The Didgeridoo

An innovative tool for asthma management in Indigenous Australians

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What is a didgeridoo? The didgeridoo is a wind instrument made from a termite-hollowed tree branch. It has been played for over 20,000 years by the Aborigines of Northern Australia. Pulsed sounds are made by tongue, throat and diaphragm manipulations and by lip vibration. Accomplished players circular breath, whereby air is inhaled through the nose whilst being exhaled though the mouth.

Health of Indigenous Australians. By every measure Australians of Aboriginal origin have poor health. The rate ratio of Indigenous to non-Indigenous for major chronic diseases ranges from 1:8 for cancer to 5:2 for diabetes. Life expectancy of Indigenous Australians is 20 years lower than the mainstream population.

Asthma and music: Singing, breathing exercises and playing of wind instruments have long been advocated for asthma management. However few studies are reported. The only previously reported study on the use of wind instruments demonstrated fewer symptoms and an improved sense of well-being (Lucia, 1994. J. Asthma 31:375).

Research goal: To contribute to the improvement of health of asthmatics within the local Indigenous community.

Objectives: To determine if a programme of music would engage Aboriginal school students. Secondary objectives were to raise their knowledge of asthma, support their asthma management and expose them to their traditional musical culture.

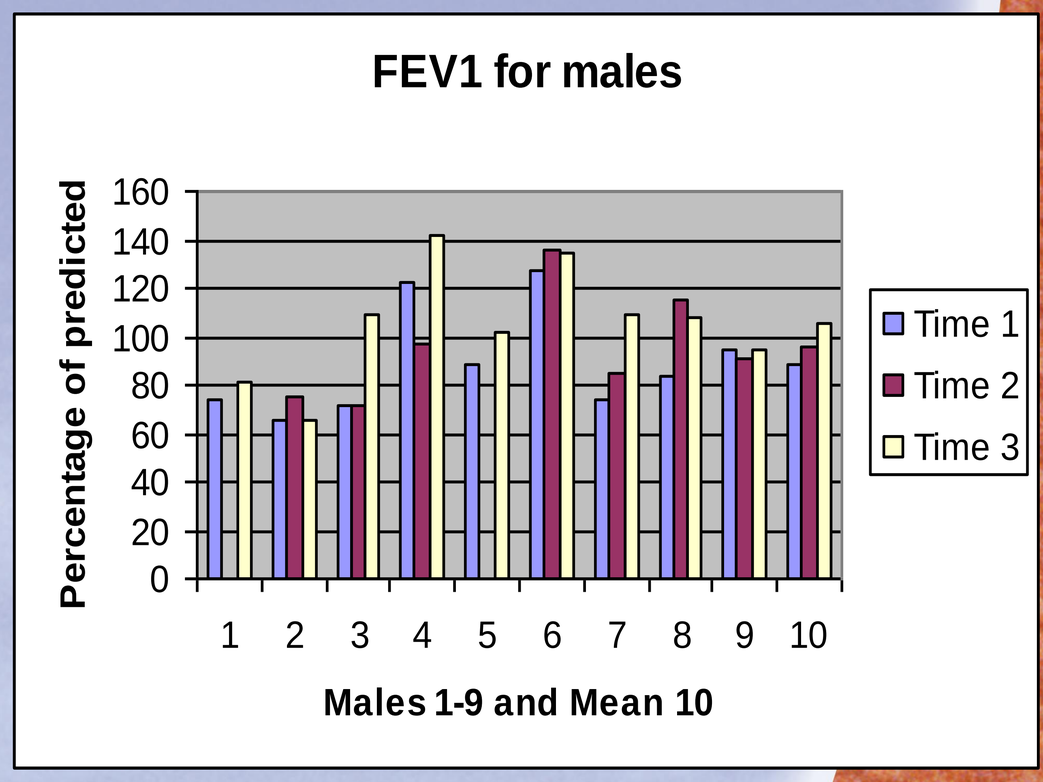
Music training: Males used didgeridoos made by a local Aboriginal craftsman. An Aboriginal didgeridoo player gave lessons. Females received singing training conducted by a professional vocal coach/singer aided by an Aboriginal singer. Groups had lessons for one hour per week for 26 weeks.

Data collected
- Retention on the programme
- Respiratory function (RF)
- Peak flow (morning and night)
- Participant reports

Engagement: Excellent in males; very good in senior females

	Attended	Retained	Percent
Adult females	4	3	75
Adult males	1	1	100
Junior females	5	0	0
Junior males	4	4	100
Senior females	13	9	70
Senior males	6	5	83
Totals	**33**	**22**	**66**

Respiratory function: Significant improvement in males



Health perception: Major improvement in symptoms

It helped me with my asthma.
I found it rewarding and beneficial to my health.
Success; It really helped my breathing.
The program has helped me a lot in regards to asthma.
It helped me to understand how my asthma works and how I can manage it.
I can now run more than 100 metres before I feel like coughing.
It helped me a lot with my breathing and it was fun as well.
Before the lessons 1km was a massive run but [at camp] I ran 6km non-stop on the beach.

Discussion: High school students engaged and benefited from the programme. The boys demonstrated this by both their own assessments and their respiratory function. The latter was not as clearly demonstrated in the females. It is suggested that the deep and circular breathing required for playing the didgeridoo was a factor in increasing respiratory function. Such extremes of breathing was not required of the females in their singing although they too noted improved health.

Conclusions:

The programme
- was successful in engaging participants
- was successful is demonstrating benefits to their health
- exposed the Aboriginal students to their culture
- could be transferred to other Aboriginal communities.

Future research: Will compare the didgeridoo with non wind instruments and control for environmental (e.g. seasonal) and social effects.

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