- Australian Institute of Health and Welfare. Australia's health 1998: The sixth biennial health report of the Australian Institute of Health and Welfare. Canberra: AIHW, 1998.
- 4. Public Health Division. *The Health of the People of New South Wales: Report of the Chief Health Officer*. Sydney: NSW Health Department, 1997.
- Brennan DS, Spencer AJ. Prospective adult dental programs survey 1995–96. AIHW DSRU, University of Adelaide, Adelaide, 1996.
- Lewis DW, Ismail AI. Preventive Dental Care (Chapter 36).
 Canadian Task Force on the Periodic Health Examination.
 Ottawa: Canada Communication Group, 1994.
- 7. US Preventive Services Task Force cited in Canadian Task Force on the Periodic Health Examination. *Canadian guide to clinical preventive health care*. Ottawa: Canada Communication Group, 1994: 408-431.

- 8. Allister J, Stewart J, Spencer J. *Dental satisfaction survey* 1994. AIHW DSRU, University of Adelaide, 1995.
- 9. Australia, Parliament. *Inquiry into public dental services:* Report from the Senate Community Affairs References Committee, Canberra, 1998.
- Spencer J. Key problems, target groups and policy directions.
 In: Dental care for adults in Australia. AIHW DSRU, University of Adelaide, 1993.
- Spencer J. Affordability and hardship in purchasing dental care. In: *Dental care for adults in Australia*. AIHW DSRU, University of Adelaide, 1993.
- 12. Barnard PD. *National oral health survey: Australia 1987*–88. Canberra: Commonwealth of Australia, 1993. ISBN O 644 29235 1.

ORAL HEALTH NEEDS OF THE ELDERLY

Peter Lloyd King

Staff Specialist Special Care Dentistry Westmead Centre for Oral Health

This article describes the oral health of elderly Australians using evidence provided by a number of local studies.

INTRODUCTION

It is generally accepted that 65 and over refers to the elderly population. At the turn of the century, only four per cent of Australian residents were aged 65 and over. That figure had risen to 12 per cent by 1979, and it is expected to reach between 24 and 26 per cent by 2051.

There is a trend away from edentulousness (having no natural teeth) in the elderly. In 1979, 60 per cent of elderly Australians were edentulous. By 1989, this figure had dropped to 44 per cent, and it is projected that only about 20 per cent of elderly Australians will be edentulous by 2019. There is also an increase in the number of natural teeth among those who have at least one natural tooth. This aging population with more natural teeth has resulted in growth in the 'pool of teeth' and, therefore, in the 'pool of teeth requiring treatment'.²

ORAL HEALTH PROBLEMS OF THE ELDERLY

The predominant oral health problems of the elderly include dental caries, periodontal disease, dry mouth

(xerostomia), tooth wear and oral cancer.³ Recurrent caries around failing restorations, cervical caries (around the neck of the tooth) or root caries are the most common dental caries in the elderly.^{3,4} The prevalence of periodontal disease appears to increase with age, which may reflect an accumulation of disease over time rather than enhanced susceptibility. The number of teeth that need to be extracted due to periodontal disease increases with age.³ Dry mouth is a common complaint of elderly people, a subject discussed in Mark Shifter's article in the March issue of the *Bulletin* (Volume 10, Number 3). The progressive impact of smoking and drinking on the development of soft tissue lesions is more apparent in older adults, and the prevalence of oral cancer increases with age.³

IMPACT OF ORAL HEALTH ONTHE WELLBEING OF FUNCTIONALLY INDEPENDENT AND INSTITUTIONALISED ELDERLY AUSTRALIANS

The impact of oral health on the wellbeing of elderly people in Australia has been investigated in both the institutionalised elderly and the functionally independent elderly.

In South Australia 1,217 non-institutionalised people aged 60 years and over completed a questionnaire containing 49 questions about the effect of oral conditions on their comfort levels and functional abilities. Conditions such as difficulty chewing, discomfort during eating and avoidance of foods 'fairly often' or 'very often' were reported by more than five per cent of dentate persons

96 Vol. 10 No. 8

(people with their own teeth) and by 10 per cent of edentulous persons. Five per cent reported that their oral health had significant impact on their interpersonal relationships.⁵

Homan's study of 238 institutionalised geriatric patients at Mount Olivet, Queensland, revealed that oral pain was a problem for 12 per cent of that group. Functional problems including chewing, swallowing and speaking were identified in 49 per cent of the patients. Chewing difficulty can lead to a preference for soft bland foods that may have less nutritional value than vitamin-rich and high-fibre hard fruits and vegetables. Undernutrition in the elderly is a significant problem and has a variety of effects ranging from the development of pressure sores to an increase in the incidence of fractured femurs.

CLINICAL FINDINGS IN AN INSTITUTIONALISED ELDERLY AUSTRALIAN POPULATION

Clinical examination of the Mount Olivet patients and residents found that 41 per cent of patients who had some of their own natural teeth had dental caries. Stomatitis (inflammation of the oral mucosa) was present in eight per cent and oral ulcers in five per cent of denture wearers. The hygiene of dentures was assessed as not satisfactory in 65 per cent of denture wearers. Oral hygiene was assessed to be not satisfactory in 93 per cent of the total Mount Olivet group, and 60 per cent suffered from periodontal disease.⁶

STRATEGIES FOR FUTURE MANAGEMENT

The pattern of elderly Australians seeking dental treatment has been investigated through telephone surveys conducted by the Australian Institute of Health and Welfare, and a dichotomy was found between edentulous and dentate elderly people. Edentulous people were most likely to have visited a dental service five or more years ago, while 61 per cent of the dentate group had visited a dental service within the past 12 months. Another significant finding was that 84 per cent of dentate persons made their last dental visit to a private dental facility. These figures emphasise the need for private practitioners to be well educated in the management of oral health problems of elderly patients.⁸

The 1993 National Health and Medical Research Council published *Oral Health Care for Older Adults*, which recommended the following:

improving advocacy through deliberate and informed policy development

- developing demonstration programs incorporating innovative oral health promotion and preventive strategies, such as educating caregivers
- establishing appropriate health targets for the elderly and monitoring oral health of older adults
- providing adequate dental education and research in geriatric dentistry.⁹

These recommendations are consistent with other investigations into problems related to the delivery of dental care to elderly patients. 10,11,12

Some special groups in Australia, such as people under the age of 65 who are homebound or disabled, are likely to face many of the same barriers to oral health which have been identified in geriatric dentistry. These groups should be considered with the elderly for the purpose of assessing their dental care needs using criteria other than chronological age.

REFERENCES

- Australian Bureau of Statistics. Year book of Australia, No. 81, 1999. Canberra: AGPS, 1999. ABS catalogue no. 1301.0.
- National Health Strategy. Improving Dental Health in Australia, Background Paper No. 9. Canberra: AGPS, 1992. ISBN 0 642 17468 7.
- 3. Gift HC. Issues of ageing and oral health promotion. *Gerodontics* 1988; 4: 194–206.
- 4. Katz RV, Stanley PH, Neal WC, Muma RD. Prevalence and intraoral distribution of root caries in an adult population. *Caries Res* 1982; 16: 265–271.
- 5. Slade G, Spencer AJ. Social impact of oral conditions among older adults. *Aust Dent J* 1994; 39(6): 358–64.
- 6. Homan BT, Lam B, Larsen RG. The oral needs and demands of a geriatric population at Mt Olivet, Brisbane. *Aust Dent J* 1986; 33(5): 424–432.
- 7. McCormack P. Undernutrition in the elderly population living at home in the community: a review of the literature. *Journal of Advanced Nursing*, 1997; 26: 856–863.
- 8. Dental Statistics and Research Unit. *A Research Database on Dental Care in Australia*. Adelaide: Australian Institute of Health and Welfare, 1993.
- 9. NHMRC. Oral health care for older adults: Report by the Health Care Committee. Canberra: NHMRC, 1994.
- Commission on Dental Education and Practice Working Group 10. Delivery of oral health care to the elderly patient. FDI Technical Report No. 43. London: Federation Dentaire International, 1986.
- 11. King PL. A dental health education program for carers of elderly people. MDS thesis, University of Sydney, 1992, in press.
- 12. Maguire M. Implementing a staff development program. Geriaction 1991; 10(2): 8–10.

Vol. 10 No. 8 97