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research report 51

Australian Institute of Health and Welfare

# Self-rated oral health of adults

This report provides information on self-rated oral health by adults in Australia from the 2008 National Dental Telephone Interview Survey. People were asked 'How do you rate your oral health?' and were given the response categories 'poor', 'fair', 'good', 'very good' and 'excellent'. This report identifies the associations of self-rated oral health with the following socioeconomic indicators: age, sex, educational attainment, private dental insurance, health care card status, home ownership and difficulty paying a \$150 bill.

# **Main findings**

- Over one in five (21%) of the Australian adult population rated their oral health as fair or poor, and 11% rated their oral health as excellent.
- The proportion rating their oral health as fair or poor increased with age, from 13% of those aged 18–24 year to almost one-quarter of those aged 45 years or older.
- All the socioeconomic indicators investigated were significantly associated with self-rated oral health.
- The largest differences were found in educational attainment, private dental insurance, cardholder status, home ownership and difficulty in paying a \$150 bill.
- About 40% of those aged 25–64 years without dental insurance and those aged 45–64 years who were renting their home rated their oral health as fair or poor.
- The two middle age groups (25–44 and 45–64 years) had the largest differences in rating their oral health as fair or poor among the socioeconomic indicators.

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## Data collection methods and response

The 2008 National Dental Telephone Interview Survey (NDTIS) involved a three-stage, stratified clustered sampling design to select a sample of Australians aged 5 years and older from households from the electoral role, which were then matched to an 'electronic white pages' database. Each sampled household was approached to participate in a computer-assisted telephone interview (CATI). A sample of 7,598 persons aged 5 years and older participated in the CATI survey, with a response rate of 59.4%. Sample sizes varied between states and territories according to their estimated resident populations, with the largest sample from New South Wales (1,584 persons) and the smallest from the Northern Territory (576 persons).

The CATI respondents supplied information on variables such as self-reported health status, use of dental services, demographics and socioeconomic status. In this report the percentage of persons who reported their self-rated oral health comprised the dependent variable. The socioeconomic variables consisted of age group, sex, educational attainment, private dental insurance, health card status, home ownership and difficulty paying a \$150 bill.

Data were weighted by state/territory, metropolitan/non-metropolitan location, age and sex. To account for design effects associated with the complex sample design, data were analysed using survey procedures that adjusted for strata.

This document reports on dentate (those who have at least one natural tooth) adults, aged 18 years and over. While the Indigenous status of the client was collected during the survey, the quality of these data was not sufficient to enable their analysis and reporting in a way which would contribute to our understanding of the dental health of Indigenous Australians.

## Results

Figure 1 shows the distribution of answers to the question 'How do you rate your oral health?' Over 65% rated their oral health as good or very good and 11% as excellent, but 21% (or approximately one in five people) rated their oral health as fair or poor.

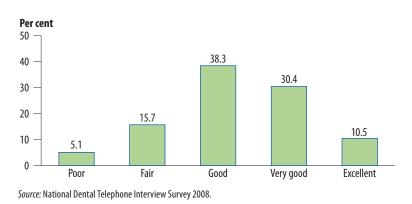
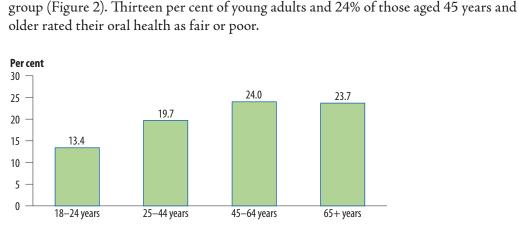


Figure 1: Percentage self-rating oral health



The proportion of the population rating their oral health as fair or poor varied by age

## Self-rated oral health and age group

Source: National Dental Telephone Interview Survey 2008.

#### Figure 2: Percentage self-rating oral health as fair or poor by age

## Sex and education

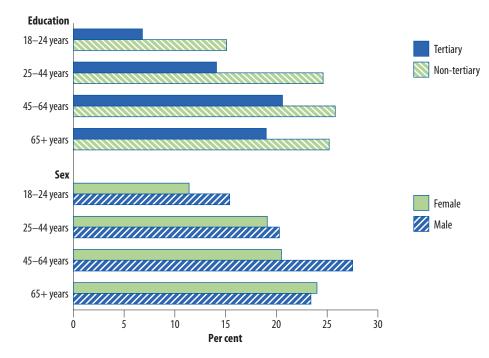
Figure 3 shows that less education was associated with poorer self-rated oral health in all age groups, with the largest difference in the 25-44 years age group (25% of those without tertiary education compared with 14% of those with at least some tertiary education). In most age groups, more males than females rated their oral health more poorly. This was particularly marked in the 45-64 years age group, where 7% more males rated their oral health as fair or poor.

## Private dental insurance and health card status

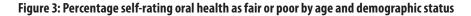
In Figure 4 clear differences can be seen in self-rated oral health with both private dental insurance and health card status. Approximately double the proportion of those without private dental insurance had poorer self-rated oral health compared with those with insurance in the 25–64 years age groups (26% cf. 12% among the 25–44 years age group and 33% cf. 17% among the 45–64 years age group). The differences were less marked in the youngest and oldest age groups.

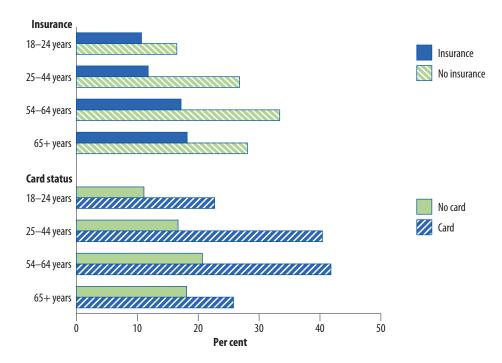
Larger differences in self-rated oral health among the 25–44 and 45–64 years age groups were also noted between holders of health care cards (which enable eligibility for public dental services) and non-cardholders. In the 25–44 years age group 40% of cardholders rated their oral health as fair or poor compared with 17% of non-cardholders, and in the 45–64 years age group the difference was 42% compared with 21%.

The following figures show the proportion of adults rating their oral health as fair or poor by sociodemographic variables stratified by age group.



Source: National Dental Telephone Interview Survey 2008.





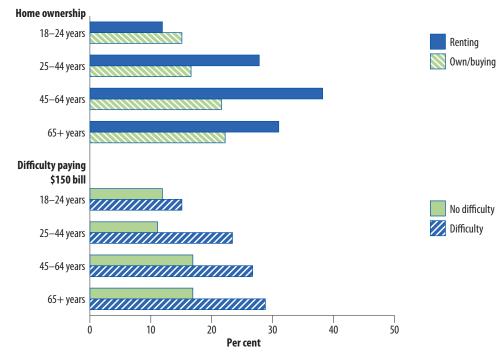
Source: National Dental Telephone Interview Survey 2008.

Figure 4: Percentage self-rating oral health as fair or poor by age and insurance and health care card status

## **Financial factors**

Whether people rented their home, or were buying or owned it, provided marked differences in self-rated oral health (Figure 5). More renters rated their oral health as fair or poor compared with those who owned or were buying their house. This difference was most marked in the middle and older age groups (28% cf. 17% among the 25–44 years age group and 38% cf. 22% among the 45–64 years age group).

About twice as many people reporting difficulty in paying a \$150 bill than those reporting no difficulty, stated that their oral health was fair or poor among those older than 25 years of age. Among the 25–44 years age group 23% of persons who had financial difficulty reported poorer oral health compared with 11% of those with no difficulty; in the 45–64 age group the difference was 27% to 17%.



Source: National Dental Telephone Interview Survey 2008.

Figure 5: Percentage self-rating oral health as fair or poor by age and financial status

## Discussion

The data presented in this report show the disparity in self-reported oral health by both socioeconomic indicators and age group. Previous reports have outlined inequality in oral health by socioeconomic variables (Slade et al. 2007). However, previously self-rated oral health has been shown to be somewhat independent of oral disease experience (Locker 2009).

Self-rated oral health is a single summary measure that covers a number of aspects, including experience of disease and the impact of oral health on daily living. Other factors such as expectations of oral health and previous experiences at dental clinics (e.g. extractions) may be important. It may also be affected by ability to cope and psychosocial factors such as chronic stress. Clinical measures of oral health and psychosocial factors were not explored in this report.

## References

Locker D 2009. Self-esteem and socioeconomic disparities in self-perceived oral health. Journal of Public Health Dentistry 69:1–8.

Slade GD, Spencer AJ & Roberts-Thomson KF 2007. Australia's dental generations: the National Survey of Adult Oral Health 2004–06. Cat. no. DEN 165. Canberra: Australian Institute of Health and Welfare (Dental Statistics and Research Series No. 34).

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### **Prepared by:**

AIHW Dental Statistics and Research Unit ARCPOH, School of Dentistry The University of Adelaide SOUTH AUSTRALIA 5005

 Email:
 arcpoh@adelaide.edu.au

 Phone:
 61 8/(08) 8303 4051

 Fax:
 61 8/(08) 8303 4858

<www.arcpoh.adelaide.edu.au>

Further information can be obtained from Associate Professor Kaye Roberts-Thomson by email kaye.robertsthomson@adelaide.edu.au, or phone (08) 8303 4454.

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