

PROGRAM OUTCOMES FOR BACHELOR OF DENTAL SURGERY

The undergraduate course entails organization of teaching programs year-wise. However, this course as a whole, demonstrates integration of the basic sciences, clinical dentistry and practical skills. This is designed in such a way as to permit smooth progression from the pre-clinical to clinical phase. Collaboration is encouraged between teachers of basic sciences, dental sciences and clinical subjects.

The undergraduate dental course consists of three main components:

- The first component consists of subjects common to medicine and dentistry like Anatomy, Physiology, Biochemistry. These lead unto disciplines such as Pharmacology, Pathology, Microbiology and then on to General Medicine and General Surgery.
- The second component runs concurrently with the first and deals with special aspects of Oral and dental tissues, Oral Biology and Oral Pathology.
- Finally, the third component based on the foundations of the first two, deals with the clinical and technical aspects of dentistry as is required for general dental practice.

BREIF DESCRIPTION OF COURSE OUTCOMES

First component:

This module is intended to provide initially, an appreciation of normal human structure, development, function and behavior, leading to understanding of the disease, its prevention and treatment.

- The main objective is to provide the student a broad knowledge of the normal structure and functions of the body, the alterations which take place in disease with particular reference to those conditions in which medical and dental co-operation is essential for proper management.
- At this stage, the student should also be made aware of the social and psychological aspects of patient care with special reference to the relationship between dentist and the patient.
- The behavioral sciences including both sociology and psychology should be introduced at the initial stages of the training programme, much before the students actually deal with the patients.

Second component:

- The second component of undergraduate programme consists of instructions in the subjects dealing with dental and oral aspects to ensure a detailed knowledge of the structure and function of the dental and oral tissues.
- This enables the student to diagnose, prevent and treat the dental and oral diseases and disorders which were not included in the first component.
- The subject of Oral Biology is to be introduced at this level to provide the students a comprehensive knowledge and application of Oral Physiology, Microbiology, Biochemistry and Oral Immunology.
- Students should be exposed to the basic aspects of Forensic Odontology at this stage of the course along with Oral Biology /Oral Pathology.

Third component:

The third component of the course comprises the clinical and technical aspects of dentistry to enable the student to undertake total oral and dental health care of the patients of all ages. The emphasis at this stage is on the prevention of the various dental diseases and how to preserve natural teeth with their supporting structures. The importance of various preventive methods is stressed.

The significance of diagnosis of various dental and oral problems is emphasized along with treatment planning before actual treatment procedures are undertaken.

In addition to acquiring knowledge, the students gain adequate clinical hands-onexperience in:

- Various radiological techniques, particularly intra-oral methods and proper interpretation of radiographs
- Extractions and other minor oral surgical procedures
- Various aspects of conservative dentistry & endodontics
- Partial and complete dentures, crown and bridge
- Various periodontal therapeutic procedures
- Use of removable orthodontic appliances
- Diagnosis & treatment philosophy in children & adolescents
- Techniques in reinforcing dental public health measures.
- Towards the final stage of the clinical training, each student is involved in comprehensive oral health care or holistic approach to enable them to plan and treat patient as a whole, instead of piece-meal treatment provided in each specialty. The Dental Council of India strongly recommends that all the dental colleges provide facilities and acquire infrastructure for this purpose.

SPECIFIC OUTCOMES IN CURRENT DENTAL DISCIPLINES:

Oral & Maxillofacial Surgery and Oral Implantology:

Instruction includes the knowledge of various maxillofacial problems like injuries, infections and deformities of the jaws and associated structures. The clinical experience includes those procedures commonly undertaken in general practice like extraction of teeth, minor oral surgical procedure, etc.

Conservative, Endodontic & Aesthetic dentistry, Prosthodontics, Crown Bridge, Aesthetic Dentistry, Periodontology:

Students are made competent to carry out routine treatment like restorations of various kinds, endodontic procedures, removable and fixed prosthodontics, concepts of osseointegration and finally various kinds of periodontal therapy. In addition, students are also made aware of their limitations on graduation, need to refer patients for consultant opinion and/or treatment and also the need for postgraduate and continual education programmes.

Pain control in Dental practice:

The successful control and management of pain is an integral part of dental practice. Upon graduation the students is competent to administer all forms of local anesthesia. The value of behavioral method of anxiety management is emphasized. The students also have the practical experience in the administration of intra-muscular and intra-venous injections. Knowledge of pain mechanisms and strategies to control post-operative pain is essential for practice of dentistry.

Forensic Odontology:

Students are made familiar & demonstrated principles & techniques in forensic identification & age estimation using radiographs, casts & body marks.

MISCELLANEOUS OUTCOMES:

- The students are encouraged to attend conferences at the state and national level, workshops, seminars and any other such activity which is necessary to upgrade the knowledge and skills.
- The undergraduate curriculum stresses the significance of infection and cross-infection control in dental practice. Aspects like sources of infection, measures to be adopted- both general and specific for control particularly the HIV and hepatitis are properly incorporated into the curriculum so that the undergraduates are aware of its significance and follow it in their practice.
- Information technology has touched every aspect of an individual's personal and professional life. The undergraduates acquire minimum computer proficiency which will enable them to enhance their professional knowledge and skills.