Background

The dental health status of Australians aged 15 or older living outside capital cities is poorer than that of people in capital cities (AIHW DSRU 2009). They are more likely to suffer complete tooth loss, to have an inadequate dentition (less than 21 teeth), wear dentures, have missing teeth, have untreated coronal dental decay and to have a higher mean Decayed Missing Filled Teeth than capital-city residents. They are also more likely to avoid certain foods due to dental problems.

Dental decay is the most costly diet-related disease in Australia - ahead of coronary disease, hypertension and diabetes.

Tooth and gum diseases can have serious negative effects on general health and quality of life. There are strong links between dental disease and other chronic diseases; for example between periodontal disease and diabetes. The latter is also experienced disproportionately in rural and remote Australia.

Accessing dental care

Poor access to dental care is a significant issue for people in rural and remote areas.

Overall rural residents have a higher incidence of unfavourable visiting patterns (38 per cent) than urban residents (27 per cent). The Australian Institute of Health and Welfare reports that country people are more likely than those living in capital cities to have a problem-orientated pattern of dental attendance; that is, they are less likely to make an annual dental visit, and less likely to have a particular dentist that they usually visited.

The notion that dentists in rural and remote areas may not be as preventively oriented as city-based dentists could be linked to this pattern of accessing dental care. Dentists outside Australia’s capital cities provide less preventive care, but more restorations and extractions.

These visiting and treatment patterns increase the risk of poorer oral health in rural residents, as evidenced by survey data. For example, 31.7 per cent of rural residents have untreated decay compared with 24.8 per cent of urban residents; and 32.8 per cent of them have moderate to severe periodontal disease compared with 26.1 per cent of urban residents. Of the dentate population, 18.5 per cent of rural residents have fewer than 21 teeth compared with 13.8 per cent of urban residents.

Oral health risk factors

There are many reasons for this differential rural-metropolitan situation. For one thing there are few dental services in more remote areas and fluoridated water supplies are less common. Water fluoridation is the most effective and socially equitable means of achieving community-wide exposure to the capacity of fluoride to prevent caries. Around 90 per cent of Australia’s reticulated water supplies are adequately fluoridated. While water fluoridation is cost effectiveness for large populations, it is financially challenging for towns with populations less than about a thousand.

Lower socioeconomic status and greater distances make dental treatment less affordable for rural people. These factors have a compounding effect because some of the most socio-economically disadvantaged parts of the country are also the most geographically remote. Many of those with very poor teeth and gums are public patients, and waiting lists for public dental care are notoriously long.

Differences in dental health between rural and urban children are likely to be due partly to differences in...
knowledge about health. For example, in rural Victoria the oral-health-related knowledge regarding risk and protective factors among parents of preschool children was found to be variable and sometimes at odds with contemporary knowledge.

The Australian Dental Association points out that diet plays an essential role in healthy teeth. They report that there has been an increase in the dental decay rates being experienced by children today when compared with the 1990s and that, typically, foods that contribute to dental decay are those that are high in sugar, such as concentrated fruit snack bars, sweets and lollies, muesli bars and sugary soft drinks and juices. Unfortunately the geographic distribution of foods high in sugar is more even than that of fresh, healthy foods like fruit and vegetables which are less accessible in rural and remote areas.

Soft drink consumption has increased rapidly in the general population in recent years and soft drink has also tended to replace both water and milk from the diet, including in rural and remote areas. The high levels of sugar in soft drinks are the cause of dental caries.

Certain conditions requiring medications can also have a detrimental effect on oral and dental health. Some medications have an erosive effect on the teeth because they cause a dry mouth. Saliva is a ‘buffer’ against an acid attack on teeth.

Poor oral health, difficulties in gaining access to dental care and lack of oral health awareness are also major issues for Aboriginal and Torres Strait Islander adults. Aboriginal children have twice as many cavities as non-Indigenous children. Many Aboriginal and Torres Strait Islander children don’t have a toothbrush or a safe and regular place in which to use it. Early childhood dental caries is common and often acute enough to require treatment in hospital under general anaesthesia.

Combined with these risk factors is the fact that dental care has long been one of the most under-funded areas of the Australian health system, although recent federal government initiatives are set to improve this situation.

**Workforce Issues**

Figures from the Australian Institute of Health and Welfare show that in remote and very remote areas there are less than half as many full time equivalent dentists per 100,000 people as there are in the cities. The distribution is slightly better where dental therapists are concerned although they are available only in small numbers (around 6 per 100,000 population).

Recent government initiatives aim to improve this situation. The Grow Up Smiling (GUS) scheme replaces the Medicare Teen Dental Health Plan and will provide Commonwealth funding for dental care for two to seventeen year olds from January 2014. However, one of the greatest challenges to effective roll-out of GUS to infants and children in rural and remote areas is poor access to oral health care professionals. Children in greater financial need are the prime targets in GUS policy and they (and their parents) make up a higher proportion of people who live in rural and remote communities than those who live in cities.

**Solutions**

The Australian Dental Association advises that a healthy diet must be complemented by good oral hygiene – brushing and flossing teeth and having regular dental check-ups.

Holistic approaches to health are required, plus education about the relationship between a good diet and general health and oral health. Like general health, good oral health is highly dependent on the environmental and social determinants of health. People need to be educated about oral hygiene, the need for a healthy diet and the toxic effects of sugar on teeth and gums.

The following would improve the oral health of people living in rural and remote Australia:

- improving access to fluoridated water;
- improving access to affordable dental health professionals (including dentists, therapists and hygienists);
- improving access to affordable, healthy food;
- addressing poverty and disadvantage; and
- developing and implementing a national program to reduce access to and the intake of sugary foods and drinks.

**Resources**

Further information can be found at the website of the Australian Dental Association, whose mission is to educate Australia that tooth decay in children and adults is entirely preventable.

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