Dental Health: The context of remote dental health and services in Central Australia

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Historical dental anthropological work has demonstrated that Indigenous peoples across the world, including Australia, very rarely experienced tooth decay, gingivitis and periodontal disease. Severe attrition resulted though from the use made of teeth not only chewing unprocessed foods but as a tool e.g. chewing hide, gut etc to soften and modify with saliva for binding, clothing etc. Attrition eventually resulted in the exposure of pulp chambers, pulpal necrosis, dental abscesses, gross infections and ultimately quite large spiralling draining sinuses to the bone surface. So dental pain and infection was well understood, and bush medicine included ways of managing it. A dental anthropologist from Adelaide University, Dr Murray Barrett, described how people at Yuendemu reported that tooth decay was caused by a 'little brown snake'. This belief could be related to the spiralling draining sinuses running from the root apices of 'dead' teeth to the bone surface.

Changing diets and lifestyles have increasingly impacted on the teeth and the surrounding soft and hard tissues. Tooth decay is an ever increasing problem, especially in the very young, but across all ages. Gingivitis is endemic because very few people brush their teeth regularly, or even occasionally, and periodontitis is an increasing problem, particularly for smokers and diabetics. Remote-living Aboriginal people in Central Australia have been shown to have three times the tooth loss of non-diabetic people.

Aboriginal people are used to tolerating pain and discomfort generally, and more specifically pain from dental and periodontal infections. This should not be taken as an indication that Aboriginal people prefer to tolerate and accept dental and oral pain to receiving preventive or early interceptive treatment for their conditions. Research into service delivery methods at Utopia in 1999 clearly demonstrated considerable interest in and support for both oral health promotion and treatment services. It appears to be generally true that Aboriginal people see medical health service providers and dental health service providers in different lights, although both health service providers are often the option of last resort when dental pain becomes intolerable. Nonetheless, dental health service providers' professional care is often sought for 'check-ups.' Preventive and interceptive care is often accepted after a person attends for either a check-up or an acute problem.

On the other hand, medical health service providers are viewed almost exclusively as sources for dental and periodontal pain relief and possibly

referral to a dentist. People are attending mainly at a point of severe stress. Three stories that relate to this phenomenon are now told.

Story 1

Medical Practitioner Toby McLay worked with me on dental mobiles in the early 1980s at Utopia. He was a wonderful supporter of early interceptive dental care, and with his assistance a large proportion of the Aboriginal population was regularly screened and their dental caries successfully treated. Even so, some people still experienced pain from severe tooth decay or periodontal disease, and Toby decided that it would be a much better service and more efficient use of resources not to have to wait some months for the next dentist visit or take people into town for treatment. By working with me, he soon learnt to give local anaesthetic and extract teeth. He reported good acceptance and good outcomes for the extractions he subsequently performed. I was very pleased too because it enabled me to focus more on the screening and early interceptive work that people wanted. In my experience almost all Aboriginal people out bush who attend the dentist would prefer to keep their teeth unless they become so painful or loose and sore to bite on that they are intolerable.

Story 2

I was meeting with the health council at Bonya a few years ago when Banjo Madrill told me that the elders wanted the dentist to come out to Bonya so that people with toothache didn’t have to go to town where they could be unhappy, stuck, or get into trouble. At the time I tried to explain that it wasn’t economically possible for the dentist to be travelling out to communities to perform a few extractions. Rather, I said I needed to make the trip worthwhile by checking up and treating as many children and adults as possible to prevent toothache and worry. I guess this concept would be quite foreign in many ways to traditional healings, concepts that address problems when they become intolerable.

At a recent dental visit to Bonya, in fact, almost all the people in the area came for a check-up and treatment. During the visit, the remote area nurse Malcolm Auld worked with me and learnt about techniques of local anaesthetic and extractions. Another dentist visit and he could take over most of the extractions needed by the community.

Story 3

I had a number of discussions with remote nursing staff at the time of drafting the dental sections for the CRANA Procedures Manual which include local anaesthetic and extraction techniques. There was general interest in the topic of dental health and considerable frustration and disappointment expressed by the nurses at their inability to address the needs of people who came in with toothaches. Most said that they couldn’t spare ambulance space for dental patients to come to Alice Springs, but that they were also tired of the people who continually attended their clinic with ongoing dental pain. A few nurses expressed their interest in learning dental extractions, though most showed anxiety and mild anger when the idea of their taking on another treatment task was proposed. The question was raised and warmly supported about why PATS couldn’t be used to refer people

in to Alice Springs to see a dentist for severe dental pain and related inflammation and infection.

The first three editions of the CARPA manual have focussed on emergency relief of pain and management of inflammation and infection associated with dental and periodontalat (gum) diseases. One might almost suppose that dental infections were short-term, opportunistic infections, when in fact they are chronic diseases that cannot be addressed without considerable surgical and/or medical treatment as well as addressing the underlying causative factors.

As dental decay and periodontal disease continue to worsen so it becomes clearer to local communities that they need to address both the causative factors as well as the treatment needs. The Katherine West Health Board has sent a delegation to the Melbourne Dental School asking for help. Clearly the outcomes of dental diseases present a significant and growing health problem for community members.

A question therefore for the editors of the fourth CARPA manual to ask is what dental information should be included in this edition. Is it sufficient to describe the temporary relief of pain and management of inflammation and infection, or should other treatments be included and if so which?

The CRANA editorial team reported that there were sufficient remote area nursing staff without regular dental services who wanted to learn about dental anaesthetics and extractions to justify making these techniques essential components of the manual.

Some further information for the editors to consider is that Australia is well into a period of growing crisis for public dentistry in particular. Levels of new dentist and dental auxiliary graduates are increasingly falling behind workforce demand. Private dental practice is becoming increasingly lucrative, impacting negatively on recruitment and retention on the rural and remote, and the public dental health, workforce in particular.

Salaries are being markedly increased with no hope of reversal for at least 10 years. Rising personnel costs are being matched by operational cost increases for infection and quality control, IT systems etc., so the funding picture is grim. The result is a decrease in service provided by visiting dental teams.

Solutions for remote communities appear to lie partly in health promotion activities, but also in increasing the on-site capacity of health staff to definitively address at least acute dental needs. Over time, with increased familiarity and acceptance, local health staff, including Aboriginal health workers, might take on more preventive and early interceptive oral health care. But here and now it seems the need for remote practitioners to learn to provide simple dental extractions has arrived.

It goes without saying though that we also need a much bigger remote dental workforce to meet the growing treatment needs, as well as to provide training to remote practitioners in emergency dental care and oral health promotion.

[Editor: There was some discussion about the possible use of temporary fillings such as 'Cavit' rather than oil of cloves for dental pain. Potential problems with oil of cloves include it being irritating to the surrounding gum tissue (hence need to squeeze out the excess oil). Against

using temporary filling is the possibility of it preventing a dental infection from draining, leading to deeper infection. Using a temporary filling also assumes that the tooth can be adequately cleaned out first, and this may not be the case.]