

Oral health and access to dental services

Oral health has improved among adults in Australia, with dramatic declines in edentulism. For example, the percentage of persons aged 65 years or more who had no natural teeth declined from 66% in 1979 to 50% in 1987–88 to 40% in 1994. Use of dental services has increased among adults in Australia. For example, among persons aged 65 years or more, the percentage who visited in the previous 12 months increased from 21.5% in 1979 to 40.9% in 1993. However, Indigenous persons comprise a group within the Australian population who may be disadvantaged in terms of their health and access to services.

Health of Indigenous Australians

The health status of Indigenous Australians is generally worse than that of non-Indigenous Australians. For example, infant and maternal mortality, and hospital admission rates indicate substantial disadvantage in terms of health among Indigenous Australians. While some historical reports indicated an advantage in terms of oral health for some Indigenous groups, other studies have indicated high experience of dental decay among Indigenous children, and high levels of tooth loss among adults.

This report looks at oral health and access to dental services by Indigenous status. This involves national surveys of the Australian population and of public dental patients. Comparisons by Indigenous status, controlling for age, are made for persons with no natural teeth, visiting for dental problems, difficulty in paying dental bills, periodontal health, decayed teeth, and provision of tooth extractions.

The Australian population

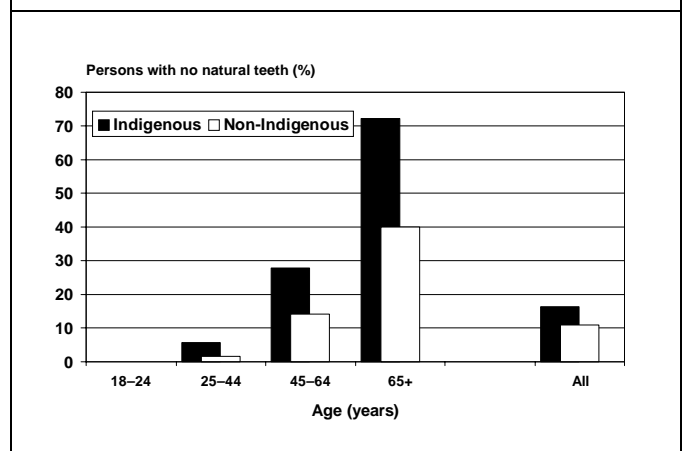
Oral health and access to dental services within the Australian population was surveyed from the National Dental Telephone Interview Survey. Comparisons of self-reported oral health and access to services are presented by Indigenous status and age.

Oral health

Complete loss of all natural teeth is an adverse outcome of the cumulative effects of oral disease and treatment. Characteristically, the percentage of persons with no natural teeth increases across older age groups reflecting the accumulation of disease experience and changing treatment philosophies over time.

Figure 1 shows the percentage of persons with no natural teeth. Overall, a higher percentage of Indigenous persons had no natural teeth (16.3%) compared to non-Indigenous persons (10.9%). This difference was observed in all age groups over 24 years of age.

Figure 1: Persons with no natural teeth (%) – Indigenous compared to non-Indigenous



Access to services

Figure 2 presents the percentage of persons who report that they usually visit for a dental problem rather than a check-up. Overall, a higher percentage of Indigenous persons report that they usually visit because of a dental problem (63.7%) compared to non-Indigenous persons (49.7%). This difference was apparent in most age groups.

Figure 2: Persons who usually visit for a dental problem (%) – Indigenous compared to non-Indigenous

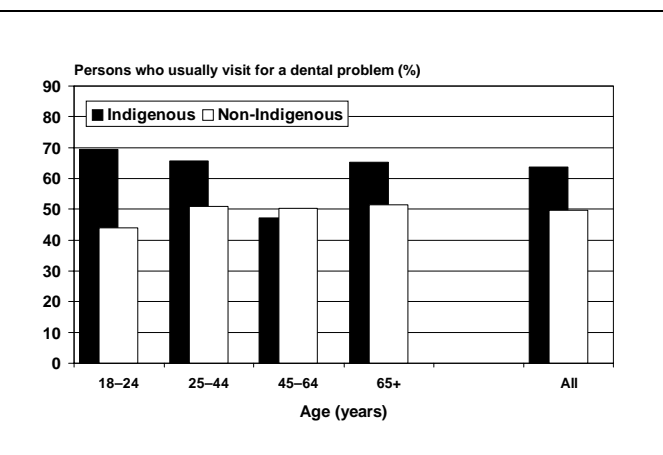
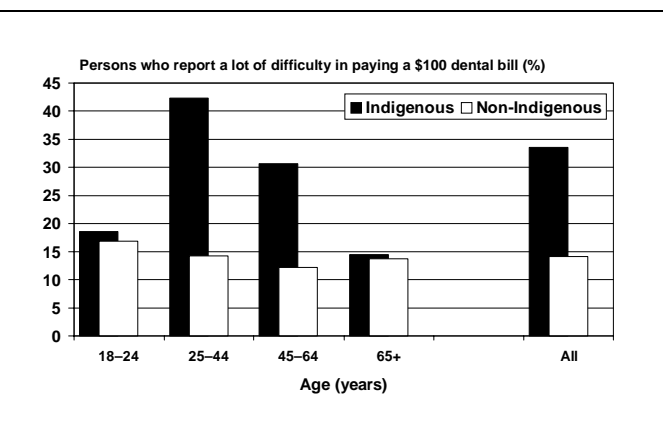


Figure 3 presents the percentage of persons who reported that they would have a lot of difficulty in paying a \$100 dental bill. Overall, a higher percentage of Indigenous persons reported that they would have a lot of difficulty in paying a \$100 dental bill (33.5%) compared with non-Indigenous persons (14.1%). This difference occurred in all groups but was most pronounced in those aged 25-44 and 45-64 years.

Figure 3: Persons who report a lot of difficulty in paying a \$100 dental bill (%) – Indigenous compared to non-Indigenous



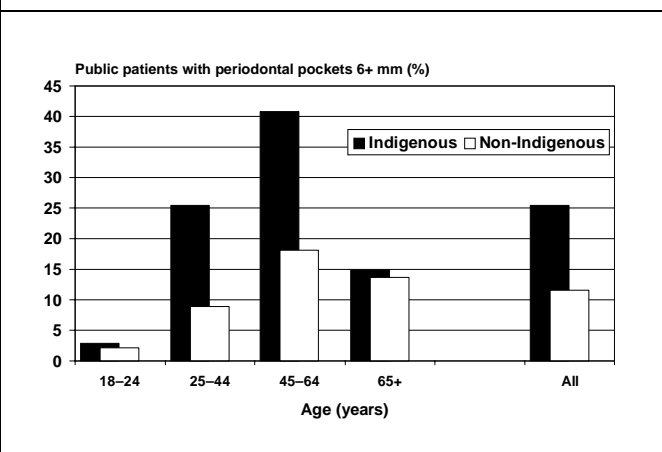
Public dental patients

Information on oral health and dental services among public patients was collected by State/Territory dental services for the Adult Dental Programs Survey. This provided data on health card-holders who attended for public-funded dental care.

Oral health

Figure 4 presents data on periodontal health (i.e. gums) measured by the percentage of patients who had periodontal pockets of 6 mm or more in depth. The presence of these pockets indicated poorer periodontal health. Poor periodontal health is associated with loss of attachment of teeth and tooth mobility, and is regarded as a major cause of tooth loss among older adults.

Figure 4: Public patients with periodontal pockets 6+ mm (%) – Indigenous compared to non-Indigenous

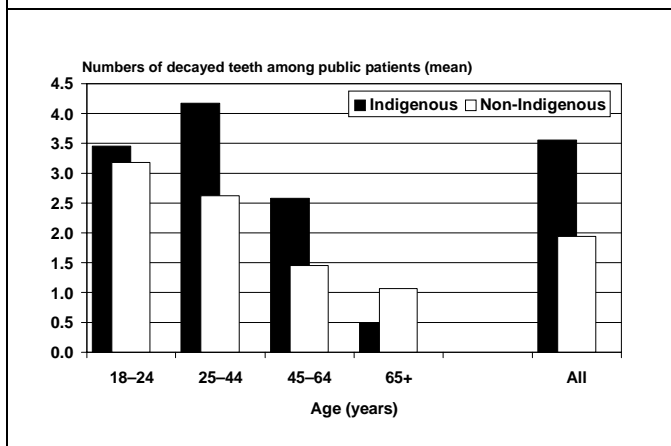


Overall, a higher percentage of Indigenous patients had periodontal pockets of 6+ mm (25.4%) compared with non-Indigenous patients (11.6%). This difference was apparent in all age groups, but was most marked in those aged 25-44 and 45-64 years.

Dental caries experience may be manifested as decayed, missing or filled teeth. Typically, numbers of decayed teeth are higher in younger age groups, with the lower numbers of decayed teeth among older age groups reflecting treatment effects of decayed teeth being converted into missing or filled teeth over time.

Figure 5 shows the average number of decayed teeth among public patients. Overall, there were higher numbers of decayed teeth among Indigenous patients (3.56) compared with non-Indigenous patients (1.94). This difference occurred in all age groups under the age of 65 years.

Figure 5: Numbers of decayed teeth among public patients (mean) – Indigenous compared to non-Indigenous

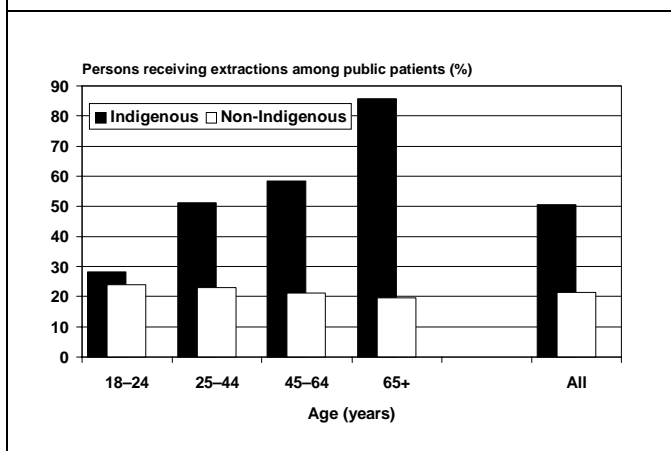


Service provision

Extraction of teeth has been described as the dental equivalent of mortality, reflecting factors such as patient and provider attitudes, access issues and treatment philosophies in addition to oral disease factors. A history of previous tooth loss has been associated with further extractions.

Figure 6 presents the percentage of public patients who had teeth extracted during their course of dental treatment. Overall, a higher percentage of Indigenous patients had teeth extracted (50.6%) compared with non-Indigenous patients (21.4%). This difference occurred in all groups but was most marked for those aged 25 years or older.

Figure 6: Persons receiving extractions among public patients (%) – Indigenous compared to non-Indigenous



Indigenous status

Persons surveyed were asked "Are you of Aboriginal or Torres Strait Islander origin?", with those answering 'yes' being coded as Indigenous for the purpose of this report. Those answering 'no' were coded as non-Indigenous.

Sources of data

This report presents findings on the Australian population from the 1994-96 National Dental Telephone Interview Surveys (NDTIS) and on public dental patients from the 1995-96 Adult Dental Programs Survey (ADPS).

The NDTIS comprised responses from 17,691 adults, with 1.2% (217) being Indigenous. The age distribution of Indigenous persons was younger than that of non-Indigenous persons. Approximately two-thirds (66.8%) of Indigenous respondents were aged 18-44 years, compared to 49.2% of non-Indigenous respondents.

The ADPS was based on data recorded on 5,926 public patients with 4.9% (278) being Indigenous. There was a younger age distribution among Indigenous compared to non-Indigenous patients (e.g. 20.6% of Indigenous patients were aged 18-24 years compared to 9.8% of non-Indigenous patients). There were only small numbers of Indigenous patients aged 65 years or more (3.4%) compared to non-Indigenous patients (28.3%).

Scope of data

Surveys of Indigenous persons may suffer from misclassification or under-reporting of Indigenous status. Due to the small numbers of Indigenous persons in the population, the survey estimates for Indigenous persons are likely to be based on small numbers of responses, which may reduce their level of precision. The data presented in this report are based on small numbers of Indigenous persons who had a younger age distribution than the non-Indigenous persons sampled. These limitations should be considered when interpreting the findings.

Summary

The Australian population

Within the Australian population, Indigenous persons showed disadvantage in comparison to non-Indigenous persons in terms of oral health and access measures. These included:

- a higher percentage of Indigenous persons had no natural teeth (16.3%) compared to non-Indigenous persons (10.9%);
- a higher percentage of Indigenous persons reported that they usually visit for a problem rather than a check-up (63.7%) compared to non-Indigenous persons (49.7%); and
- a higher percentage of Indigenous persons reported that they would have a lot of difficulty in paying a \$100 dental bill (33.5%) compared to non-Indigenous persons (14.1%).

Public dental patients

Among health card-holders such as the unemployed and aged pensioners who received public-funded dental treatment, there was evidence of disadvantage by Indigenous status. This included:

- a higher percentage of Indigenous patients had gum problems measured as periodontal pockets of 6 mm or more in depth (25.4%) compared to non-Indigenous patients (11.6%);
- the average number of decayed teeth was higher among Indigenous (3.56) compared to non-Indigenous patients (1.94); and
- a higher percentage of Indigenous patients had teeth extracted during their course of public dental treatment (50.6%) compared to non-Indigenous patients (21.4%).

Acknowledgements

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The Adult Dental Programs Survey was collected in collaboration with the dental authorities in the participating States/Territories of Australia.

Further information

Further information on adult access to dental care is available in the following publications:

Carter KD, Brennan DS, Stewart JF (1998). Adult access to dental care – migrants. AIHW Dental Statistics and Research Series No. 15. Adelaide: The University of Adelaide.

Brennan DS, Carter KD (1998). Adult access to dental care – Indigenous Australians. AIHW Dental Statistics and Research Series No. 16. Adelaide: The University of Adelaide.

Stewart JF, Carter KD, Brennan DS (1998). Adult access to dental care – rural and remote dwellers. AIHW Dental Statistics and Research Series No. 17. Adelaide: The University of Adelaide.

The AIHW Dental Statistics and Research Unit (DSRU) is a collaborative unit of the Australian Institute of Health and Welfare established in 1988 at The University of Adelaide. 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 labour force.

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