

This report provides information on some aspects of oral health and use of dental services of young adults in South Australia. Recent research indicates that the high percentages of children and adolescents visiting regularly falls away among young adults and there is a sharp increase in the proportion who usually visit when they have a problem rather than for a check-up. This is despite nearly one-third having untreated decay and signs of early decay being evident in almost half of those examined. Gains in oral health in childhood may be at risk when young people reach early adulthood.

Data collection

A random sample of young adults was selected from the electoral roll. Names and addresses were matched to the electronic white pages to obtain phone numbers. Those for whom phone numbers were unavailable were mailed a letter asking them to contact the research team.

Telephone interviews using computer-aided telephone interviews were conducted for 1,265 adults aged 20–24 years, a response rate of 60.9%. These interviews provided sociodemographic, health behaviour data such as smoking and exercise and dental visiting data. At the conclusion of the interview respondents were offered a dental examination.

Dental examinations were carried out on 644 subjects (50.9% of those interviewed) by three calibrated examiners in clinical settings using a protocol based on the 1987 National Institute of Dental Research in the USA. Clinical data was recorded directly on to laptop computers.

Sociodemographic characteristics

The sociodemographic profile of those both interviewed and examined compared to those who were only interviewed is shown in Table 1. A greater proportion of those examined were tertiary educated than of those who had an interview only; a greater proportion were holders of Government cards, had been born overseas and had not visited for dental care in the previous 12 months. There was little difference between the two groups in terms of mean age, sex and whether or not they held private dental insurance.

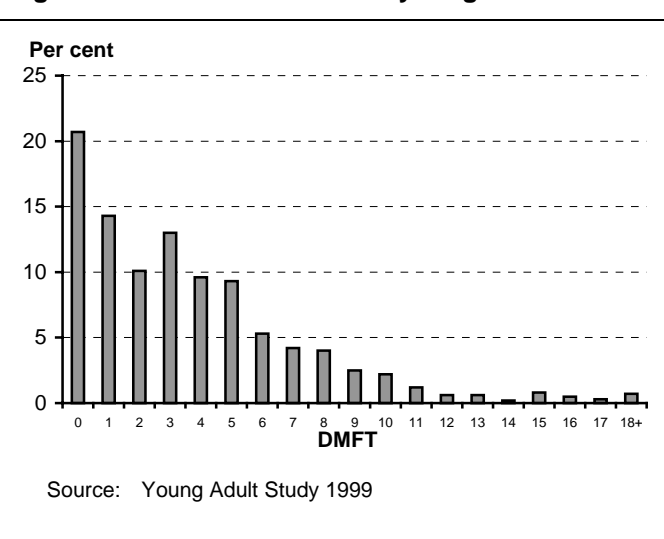
Table 1: Sociodemographic profile of those interviewed and examined

	Interview only	Examined
Sex – male	49.8%	45.5%
Age	22.6 years	22.5 years
Tertiary education	32.1%	43.1%
Concession card	13.8%	22.4%
Dental visit in last 12 months	53.7%	37.7%
Born overseas	6.0%	8.9%
Private dental insurance	36.9%	38.0%

Dental decay

Figure 1 shows the distribution of caries experience as measured by the number of decayed, missing and filled teeth (DMFT). The distribution is positively skewed with 21% having no caries experience and almost 15% having only one tooth affected by dental caries. The mean DMFT score is 3.66, the median 3.0 and the standard deviation 3.67. Just less than 14% of subjects had a DMFT of eight or more and could be regarded as at high risk of dental caries.

Figure 1: DMFT distribution of young adults



Mean values for the components of the DMFT are shown in Table 2. The value for teeth with early decay (precavitated lesions) is shown for comparative purposes. Precavitated lesions affect 2.3 times the mean number of teeth affected by cavities. Filled teeth contribute over 75% of the mean DMFT. Decayed teeth contribute 19% of the caries experience (mean number of decayed teeth per person of 0.7) and the mean number of teeth missing due to dental caries is very low at 0.2, contributing only 4% to the total mean DMFT.

Table 2: Components of DMFT

	Mean
Precavitated decay	1.61
Decay – cavitated	0.69
Decayed roots	0.02
Missing teeth	0.16
Filled teeth	2.79
DMFT	3.66

Figure 2 shows the percentage of young adults with a DMFT of 8+ by government benefit card status and visiting factors. A higher proportion of card-holders than non-card-holders had a DMFT score of 8 or more; a greater proportion of those who had made a dental visit in the previous two years than those who had not, and more of those who usually visit a dentist for a problem than those who visit for a check-up had a DMFT of 8+. (In Figure 2 and those following 'y' means that group has the particular characteristic and 'n' means that it does not.)

Figure 2: Percentage of persons with DMFT of 8+

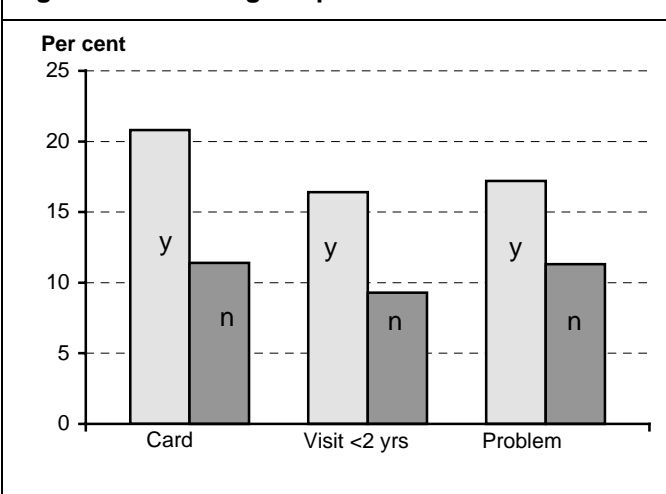
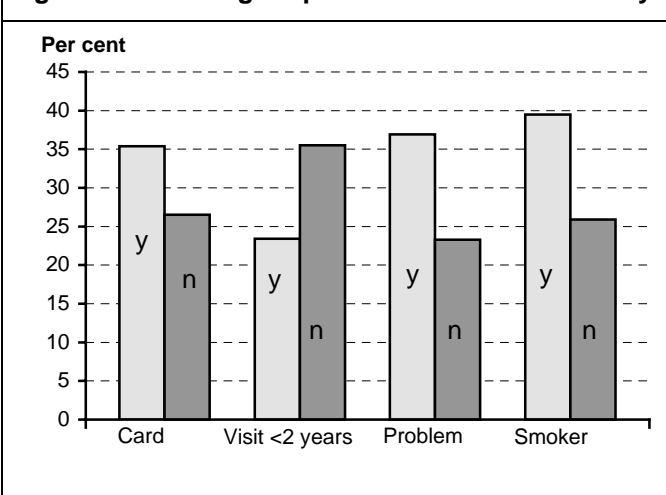


Figure 3 shows the percentage of young adults with untreated decay by sociodemographic, visiting and health behaviour variables. A greater proportion of card-holders had evidence of cavitated caries than non-card-holders. More of those who had not visited in the previous two years than those who had, a greater proportion of those who usually visit for a problem than for a check-up and more of those who smoke than those who do not had at least one cavitated lesion.

Figure 3: Percentage of persons with untreated decay

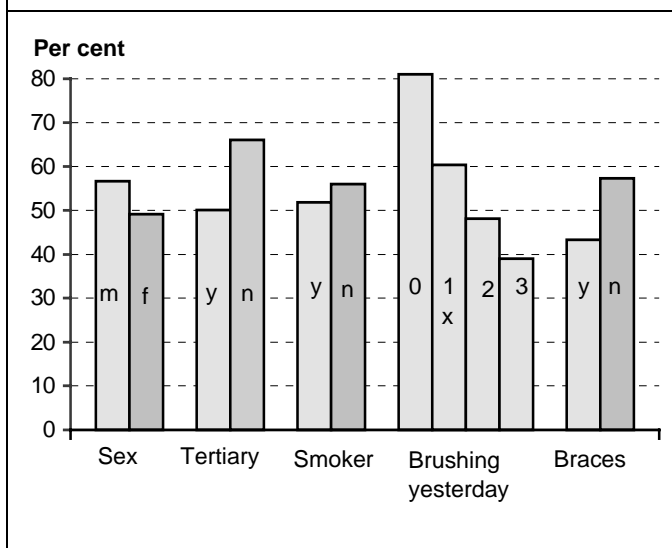


Gum problems

The percentage of young adults with inflamed gums (gingivitis) by sociodemographic and health behaviour factors is presented in Figure 4. A higher percentage of males than females had gingivitis, those without tertiary education than those with, non-smokers than smokers, those who brushed less frequently than more frequent brushers and those who had not had fixed orthodontic care compared to those who had.

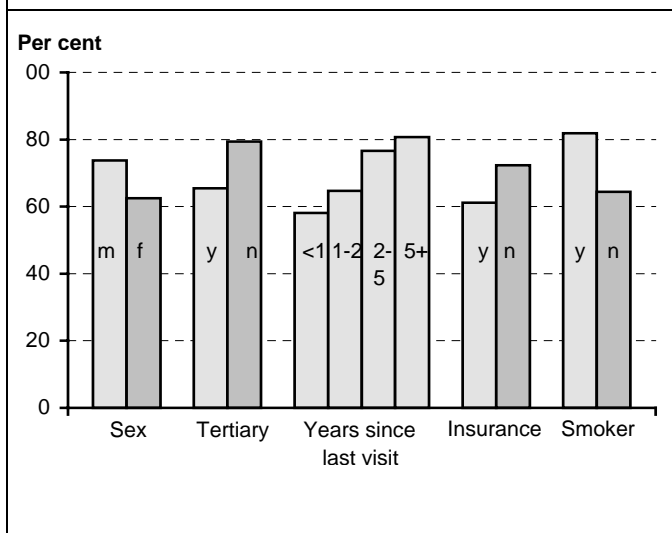
Gingivitis was found in 52.5% of subjects and the mean number of sites affected was 3.2.

Figure 4: Percentage of persons with gingivitis by SES and health behaviour variables



Calculus (tartar) was found in 68% of those examined (Figure 5). Calculus was found in a higher percentage of males, those without tertiary education, those who had been to a dentist less recently, those without dental insurance and smokers.

Figure 5: Percentage of persons with calculus by SES and health behaviour variables



Access to dental services

Access to dental services as measured by time since last dental visit is a measure of realised access. Amongst young adults surveyed in Adelaide in 1999, 46% had made a dental visit in the previous 12 months, and approximately 66% had made a visit in the previous two years. These

figures have changed marginally since the 1987/88 National Oral Health Survey (NOHSA). A comparison of time since last visit between NOHSA, the 1999 Young Adult Study and the National Dental Telephone Interview Survey (NDTIS, 1994) is presented in Table 3.

Fewer young adults (45.5%) in 1999 reported visiting in the previous 12 months than the general adult population (55.1%) and a greater proportion report a period of more than two years since their last visit, 33.8% compared with 26% in NDTIS.

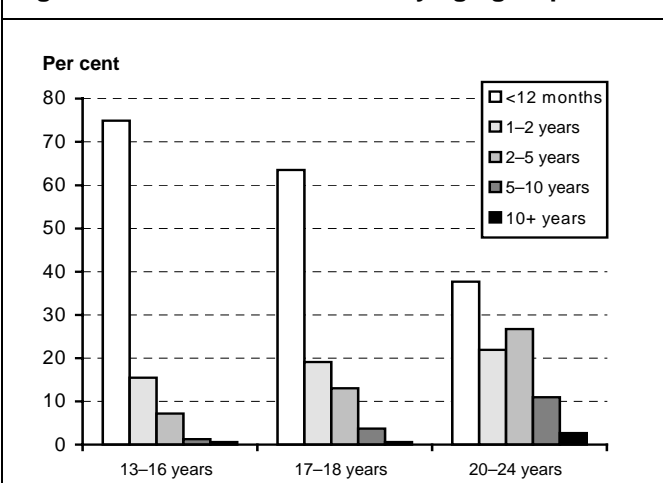
Table 3: Time since last visit – percentage of persons

	1987/88 20–24 years	1999 20–24 years	NDTIS 1994 18 years
<12 months	47.9	45.5	55.1
1–2 years	17.4	20.7	18.9
2+ years	30.9	33.8	26.0

Sources: National Oral Health Survey 1987/88
National Dental Telephone Interview Survey 1994
Young Adult Study 1999

Figure 6 shows the change in time since last visit using data from NDTIS 1994–96 for 13–16 and 17–18 year age groups and from YAS for the 20–24 year age group. The proportion of each group who reported visiting in the previous 12 months declines by almost 50% between the youngest and oldest age group. The proportion who report that their last visit was more than two years ago increased across the age groups with little change in the percentage who visited from one year to less than two years ago.

Figure 6: Time since last visit by age group

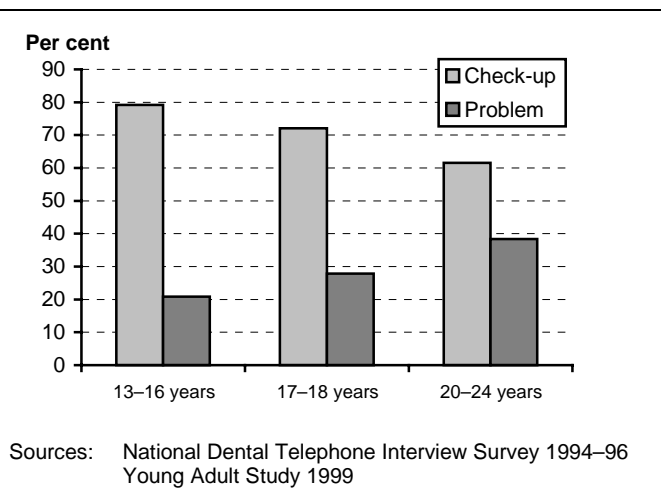


Sources: National Dental Telephone Interview Survey 1994–96
Young Adult Study 1999

Usual reason for dental visit

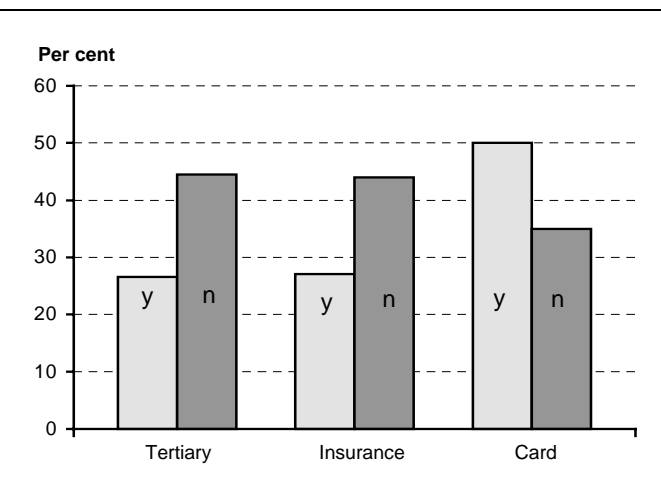
The reason for seeking dental care influences the treatment likely to be received. Visiting for a problem rather than a check-up may reflect the ability to access dental services. Figure 7 represents the percentage of persons in various age groups whose usual reason for visiting a dental provider is for a check-up and for a problem. In all age groups a greater proportion of adolescents usually visit for a check-up than for a problem, but that proportion declines across the age groups with 80% visiting for a check-up in the 13–16 year age group and approximately 60% reporting that they usually visit for a check-up in the 20–24 year age group.

Figure 7: Usually visit for a dental problem, by age group



Young adults who use dental services for a problem rather than a check-up were more likely to be holders of government cards, to not have private dental insurance, and to not have tertiary education (Figure 8).

Figure 8: Per cent of persons whose usual reason for visit is for a problem



Summary

- Declining frequency of dental visits with increasing age.
- Use of dental services for problem rather than check-up increases with age.
- Majority have low DMFT but 10–15% could be regarded as high risk.
- Precavitated lesions in 47.7% and cavitated lesions in 28.4% young adults indicate significant needs for preventive and restorative care.
- Low prevalence of gum (periodontal) health and high prevalence of calculus in young adults may reflect lower rates of dental utilisation.
- These results for the young adults represent the oral health of metropolitan, fluoridated Adelaide and are likely to be an under-representation of the oral health needs of this age group nationally.

Acknowledgements

The Australian Dental Research Foundation and the AIHW Dental Statistics and Research Unit supported this research.

AIHW Catalogue No. DEN 69
ISSN 1323-8744

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.

Published by:

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