in the area of ear health and hearing issues among Indigenous peoples.

Development and ongoing support for the Ear*InfoNet* is necessary if we are to meet the urgent need to improve approaches to management of otitis media and hearing loss (serious public health problems for Indigenous Australians).

There is a large body of knowledge about how best to prevent, diagnose, treat and manage middle ear disease and associated communication and learning problems. However, we know that many people involved in the area of Indigenous ear health, hearing and education, work in remote areas of Australia and do not have ready access to good quality information.

The EarInfoNet: includes reviews; guidelines; resources and equipment; programs, projects and lessons; policies and strategies; publications; and links. It also includes information about research activity, funding opportunities, organisations, agencies and individuals working in the field, news and events and training programs. The resource has been designed to cater to an audience of mixed cultural and educational backgrounds.