



AUSTRALIAN DENTAL ASSOCIATION INC.

Dentists... part of a caring profession



Become a Dentist ~ Your Passport to a Brighter Future

The Science, Art & Ethical Practice of Dentistry

What is dentistry?

Dentistry is defined by the World Health Organization as *'the science and art of preventing, diagnosing and treating diseases, injuries and malformations of the teeth, jaws and mouth.'* Over the last decade there has been a much greater emphasis on understanding and maintaining a person's oral health in the context of their general health. This is reflected in statements made by:

the International Association for Dental Research (IADR) that "the quality of life of people is affected by their general oral health, which is especially relevant for disadvantaged and special-needs patient populations. Adequate oral care and access to care is positively associated with high levels of quality of life"; and

the US Surgeon General that "We know that the mouth affects general health and well-being".



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What is a dentist?

As dentists form part of an ethical profession they are expected to place the welfare of their patients before any other consideration.

A successful dentist will need to:

- enjoy interacting with people*
- have good interpersonal skills*
- be a good communicator*
- have good fine motor skills*
- enjoy working independently and accepting responsibility*
- enjoy working co-operatively with others*
- have a high level of aptitude in science-based subjects*

An interest in health and a sense of social responsibility is also important. To become a dentist, you will need to acquire good business and leadership skills in the management of a health service and skills for working well with other health professionals.

Why become a dentist?

A career as a dentist allows the flexibility to balance a professional and personal life, the opportunity to be your own boss, and to earn a good income. It is a rewarding profession that combines art and science, personal communication skills and high ethical standards.



What does a dentist do?

Dentists aim to improve the quality of life for their patients by preventing and treating oral disorders.

They do this by:

Devoting time to patient education in maintaining good oral health.

Diagnosing dental disease such as tooth decay, gum disease and oral cancer. This may involve a thorough oral examination, the collection of the patient's medical history, saliva tests, X-rays, lasers or biopsies.

Diagnosing general disease, which may have oral manifestations such as AIDS, diabetes and leukaemia.

Providing health care to prevent and treat tooth decay and gum disease. Prevention of dental disease may involve clinical treatments such as scaling, cleaning, application of fluoride, use of pharmaceutical interventions and public health measures such as involvement in community health programs.

Restoring teeth that are decayed or damaged and improving function and appearance. Restoration of teeth may involve amalgam or tooth-coloured restorations, crowns, bridges, veneers, and root-fillings where the tooth pulp (nerve) is treated.

Replacing lost teeth. Teeth can be replaced by plastic or metal dentures or by implant-supported crowns and dentures.

Treating problems with the function of the mouth, e.g., during chewing.

Performing a variety of oral surgical procedures on the teeth and associated structures, e.g., the removal of wisdom teeth.

Being responsible for treatment delegated to allied dental personnel.

Referring treatment to specialist dentists and/or other health practitioners when necessary.

Dentists may provide orthodontic treatment to correct misaligned teeth and jaws and may also write prescriptions to manage or cure disease and control infection and/or pain.

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The changing nature of dentistry

In recent years the role of the dentist has changed considerably. Effective preventive measures, rapid advances in biomedical and genetic research, and the development of new technologies and materials are just some of the factors that have altered the scope and challenges of modern dentistry.

The overall level of tooth decay has declined due to water fluoridation, better preventive therapy, and improved community attitudes to dental hygiene, health and nutrition. However, recent research has shown that dental decay is again increasing in children. Other research has focused on the 'consequence of success' where the very success of the dental profession in helping people maintain their teeth has resulted in more dentists being required to manage the oral health of the increasing number of people retaining their teeth and of the ageing population.

The need for extraction of teeth, while still required on occasions, has considerably lessened. Orthodontics, surgical removal of wisdom teeth, dentistry to improve a patient's aesthetics, implants and the use of complicated treatments have all increased in recent years.

Dentistry is evolving rapidly, largely due to the use of lasers and CAD/CAM technology. Dentists need to keep up to date with the latest research and developments. The trend is for ongoing continuing professional education to be mandatory for continual registration as a dentist.

With the ageing Australian population, more patients who have complex medical conditions that will influence dental disease and dental treatment will present to dentists. Recognition of these conditions and their management will become more important in the practice of dentistry.



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The Science, Art & Ethical Practice of Dentistry

Employment opportunities

Employment opportunities are excellent. There is a shortage of dentists in Australia, especially in regional, rural and remote areas, in government clinics, and in academic teaching and research. Large numbers of dentists are expected to retire in the next 20 years whilst increasing numbers of older adults are keeping their teeth longer. There is greater awareness of oral health care, and a greatly increased demand for aesthetic services. New information about the relationship of oral health to general health makes dentistry an important health profession for the future.

Possible career paths include:

private general practice
public service
armed forces
specialist practice
teaching
research
international aid agencies

Private sector

Most dentists, both general and specialist, work in the private sector, usually starting as an assistant dentist remunerated either by salary or commission. The cost of setting up a practice, buying a solo practice, an associate practice (sharing expenses but not fees), or a partnership (sharing both expenses and fees) will need to be planned for. There is a trend for dentists to work in more than one sector. Often private practitioners will do a session or two a week elsewhere such as teaching, at a hospital or in the armed forces reserve.



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Public sector

The public sector includes areas such as hospitals, schools and health departments. Salaried dentists, both general and specialist, within the public sector are concerned with managing the dental care of school children, the elderly, the socio-economically disadvantaged, and people with intellectual and physical disabilities. Clinical leaders in the public sector manage activities that monitor oral health on a community basis. For further information on working in public dental clinics and possible scholarships visit the government dental health department in your state.

Armed forces

Each of the armed services maintains dental units, which provide a comprehensive range of dental care for members of the service and in some circumstances their families. Dental graduates enter the armed services with the officer rank as an Army Captain, a Flight Lieutenant, or a Navy Lieutenant. Scholarships are available. Dental graduates are readily accepted into the defence force reserves. Promotion is available over time. Specialist dentists enter the armed forces with a higher rank. More information is available at www.defencejobs.gov.au.

Specialist dentists

To be able to practice as a specialist dentist, you will need to have obtained a higher degree of at least three years duration after graduating as a dentist and have demonstrated your expertise in a particular area of dentistry over a period of time. A specialist's primary purpose must be to render a service to patients and the community, which requires knowledge and skill beyond those which could normally be expected in the relevant area of general dental practice.



Currently recognized specialists are:

A Dento-maxillofacial Radiologist deals with diagnostic imaging procedures in the mouth and adjacent parts.

An Endodontist prevents, diagnoses and treats diseases and injuries to the dental pulp – the soft tissues in the hollow centre of the tooth.

An Oral and Maxillofacial Surgeon surgically treats injuries, abnormalities and diseases of the mouth and adjacent parts.

An Oral Physician deals with the clinical diagnosis, assessment and principally non-surgical pharmacological management of diseases of the mouth and adjacent parts and the dental/oral manifestations and complications of systemic diseases.

An Oral Pathologist deals with diseases of the mouth and associated structures, studies their causes and by use of clinical, radiographic, microscopic and other laboratory procedures establishes differential diagnoses and provides forensic evaluations.

An Orthodontist prevents and treats misaligned teeth and jaws.

A Paediatric Dentist or a Paedodontist deals with the prevention, recognition, diagnosis and treatment of the disease and abnormalities in children and their associated development and behavioural problems.

A Periodontist prevents and treats diseases of the tissues that support the teeth, i.e., the gums and underlying bone.



The Science, Art & Ethical Practice of Dentistry

A Prosthodontist restores and/or replaces teeth and their associated parts.

A Public Health Dentist deals with the community as a patient being concerned with oral health education of the public, applied dental research and administration of dental care programmes.

A Special Needs Dentist deals with patients where intellectual disability, medical, physical or psychiatric conditions require special methods or techniques to prevent or treat oral health problems.

Teaching and Research

Teaching and research is undertaken at all of the Universities that have a course in dentistry and at research centres. The Australian Dental Association supports the Australian Dental Research Foundation which is a major source of funding for dental research in Australia.

All specialist dental courses involve a research component. The trend for more dentistry to be evidence-based has increased the role of research.

International Aid Agencies

Some dentists, both general and specialist, work for international aid agencies outside Australia. Many dentists give up 2-3 weeks per year from their practices to give voluntary service to disadvantaged persons in developing countries.

The Science, Art & Ethical Practice of Dentistry

How do I become a dentist?

Entry into dentistry courses is highly competitive. Entry requirements and the length of the dentistry course differ between Australian universities and change regularly. Some require high Year 12 or International Baccalaureate scores, an Undergraduate Medicine and Health Sciences Admission Test (UMAT) and an interview. Others require graduate entry, meaning you need a bachelor's degree in any discipline from an accredited University.

For more information on a career as a dentist access the website of the Australian Dental Association at www.ada.org.au or the following dental school websites:

University of Melbourne (www.dent.unimelb.edu.au)

University of Adelaide (www.dentistry.adelaide.edu.au)

University of Sydney (www.dentistry.usyd.edu.au/)

University of Western Australia (www.meddent.uwa.edu.au)

University of Queensland (www.uq.edu.au/dentistry)

Griffith University (www.gu.edu.au/school/doh/)

Most of the Universities have government assisted, full-fee paying and international students. A feature of most courses is an early introduction to clinical work, a very high component of supervised clinical work throughout the course, and in the senior years, opportunities for clinical placements in regional, rural and remote areas and in community dental clinics.

Australian Dental Association

The Australian Dental Association is an organization of dentists which has as its aim the encouragement of the health of the public and the promotion of the art and science of dentistry.



www.ada.org.au

Photographs:

The University of Queensland – pp. 1, 4, 5.

Colgate Australian Clinical Dental Research Centre, School of Dentistry, The University of Adelaide – p. 7.



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