# 8.1.8 LIST OF COMPETENCIES

# DENTAL COUNCIL OF INDIA

BDS COURSE REGULATIONS 2007



DENTAL COUNCIL OF INDIA Temple Lane, Kotla Road New Delhi – 110 002 Should be holding the post of a Reader or above in a Dental Institution approved/recognised by the Dental Council of India for B.D.S.

#### Note:

- In case of Public Health Dentistry, as there is acute shortage of teachers one examiner from Public Health Dentistry and the second one could be from Periodontics. To be reviewed after three years.
- In case of Physiology and Biochemistry if Internal examiner is from Physiology, External examiner should be from Biochemistry or wise versa
- Incase of Pathology and Microbiology if Internal is examiner is from Pathology, External
  examiner should be from Microbiology or wise versa
- In case of Dental Materials, if internal is from Prosthodontics, external should be from Conservative Dentistry and wise versa

50% of Examiners appointed shall be external from Dental Institutions approved/recognised by the Dental Council of India for B.D.S. Course, from other University, preferably from outside the State.

Reciprocal arrangement of Examiners should be discouraged, in that, the Internal Examiner in a subject should not accept external examinership for a College from which External Examiner is appointed in his subject for the corresponding period.

No person shall be an external Examiner to the same University for more than 3 consecutive years. However, if there is a break of one year the person can be re-appointed.

"Minimum Physical Requirement and Minimum Staffing Pattern (as per DCI Regulations 2006)."

# **GOALS AND OBJECTIVES**

#### GOALS

The dental graduates during training in the institutions should acquire adequate knowledge, necessary skills and reasonable attitudes which are required for carrying out all activities appropriate to general dental practice involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The graduate also should understand the concept of community oral health education and be able to participate in the rural health care delivery programmes existing in the country.

# OBJECTIVES:

The objectives are dealt under three headings (a) Knowledge and understanding (b) skills and (c) Attitudes.

# (A) KNOWLEDGE AND UNDERSTANDING:

The graduate should acquire the following during the period of training.

- Adequate knowledge of the scientific foundations on which dentistry is based and good understanding of various relevant scientific methods, principles of biological functions and be able to evaluate and analyse scientifically various established facts and data.
- Adequate knowledge of the development, structure and function of the teeth, mouth and jaws
  and associated tissues both in health and disease and their relationship and effect on general
  state of health and also bearing on physical and social well being of the patient.
- Adequate knowledge of clinical disciplines and methods which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws and preventive diagnostic and therapeutic aspects of dentistry.
- Adequate clinical experience required for general dental practice.
- Adequate knowledge of the constitution, biological function and behaviour of persons in health and sickness as well as the influence of the natural and social environment on the state of health in so far as it affect dentistry.

# (B) SKILLS:

A graduate should be able to demonstrate the following skills necessary for practice of dentistry.

- Able to diagnose and manage various common dental problems encountered in general dental
  practice keeping in mind the expectations and the right of the society to receive the best
  possible treatment available wherever possible.
- Acquire the skill to prevent and manage complications if encountered while carrying out various surgical and other procedures.
- Possess skill to carry out certain investigative procedures and ability to interpret laboratory findings.
- Promote oral health and help prevent oral diseases where possible.
- 5. Competent in the control of pain and anxiety among the patients during dental treatment.

#### (C) ATTITUDES

A graduate should develop during the training period the following attitudes.

- Instruction should be given in dental jurisprudence, legal and ethical obligations of dental practitioners and the constitution and functions of Dental Council of India.
- 12. Infection and cross infection control assume significance in dental practice. The students should be made aware of the potential risk of transmission in the dental surgery, various infectious diseases particularly HIV and hepatitis. The students should be aware of their professional responsibility for the protection of the patients, themselves and their staff and the requirements of the health and safety regulations.
- 13. In the recent times, the subjects of esthetic dentistry, oral implantology, behavioural sciences and forensic odontology have assumed great significance. Hence, the Council recommends that these four specialities should be incorporated into the undergraduate curriculum. The instruction and clinical training in aesthetic dentistry shall be carried out by the departments of Conservative, Endodontics & Aesthetic Dentistry and prosthodontics, Crown Bridge, Aesthetic Dentistry and Oral Implantology. Similarly, the instruction and clinical training in oral implantology shall be done by the departments of Oral & Maxillofacial Surgery, Prosthodontics, Crown Bridge, Aesthetic Dentistry and Oral Implantology and Periodontology and Oral Implantology. The instruction in behavioural sciences should ideally commence before the students come in contact with the patients and shall be carried out by the departments of Public Health Dentistry & Preventive Dentistry and Pedodontics & Preventive Dentistry. Forensic Odontology will be a part of Oral Pathology & Oral Microbiology and Oral Medicine and Radiology.

#### COMPETENCIES

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 inpatient 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.