

Practice profiles of Australian private general dental practitioners

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Introduction

In Australia, the vast majority of dental practitioners are in the private sector (83 per cent). The provision of oral health services is dominated by general practitioners (85 per cent), with a small percentage of practitioners in specialist and restricted practice (12 per cent), and the remainder in areas such as administration, teaching and research.¹ This paper describes the profile of patients and their presenting conditions among private general dental practitioners in 2003–2004.

METHODS

Sample and response

A longitudinal design involving a sample of 10 per cent of male dentists and 40 per cent of female dentists was randomly drawn from the dental registers for each State or Territory in Australia in 1983. The higher sampling rate for female dentists was designed to include sufficient numbers for comparisons by sex of dentist as females comprise a lower percentage of registered dentists than males. Sample supplementation at each successive five-yearly wave of the study, based on 10 per cent of male and 40 per cent of female dentists who were newly registered since the previous wave, ensured representative cross-sectional estimates. In 2003–2004 this sample were surveyed by mailed questionnaire, providing a response rate of 76 per cent.

The data were weighted using dental board registration statistics from 2000.¹ Therefore the estimates of practice activity were representative of the age and sex distribution of Australian private practice dentists at that time.

Data collection

Respondents completed questions related to their current practice experience. Practitioners provided estimates of the number of patients treated per day and the number of hours per day, days per week and weeks per year devoted to work. Practitioners recorded the types of services provided over one to two self-selected typical days of practice. The number of patients sampled by each dentist varied according to their typical level of activity. Dentists were free to choose which days to include in their service log. Only sampled dentists within any group practice provided data. Dentists were instructed to record for each patient treated on their selected

Table 1. Age distribution of responding private general practitioners

	Male	Female
Age of dentist	%	%
20-29 years	8.3	19.3
30-39 years	23.8	32.4
40-49 years	34.9	34.8
50-59 years	23.4	12.0
60+ years	9.5	1.5
Total (n)	252	259

typical days the services provided regardless of whether or how they were charged to the patient. Services were classified into main areas of service following the Australian Dental Association's *Schedule of Dental Services and Glossary*.² Extraction services reported in this paper correspond to the area listed as oral surgery in the Schedule.

RESULTS

Age and sex distribution of respondents by time of study

The age and sex distributions of responding private general practitioners from 2003–2004 are presented in Table 1. The highest percentage of dentists occurred in the 40–49 year age group for both male and female dentists. However, male dentists had an older age distribution than female dentists, with higher percentages in the 50–59 and 60+ year age groups. In contrast, female dentists had higher percentages in the 20–29 and 30–39 year age groups. While the sampling rates produced approximately equal numbers of male and female dentists, the over-representation of female dentists was adjusted through the weighting process for the remainder of the results.

Patient age distribution

The age distribution of patients is presented in Fig 1. The patient age distribution was dominated by adults. The highest percentages of patients were aged 25–44 (32.2 per cent) and 45–64 (34.6 per cent) years, while the next highest percentage of patients were aged 65 years or more (14.1 per cent).

Patient and visit characteristics

Figure 2 shows that over half of the patients were female (55.1 per cent) and had dental insurance cover (60.6 per cent). While the breakdown by reason for visit showed the highest percentage of patients occurred in the category of

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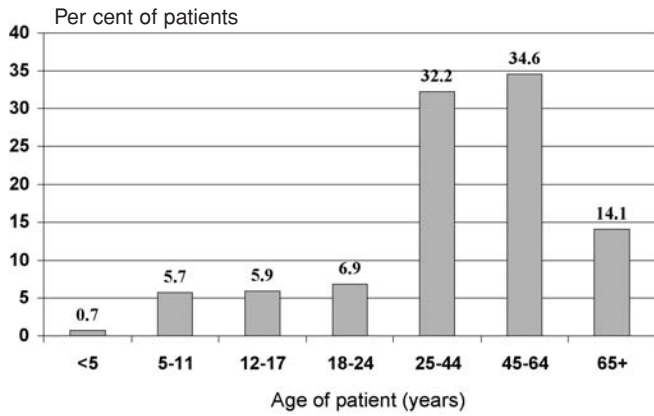


Fig 1. Age distribution of patients.

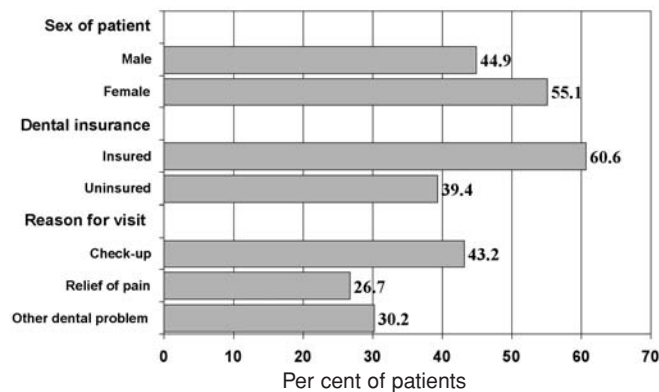


Fig 2. Characteristics of patients.

check-up (43.2 per cent), there were substantial percentages of patients who visited for relief of pain (26.7 per cent) as well as for other dental problems not involving relief of pain (30.2 per cent).

Oral health characteristics of patients

The oral health characteristics of patients are shown in Fig 3. Over half of the dentate patients had no decayed teeth (52.7 per cent), with 11.1 per cent having five or more decayed teeth. The level of tooth retention was high, with only 16.9 per cent of dentate patients having 20 teeth or less. The majority of patients did not have any dentures (84.8 per cent) and nearly all patients were dentate (98.7 per cent).

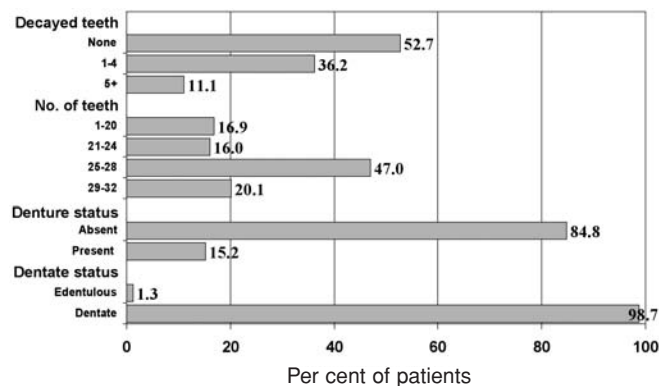


Fig 3. Oral health status of patients.

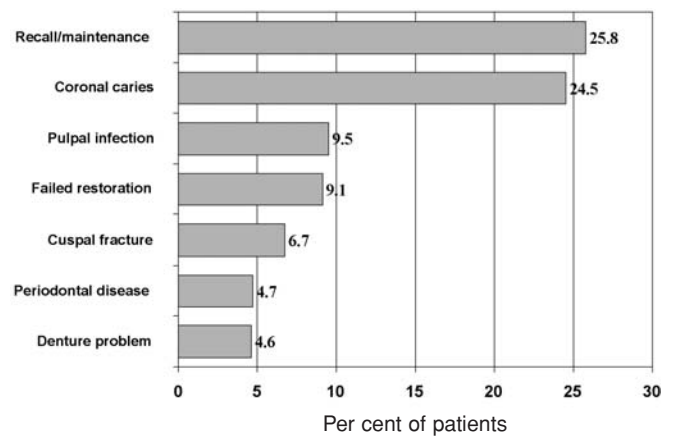


Fig 4. Main presenting problems.

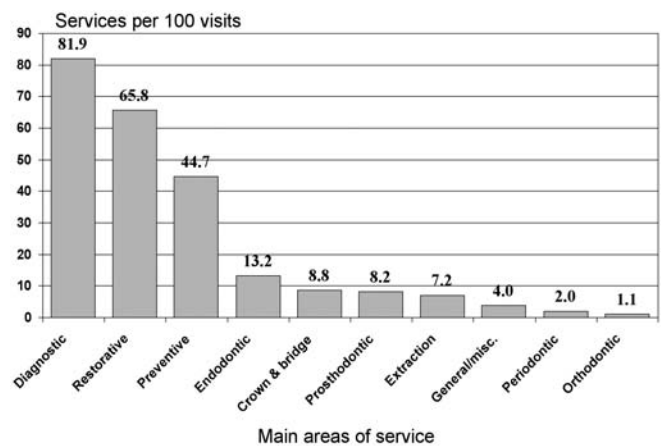


Fig 5. Services provided per 100 visits.

Main presenting condition

Figure 4 presents the highest ranked presenting dental conditions. Approximately one-quarter of patients presented for recall/maintenance care (25.8 per cent) and coronal caries (24.5 per cent), respectively. The next most prevalent presenting conditions were pulpal infection (9.5 per cent) and failed restoration (9.1 per cent), followed by cuspal fracture (6.7 per cent), periodontal disease (4.7 per cent) and denture problems (4.6 per cent).

Services provided

The number of services provided per 100 dental visits are presented in Fig 5 by main area of service. The service distribution was dominated by diagnostic, restorative and preventive services. The next highest ranked service areas were endodontic, crown and bridge, prosthodontic and extraction. Only small numbers of general/miscellaneous, periodontic and orthodontic services were provided in private general practice.

DISCUSSION

It is likely that dental practice in Australia is currently being influenced by changes in demographics and oral health status. Population trends in Australia show a high growth rate of the older population and this is projected to increase into

the future.³ The age distribution was skewed towards middle-aged adults. Decreased levels of tooth loss have also been observed among adults in Australia.^{4,6} High levels of tooth retention were evident in the patients of the private general practitioners. With the increase in numbers of teeth present, the dental needs of adults may increase due to the larger pool of teeth at risk.⁷

Changing social circumstances and technological advances are predicted to lead to higher patient expectations and greater demands for oral health care.⁸ A large percentage of patients presented for recall/maintenance care and caries, consistent with the service profile showing high numbers of diagnostic, preventive and restorative care.

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