

# **Program Specific Learning Outcomes**

At the completion of the undergraduate training programme the graduates shall be competent in the following. -

### **General Skills**

- > Apply knowledge & skills in day to day practice
- > Apply principles of ethics
- Analyze the outcome of treatment
- > Evaluate the scientific literature and information to decide the treatment
- > Participate and involve in professional bodies
- > Self assessment & willingness to update the knowledge & skills from time to time
- > Involvement in simple research projects
- > Minimum computer proficiency to enhance knowledge and skills
- > Refer patients for consultation and specialized treatment
- > Basic study of forensic odontology and geriatric dental problems

## **Practice Management**

- > Evaluate practice location, population dynamics & reimbursement mechanism
- > Co-ordinate & supervise the activities of allied dental health personnel
- Maintain all records
- > Implement & monitor infection control and environmental safety programs
- > Practice within the scope of one's competence

# Communication & Community Resources

- Assess patients goals, values and concerns to establish rapport and guide patient care
- > Able to communicate freely, orally and in writing with all concerned
- > Participate in improving the oral health of the individuals through community activities.

### Patient Care - Diagnosis

- > Obtaining patient's history in a methodical way
- > Performing thorough clinical examination
- > Selection and interpretation of clinical, radiological and other diagnostic information
- > Obtaining appropriate consultation
- Arriving at provisional, differential and final diagnosis





## Patient Care - Treatment Planning

- ➤ Integrate multiple disciplines into an individual comprehensive sequence treatment plan using diagnostic and prognostic information
- > Able to order appropriate investigations

## Patient Care - Treatment

- > Recognition and initial management of medical emergencies that may occur during Dental treatment
- Perform basic cardiac life support
- > Management of pain including post operative
- Administration of all forms of local anaesthesia
- > Administration of intra muscular and venous injections
- > Prescription of drugs, pre operative, prophylactic and therapeutic requirements
- Uncomplicated extraction of teeth
- > Transalveolar extractions and removal of simple impacted teeth
- > Minor oral surgical procedures
- > Management of Oro-facial infections
- > Simple orthodontic appliance therapy
- > Taking, processing and interpretation of various types of intra oral radiographs
- > Various kinds of restorative procedures using different materials available
- Simple endodontic procedures
- Removable and fixed prosthodontics
- Various kinds of periodontal therapy

### ORAL MEDICINE & RADIOLOGY

- Able to identify precancerous and cancerous lesions of the oral cavity and refer to the concerned speciality for their management
- Should have an adequate knowledge about common laboratory investigations and interpretation of their results.
- Should have adequate knowledge about medical complications that can arise while treating systemically compromised patients and take prior precautions/ consent from the concerned medical specialist.
- Have adequate knowledge about radiation health hazards, radiations safety and protection.
- Competent to take intra-oral radiographs and interpret the radiographic findings





- Gain adequate knowledge of various extra-oral radiographic procedures, TMJ radiography and sialography.
- Be aware of the importance of intra- and extra-oral radiographs in forensic identification and age estimation.
- Should be familiar with jurisprudence, ethics and understand the significance of dental records with respect to law.

#### PAEDIATRIC & PREVENTIVE DENTISTRY

- Able to instill a positive attitude and behaviour in children towards oral health and understand the principles of prevention and preventive dentistry right from birth to adolescence.
- Able to guide and counsel the parents in regards to various treatment modalities including different facets of preventive dentistry.
- Able to treat dental diseases occurring in child patient.
- Able to manage the physically and mentally challenged disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.

# ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS

- Understand about normal growth and development of facial skeleton and dentition.
- Pinpoint oberrations in growth process both dental and skeletal and plan necessary treatment.
- Diagnose the various malocclusion categories.
- Able to motivate and explain to the patient (and parent) about the necessity of treatment.
- Plan and execute preventive orthodontics (space maintainces or space regaines).
- Plan and execute interceptive orthodontics (habit breaking appliances).
- Manage treatment of simple malocclusion such as anterior spacing using removable appliances.
- Handle delivery and activation of removable orthodontic appliances.
- Diagnose and appropriately refer patients with complex malocclusion to the specialist.

### PERIODONTOLOGY

• Diagnose the patients periodontal problem, plan and perform appropriate periodontal treatment.





- Competent to educate and motivate the patient.
- Competent to perform thorough oral prophylaxis, subgingival scaling, root planning and minor periodontal surgical procedures.
- Give proper post treatment instructions and do periodic recall and evaluation.
- Familiar with concepts of osseointegration and basic surgical aspects of implantology.

### PROSTHODONTICS AND CROWN & BRIDGE

- Able to understand and use various dental materials.
- Competent to carry out treatment of conventional complete and partial removable dentures and fabricate fixed partial dentures.
- Able to carry out treatment of routine prosthodontic procedures.
- Familiar with the concept of osseointegration and the value of implant-supported Prosthodontic Procedures.

## CONSERVATIVE DENTISTRY AND ENDODONTICS

- Competent to diagnose all carious lesions
- Competent to perform Class I and Class II cavities and their restoration with amalgam
- Restore class V and Class III cavities with glass ionomer cement
- Able to diagnose and appropriately treat pulpally involved teeth (pulp capping procedures)
- Able to perform RCT for anterior teeth
- Competent to carry out small composite restorations
- Understand the principles of aesthetic dental procedures

# **ORAL & MAXILLOFACIAL SURGERY**

- Able to apply the knowledge gained in the basic medical and clinical subjects in the management of patients with surgical problems.
- Able to diagnose, manage and treat patients with basic oral surgical problems.
- Have a broad knowledge of maxillofacial surgery and oral implantology.
- Should be familiar with legal, ethical and moral issues pertaining to the patient care and communication skills.
- Should have acquired the skill to examine any patient with an oral surgical problem in an orderly manner.
- Understand and practice the basic principles of asepsis and sterilisation





- Should be competent in the extraction of the teeth under both local and general anaesthesia.
- Competent to carry out certain minor oral surgical procedure under LA liketrans-alveolar extraction, frenectomy, dento alveolar procedures, simple impaction, biopsy, etc.
- Competent to assess, prevent and manage common complications that arise during and after minor oral surgery.
- Able to provide primary care and manage medical emergencies in the dental office.
- Familiar with the management of major oral surgical problems and principles involved in the in-patient management.

### PUBLIC HEALTH DENTISTRY

- Apply the principles of health promotion and disease prevention.
- Have knowledge of the organization and provision of health care in community and in the hospital service.
- Have knowledge of the prevalence of common dental conditions in India.
- Have knowledge of community based preventive measures.
- Have knowledge of the social, cultural and env. Factors which contribute to health or illness.
- Administer and hygiene instructions, topical fluoride therapy and fissure sealing.
- Educate patients concerning the aetiology and prevention of oral disease and encourage them to assure responsibility for their oral health.

