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AIHW Dental Statistics and Research Unit

Oral Health and Access to Dental Care – older adults in Australia

Research Report, November 2000

ADELAIDE UNIVERSITY AUSTRALIA

This report provides information on aspects of oral health and use of dental services among community-dwelling older adults in Australia. Historically, the majority of older adults were edentulous (no natural teeth), leading to low demand for dental services. Currently the population of older adults is increasing in number, with a greater proportion retaining their teeth, consequently increasing their requirement for dental services. A high proportion of older adults are government concession card holders, and may be at a disadvantage in accessing dental care due to the lack of public oral health facilities and increased length of waiting lists. The increasing need for services among older adults may cause greater numbers of the financially disadvantaged to face affordability and hardship barriers to appropriate dental care, thereby compromising oral health outcomes.

Data collection

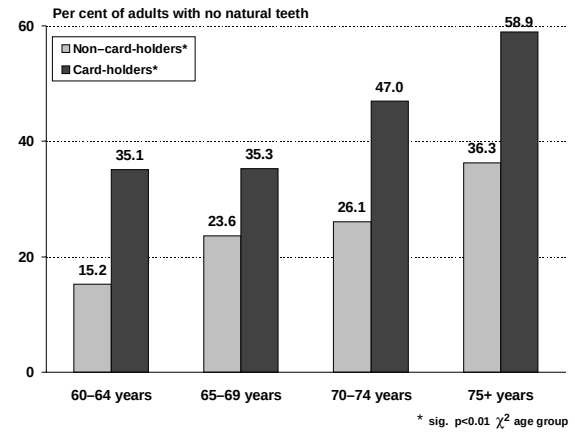
National Dental Telephone Interview Survey data (1994, 1995 and 1996) from respondents aged 60 years and over (n = 4,773) were classified into 5-year age groups to investigate oral health and visiting behaviour associated with increasing age. Data were weighted to represent the age and sex distribution of the Australian population at the time of each survey.

Dentate status

The cumulative effects of past disease and treatment practices are reflected in tooth loss and the wearing of dentures. Adults from different age groups and social backgrounds may exhibit variations in tooth loss, possibly indicating differing historical treatment patterns.

Complete tooth loss increased sharply across age groups. Card-holders had a higher rate of complete tooth loss than non–card-holders with the difference evident in all age groups (Figure 1). Among those aged 75+ years, 36.3% of non–card-holders were edentulous compared with 58.9% of card-holders. The lower percentages of edentulism in the younger age groups among both card-holders and non–card-holders reflect declining rates of complete tooth loss which have been occurring in recent decades.

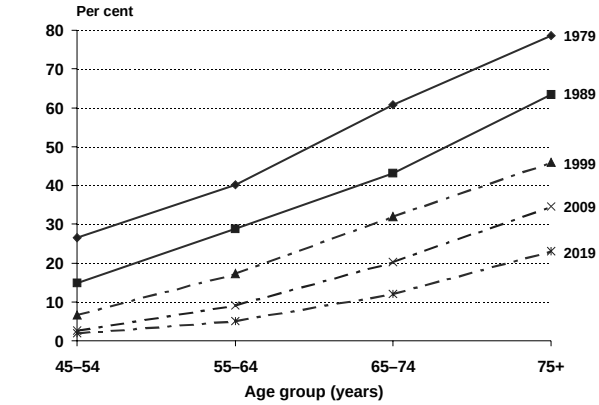
Figure 1: Complete tooth loss among adults aged 60+ years



Source: National Dental Telephone Interview Survey 1994, 1995, 1996

With the development of improved treatment options which encourage the retention of teeth, community expectations to keep teeth for life may result in further decreases in tooth loss. Persons in the under 70 years age groups may be less likely to progress to comparable rates of edentulism seen among the oldest age groups.

Figure 2: Projections of the percentage of Australians with no natural teeth



Source: 1979 Special Supplementary Survey
1987–88 National Oral Health Survey of Australia
1989–90 National Health Survey

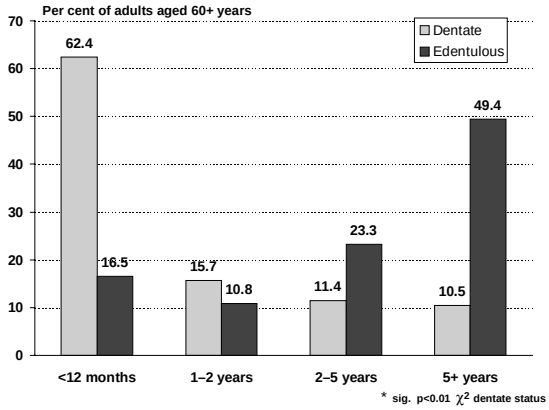
Figure 2 shows the projected edentulism rates for 1999, 2009 and 2019 based on estimates from the ABS Special Supplementary Survey Dental Health 1979 and the National Oral Health Survey 1987–88. The rapid decline in edentulism, coupled with the rapid increase in the number of older adults in the population, is leading to an increasing need for dental care among older adults.

Access to dental services

Dental needs of older adults are changing, with an increasing requirement for dental services to maintain teeth rather than dentures only.

Figure 3 presents the time since last dental visit for dentate and edentulous adults aged 60 years and over. It can be seen that while over 60% of dentate (those with some natural teeth) adults had made a visit in the previous year, almost half of those with no natural teeth had a period of five or more years since their last dental visit.

Figure 3: Time since last dental visit – adults aged 60+ years



Source: National Dental Telephone Interview Survey 1994, 1995, 1996

It is evident from the differences in time since last visit that as edentulism continues to decline, there will be a continually increasing demand for dental care, challenging a public dental care system.

Dental visit within 12 months

Table 1 presents dental visiting behaviour among dentate older adults by age group and government concession card-holder status. Significantly fewer card-holders had made a dental visit within the previous 12 months ($p<0.01$ χ^2); between 50% and 58% compared with up to 76.6% of non–card-holders. Attendance in the last year declined slightly across age groups among card-holders, while an opposite effect occurred among non–card-holders, with a significant increase in dental visiting with increasing age group.

Reason for usual dental visit

The treatment likely to be received at a dental visit is influenced by the reason for seeking care. Check-up visits more are more likely to result in timely treatment or preventive care, while visiting for a problem may indicate difficulties in accessing dental care, in particular availability and affordability issues.

Card-holders were significantly more likely to report that they usually make a dental visit for a problem than non–card-holders ($p<0.01$ χ^2) (Table 1). There was a trend (non-significant) for problem-oriented visiting to increase across age groups among card-holders, peaking at 65.1% among 70–74 year olds. Less than 51% of non–card-holders reported that they usually make a dental visit because of a dental problem, declining significantly with increasingly older age groups.

Table 1: Dental visiting behaviour – dentate adults

	60–64 years	65–69 years	70–74 years	75+ years
Visit within previous 12 months				
Card-holders	57.8	54.4	53.4	50.0
Non–card-holders †	67.9	65.4	70.9	76.6
All	64.3	59.5	62.4	63.1
Usually visit for problem				
Card-holders	53.7	56.2	65.1	60.5
Non–card-holders †	50.7	46.6	38.4	42.2
Location of last visit				
Card-public	8.2	14.1	13.1	14.2
Card-private	28.7	40.7	35.0	38.0
Non–card-private	63.1	45.2	51.9	47.8

† sig. $p<0.01$ χ^2 age group

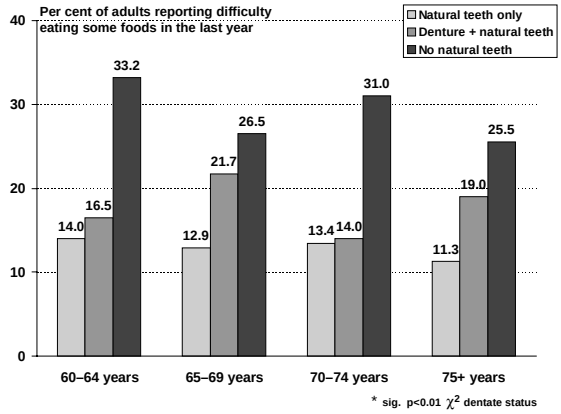
Source: National Dental Telephone Interview Survey 1994, 1995, 1996

Location of last dental visit

Approximately 14% of those groups aged 65 years and over made their last dental visit at a public clinic, while between 35% and 40% were card-holders eligible for public dental care but last visited a private practice. The remainder were non–card-holders who last made a visit at a private practice at their own expense.

Social impact and economic factors

Figure 4: Difficulty eating some foods; persons aged 60+



Source: National Dental Telephone Interview Survey 1994, 1995, 1996

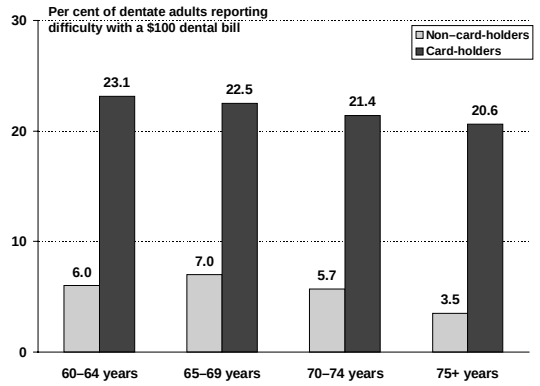
A range of social impact and economic factors were investigated to determine the extent of inequality between the groups. The percentage of older adults who reported that they had avoided eating some foods 'very often', 'often' and 'sometimes' because of problems with their teeth or dentures is presented in Figure 4. There was a clear gradient of disadvantage associated with tooth loss, although very little variation existed across age groups. Those who wore dentures reported higher levels of food avoidance than the group who had natural teeth only. Over a quarter of edentulous

persons reported that they had experienced problems with some foods. Individuals who wore a denture but retained some of their natural teeth reported an intermediate level of problems in most age groups.

Affordability

All respondents were asked how much difficulty they would have in paying a $100 dental bill. When comparing affordability among card-holders and non–card-holders, it can be seen that there was a three-fold difference across all groups ($p<0.01$ χ^2). More than 20% of card-holders reported that they would have a lot of difficulty paying a $100 dental bill compared to 7% or less of non–card-holders. There was little variation across age groups.

Figure 5: Difficulty with a $100 dental bill

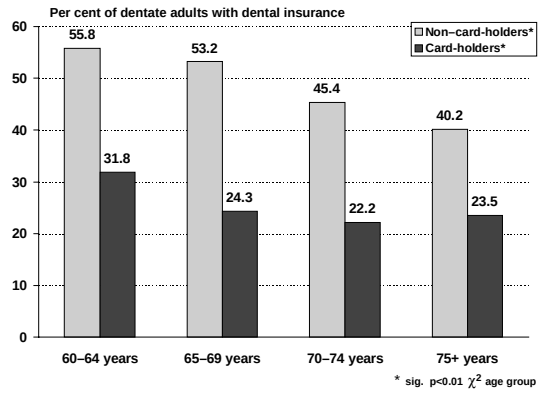


Source: National Dental Telephone Interview Survey 1994, 1995, 1996

Dental insurance

Dental insurance among dentate adults was highest in the 60–64 years age group among both card-holders and non–card-holders, and declined significantly across increasing age groups. Non–card-holders aged under 70 years reported the highest coverage (55.8% and 53.2% among the 60–64 and 65–69 years age groups).

Figure 6: Dental insurance – dentate adults



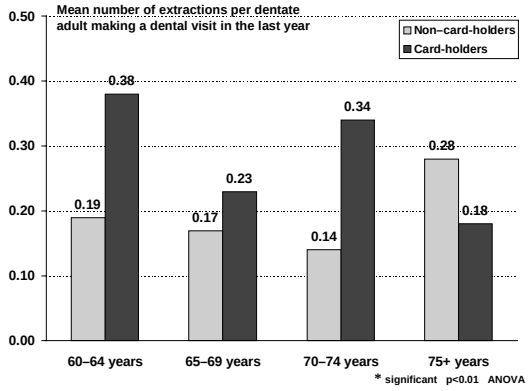
Source: National Dental Telephone Interview Survey 1994, 1995, 1996

Card-holders reported significantly lower levels of dental insurance than non–card-holders ($p<0.01$ χ^2), with the lowest dental insurance coverage among card-holders aged 70–74 years (22.2%).

Services received – extractions

Respondents who had made a dental visit in the previous year were asked what treatment they had received. Extraction of a tooth indicates that all previous preventive and restorative treatment has failed. The majority of older adults had experienced tooth loss in the past, with up to 66% wearing a partial or full denture.

Figure 7: Extractions in the last year



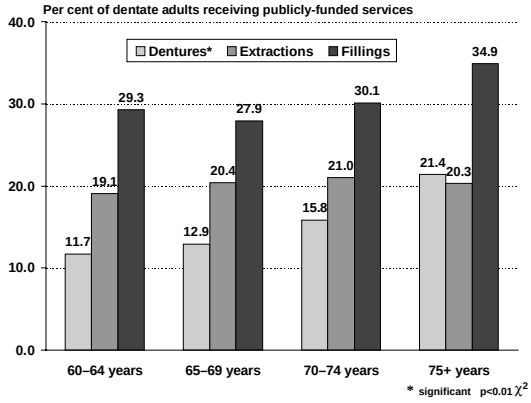
Source: National Dental Telephone Interview Survey 1994, 1995, 1996

Extraction rates in the previous year were higher among card-holders than non–card-holders in all age groups except the 75+ year-olds (Figure 7). Older adults had relatively high numbers of teeth extracted, with no definite trend across age groups. The highest mean number of extractions was reported by 60–64 year-old card-holders (0.38 per person compared with 0.19 among non–card-holders).

Public-funded dental patients

Oral health data relating to dentate patients receiving public-funded dental care were collected in the Prospective Adult Dental Programs Survey in 1995–96, and included care provided to eligible patients by public clinics and publicly-funded at private practices.

Figure 8: Denture services, extractions and fillings – dentate public-funded patients



Source: Prospective Adult Dental Programs Survey 1995, 1996

Dentures, extractions and fillings

Figure 8 presents the percentages of public-funded dental patients receiving denture services, oral surgery

(extractions) and fillings by age group. The percentage of patients receiving denture services increased significantly across age groups, from 11.7% to 21.4%. Approximately 20% of each age group received extractions. The percentages receiving fillings increased slightly across age group, ranging from 29.3% to 34.9%.

Dental satisfaction

Satisfaction with health care reflects the extent to which the care given meets the patients' needs and expectations, with care which is less satisfactory to the consumer likely to be less effective.

The Dental Satisfaction Survey questionnaires were mailed to a sub-set of respondents to the telephone surveys. Respondents were also invited to offer comments on aspects of their recent dental care. A selection of comments which particularly reflect the concerns and expectations of older adults included:

- 'All my previous visits to a private dentist were most satisfactory. However the cost was beyond my pension.'
- 'My last visit was for a denture problem. They fixed that but made no appointment for actual dental treatment. Because it is a bit hard getting there I didn't ask for one. '
- 'The dentist does give a discount to Senior Citizens. I know my friends go to him because of this and as a pensioner I have little money and because of this I do not seek treatment unless I have to.'
- 'On one emergency visit due to an aching tooth I had to wait for most of the day before I could see the dentist' *(patient aged 78).*
- 'We can afford the necessary & regular dental care thanks to private insurance.'
- 'Although I am a pensioner I considered I was treated with much more respect than at some medical clinics I have attended. Appreciated not being treated as a second class citizen.'
- 'I am an old age pensioner. The treatment I got was good but impersonal by the professional. I get the feeling that the professional had little interest in me one way or another. I was just an old bludger on the system.'
- 'There was a four year wait before I got an appointment at the Dental Hospital. Got treated eventually.'

Summary

Demographic, oral health status and social changes are leading to a greater proportion of older adults retaining their natural teeth. However, up to two-thirds of older adults are financially disadvantaged, which may create affordability issues in accessing timely and appropriate dental care.

Denture wearers reported higher levels of avoidance of some foods than persons with natural teeth only. Higher levels of extractions and denture services among card-holders may contribute to inequality of oral health between card-holders and non–card-holders.

Patterns of inter–age-group variation showed:

- higher levels of complete tooth loss with increasing age;
- lower levels of dental insurance with increasing age; and
- among non–card-holders, increasing age was associated with a higher percentage making dental visits in the previous 12 months and lower levels of visiting for a problem.

Card-holders were substantially disadvantaged in all measures of oral health and access to services, including:

- higher rates of edentulism;
- longer time since last dental visit;
- problem-oriented dental visiting patterns;
- low levels of eligible older adults receiving dental care at public clinics and dental hospitals;
- greater difficulty paying a $100 dental bill;
- lower levels of dental insurance; and
- higher levels of extractions in the previous 12 months.

These findings indicated barriers in the use of dental services, including the receipt of problem-oriented care and the pattern of services received.

Acknowledgements

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The AIHW Dental Statistics and Research Unit (DSRU) is a collaborative unit of the Australian Institute of Health and Welfare established in 1988 at Adelaide University. The DSRU aims to improve the oral health of Australians through the collection, analysis and reporting of dental statistics and research on dental health status, use of dental services, provision of dental services and the dental workforce.

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