## Pina Palya, Pina Kulilku Good Ears, Good Learning



Community Report 2014

## About Pina Palya, Pina Kulilku

Pina Palya, Pina Kulilku (Good Ears, Good Learning) was a program that included:

- Training Aboriginal health workers to check ears
- Ear checks for Aboriginal children aged less than 5 years
- Promoting regular ear checks, frequent hand washing and keeping cigarette smoke away from children to prevent ear infections

The project was a collaboration between the Telethon Kids Institute (formally known as the Telethon Institute for Child Health Research), WA Country Health Services, the Rural Clinical School, Bega Garnbirrungu Aboriginal Health Services (Bega) and Ngunytju Tjitji Pirni Inc (NTP) with funding from Healthway.



HAND ARTWORK BY CHILDREN ATTENDING CHRISTIAN ABORIGINAL PARENT DIRECTED SCHOOL (CAPS) COOLGARDIE AND EAST KALGOORLIE PRIMARY SCHOOL CHILDREN

Report prepared by Kirsten Alpers, Ruth Monck and Deborah Lehmann

Acknowledgements and thanks to the collaborators and to the communities of Kalgoorlie-Boulder, Coolgardie, Menzies, Kurrawang, Leonora, Laverton, Norseman and Mount Margaret; East Kalgoorlie Primary School, South Kalgoorlie Primary School, Christian Aboriginal Parent Directed School (CAPS) Coolgardie, CAPS Kurrawang and Wongutha Birni Aboriginal Corporation; Bradley Gilchrist, Evelyn Roth, Sharon Weeks, Francis Lannigan, Christine Jeffries-Stokes, Annette Stokes, Dawn Gilchrist, Fay Sambo, Wendy Sun, Lorraine Sholson, Margie Wallam and Tanyana Jackiewicz.

The study was approved by the Western Australian Aboriginal Health Ethics Committee.

### What are middle ear infections?

Middle ear infections (also called 'otitis media') are very common in all children but particularly in Aboriginal children.

Children may have an ear infection but no symptoms until they get runny ears. When ears are runny the disease is severe and there is already a hole in the ear drum (a perforation). If a child has a hole in the ear it will affect their hearing. If the hole does not heal, the child may need an operation to close the hole. Hearing loss affects children's schooling, self-esteem and later employment.

Before Pina Palya, Pina Kuliku (Good Ears, Good Learning) we looked at otitis media in Kalgoorlie children with a study called The Kalgoorlie Otitis Media Research Project. This study took place between 1999 and 2005 and checked the ears of 100 Aboriginal children and 180 non-Aboriginal children up to 7 times from birth to 2 years of age.

#### In The Kalgoorlie Otitis Media Research Project between 1999-2005

We found that:

- Otitis media was present in about half of all ear checks
- 3 out of 4 Aboriginal children 5-9 months old had otitis media
- One in 3 children had a perforated ear drum before age 2 years
- One in 3 children over 6 months old had significant hearing loss
- Often, there were no signs of the disease until ears were runny so families did not seek early treatment from health staff.
- Children in contact with tobacco smoke were more likely to get ear infections.
- The germs that cause ear disease are more easily spread where people live in crowded conditions.

#### Pina Palya, Pina Kulilku – Good Ears Good Learning

The aim of this study was to have Aboriginal children reaching school age with healthy ears so they achieve the best possible educational and social outcomes. Radio programs, community soap making and art workshops and musicals were used to raise

awareness about middle ear disease (otitis media), its prevention and treatment, the risks to children of being exposed to tobacco smoke and the benefits of frequent hand washing. We regularly checked Aboriginal children aged less than 5 years old in Kalgoorlie-Boulder and 7 other Aboriginal communities in the Goldfields (Coolgardie, Kurrawang, Laverton, Leonora, Mount Margaret, Menzies and Norseman). Health staff were trained to screen, treat and refer children to services according to standard protocols. We evaluated the program by interviewing health staff and members of the community.





TOP: EAR CHECK AT NTP. THE
EARDRUM CAN BE SEEN ON
THE LAPTOP SCREEN
BOTTOM: LEONORA CHILDREN

AFTER EAR CHECKS

#### **Musicals**

Local musician Bradley Gilchrist ran workshops with school children in Kalgoorlie-Boulder and Coolgardie followed by public performances of an ear health musical called 'Kenny the Kangaroo and Friends'. Through singing and use of the video-otoscope, which shows the eardrum on a computer screen, children learnt about how ears work and how to keep them healthy by getting regular checks, washing hands and keeping away from cigarette smoke.

#### Kenny the Kangaroo and Friends Script by B Gilchrist

Kenny the Kangaroo had problems at school because he had an ear infection. At home Kenny was always surrounded by people smoking. No-one told him to wash his hands. If you wash your hands you are less likely to get ear infections.

Kenny goes for an ear checkup. "Have your ears been sore lately?" asks the health worker. "Yes" replies Kenny.

"Oh no! You have an ear infection. It can be fixed with antibiotics". When Kenny grew up, he became an ear specialist to teach his community about ear health. He wanted to spread his message far and wide so he went to a farm to speak with all the animals.

Kenny's messages to his animal friends were: wash your hands with soap and water; don't smoke around children; go for regular ear checkups by a health worker. Healthy ears help children learn at school. Keep children safe from middle ear infections and help them to grow up healthy and strong.

WONGUTHA BIRNI CHILDREN

PERFORMING THE MUSICAL

The GERM Song
We're the GERMS
and we're gonna getcha,

Full of disease :- and I betcha.

We're gonna lay you out on a stretcha,

We're the GERMS and we rule!

All song lyrics by B Gilchrist

#### **Comments from community members**

**Teachers:** "Students were really engaged"; "Kids are not shy any more."; "The program is really good"; "Children are singing the songs in the playground"; "Students need to learn ... in an interesting way, not sitting in the class doing theory all the time". A teacher realised that if students don't behave well in class they may have an ear infection and can't hear.

Parents: "Good to have something to do after school" A father said children wash hands more at home. He bought soap for home and took 2 children to have their ears checked. Four mothers said children were singing the songs at home and taught siblings too. "I don't need to remind children much about washing hands before meals"

Sing along with the song: Wash your hands with water and soap and ...



## Soap making

Community members enjoyed soap making workshops held at community events, where there were also opportunities to check ears and use the Glitterbug.

#### Recipe to make soap at home:

Lux soap flakes, hot water, optional food colouring, scented oils

Combine Lux Flakes and small amount of hot water together in a bowl to make a dough, like damper. Add a few drops of food colouring. Knead the soap mixture, divide into small lumps forming these into shapes or press into moulds. Leave to dry for a few days.

Fun things to do with your soap mixture: create your own objects and shapes, make soap on a rope to hang from the tap, add a little bit of scented oil, flowers or herbs. Have fun!



SOAP CAME IN ALL SHAPES AND SIZES AND THE ACTIVITY WAS ENJOYED BY ALL







## Glitterbug ™

A fluorescent lotion that shines in ultraviolet light is rubbed onto the hands like moisturiser. Following handwashing, an ultraviolet light is shone on the hands and shows all the lotion that has not been washed off. People can then see how well the hands have been washed.

Participants were eager to do this activity.

One teenager washed her hands again and again till all the lotion was gone.



## Big Ear ('Pina purlka')

Pina Purlka (Big Ear) has been a very popular health promotion and educational activity at community events and in the clinic environment. An inflatable ear was made from parachute material by artist Evelyn Roth from South Australia. The Big Ear allows children and adults to go inside and explore the inner workings of the ear. It has been used at community events and schools in Kalgoorlie, Norseman, Leonora, and Mount Margaret. The children's ward at Kalgoorlie Regional Hospital asked for the Big Ear when ear surgery was being done; medical and nursing staff and the patients and their families were thrilled to view and go inside the Big Ear, including one child in a wheelchair.

The Big Ear has travelled outside the Goldfields including to a National Walking Ear Health Conference in Perth. through The Northern Territory now have their own Big Ear and Nose (BEN) the ear which the Menzies School of Health Research in Darwin launched in 2013. The Big Ear is still being used in the Goldfields, including travelling to the Mt Magnet Health Day in 2014 with Hearing West on behalf of the Geraldton Regional Aboriginal Medical Service (GRAMS). PICTURES TAKEN AT THE LAUNCH OF THE BIG EAR IN KALGOORLIE FEBRUARY 2012 And if you stop smoking, I'm not joking ...

## **Screening and Training**

Screening was done at NTP, Bega and community health centres in Kalgoorlie-Boulder, Leonora, Coolgardie, Laverton, Mt Margaret and Menzies. There were 357 screenings in 206 enrolled 0-5 year old children. Many more children and adults had opportunities for screening also. Several local Aboriginal Health Workers completed training offered by the National Aboriginal Community Controlled Health Organization (NACCHO). This training has enhanced their knowledge and skills. Many are now experts in the field of ear health.

Dr Francis Lannigan, an Ear, Nose and Throat specialist provides ongoing clinical and training support for ear health in the Goldfields.









DR FRANCIS LANNIGAN **EXAMINING A CHILD IN LEONORA** 

The VIDEO OTOSCOPE allows images of the ear drum to be seen clearly on a laptop screen. The use of this equipment helped community members understand more about the ear and the importance of healthy ears.



**Normal** 



Runny ear

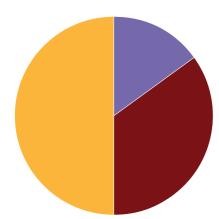


Acute ear infection



# What we found in the Pina Palya, Pina Kulilku Good Ears Good Learning Project

Only half of the children under 5 years old had completely healthy ear drums



15% HAD A PERFORATED EARDRUM
35% HAD OTHER EAR INFECTIONS
50% HAD NORMAL EAR DRUMS

#### **Smoking**

About half of parents/guardians reported that they smoked cigarettes. However, 78% (more than 3 quarters) of them said they smoke outside the house and do not allow smoking in the car.



#### **Evaluation**

The Study team asked community members questions at the start of the study. Towards the end of the study an Aboriginal woman from the Goldfields (who was not part of the research team) interviewed people to see if any things had changed after the health promotion program.

The following changes were reported:

- more people smoked outside rather than inside the house
- there was more knowledge on how to prevent ear infections
- fewer people allowed smoking in cars



#### Community feedback

The project was "good", because it was:

- "interesting, good for our children"
- it "detects hearing loss in our children at an early stage before going to school, helps bring awareness of the benefits of having good hearing and helps our Aboriginal children"
- "the musical was culturally appropriate and very effective"

Also mentioned was the "Need to involve other communities as well and need to come on a regular basis".









## **Summary**

From the Kalgoorlie Otitis Media Research Study, we know that in the Goldfields

- · Almost all Aboriginal children have ear infections before age 2 years
- 1 in 3 Aboriginal children have moderate to severe hearing loss
- 1 in 3 Aboriginal children get runny ears at least once.
- The germs that cause middle ear disease (otitis media) can be found in the noses of
- In Aboriginal children the disease can start within the first weeks of life.
- Children with ear infections often do not have symptoms.

Pina Palya Pina Kulilku – Good ears Good Learning has led to improved collaboration between health service providers, education department and the wider community. The project has increased awareness about the importance of healthy ears within the community and education system in the Goldfields. Many organizations have requested further input from the project team and health service providers to deliver more services that will improve children's hearing. The project created awareness on how to prevent ear infections. At the end of the project people reported that they washed hands more often than before and more people agreed that not smoking around children could help to prevent otitis media.



RACING CAR TYMPANOMETER BEING USED IN LEONORA

### **Ear Health Resources:**

A presentation on Pina Palya, Pina Kulilku (Good ears, good learning) was made at the 11th National Rural Health Conference in Perth in March 2011 (http://11nrhc.ruralhealth.org.au) and a written version can be viewed at http://nrha.org.au/11nrhc/papers/11th%20NRHC%20Monck\_Ruth\_A8.pdf

http://www.healthinfonet.ecu.edu.au/other-health-conditions/ear and www.careforkidsears.health.gov. au are internet sites providing information and resources about ear health issues

The Aboriginal Ear Health Manual can be accessed at http://www.healthinfonet.ecu.edu.au/uploads/ resources/25784\_25784.pdf

Recommendations for clinical care guidelines on the management of otitis media in Aboriginal and Torres Strait Islander populations (2010) can be accessed at https://www.health.gov.au/internet/main/ publishing.nsf/Content/health-oatsih-otitismedia-clinical-guidelines2010

A broadcast on www.ruralhealthwest.com.au called Ears—Back to Basics can be accessed at http:// www.ruralhealthwest.com.au/professional-development/rural-doctors-broadcasts/ears-back-to-basics

The Big Ear on the radio: http://blogs.abc.net.au/wa/2012/02/the-big-ear.html?site=goldfields&progra m=goldfields\_esperance\_mornings



"NANA TAUGHT ME TO WASH MY HANDS"

- enquire@telethonkids.org.au
- Ongoing training and support is being provided for the Goldfields

































































