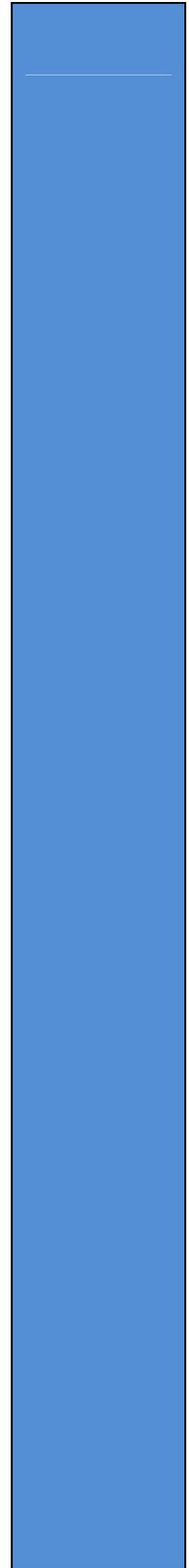


**National Authority for Quality Assurance and Accreditation of  
Education**

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**National Academic Reference Standards (NARS)  
For  
Dentistry**

May 2008



## **Introduction**

The nature of the specialty of dental medicine:

Dentistry as part of the healthcare profession is the science and art of prevention, detection, management and treatment of oro-facial and dental disease. It is mainly a clinical discipline with the ultimate goal of maintaining oral, dental and general health in individuals and in societies at large. Dentistry is based on the foundation of knowledge and understanding of basic and medical sciences including Physics, Chemistry, Bioscience, Human anatomy, growth and genetics, Physiology, Biochemistry, Microbiology and immunology, General histology, Pharmacology, General pathology, Internal medicine and General surgery.

Faculties of dentistry are required to emphasize on the ethical practice and professionalism, high level of communication skills and competence in clinical and technical aspects of dentistry.

Educational environment should inspire students to maintain high professional and personal standards. Lifelong learning in a caring profession should be an integral part of the educational process. Educational environment should also encourage students to develop analytical approach to theory and practice of dentistry and to stimulate critical thinking. It should also allow students to acquire research methods and skills in collection, evaluation and presentation of evidence. This form of education provision should allow students to develop an adaptable approach to the practice of dentistry to be able to respond effectively to the individual needs of patients and of the communities they will serve.

An important aspect of dental education should provide the students with a wide range of clinical skills, however, they are not expected to be highly skilled in all clinical procedures. The students

should be encouraged to deliver dental care in a team approach concept.

Programs should exhibit a degree of flexibility to accommodate changing pattern of dental and oral health needs in conformity with the national health policy.

Career in dentistry should not be limited by the fact that the new graduate is trained only as a practitioner. A wide range of careers exists within dentistry itself, presumably dental education nurtures diverse research activities that support dental professionals throughout their careers.

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## **1- The attributes of dental medicine graduates:**

The graduate must be able to:

- 2.1 Deliver, independently oral health care services within the scope of general dentistry.
- 2.2 Provide comprehensive practice management encompassing patient assessments, and maintain patient's records in complete and accurate forms.
- 2.3 Provide ethical professional practice including compassion, empathy, integrity, responsibility and tolerance.
- 2.4 Communicate effectively to develop a mature, sensitive and caring relationship with their patients.
- 2.5 Respond to socio-economic aspects of different communities and engage effectively in community services.
- 2.6 Maintain a safe and infection-controlled environment.
- 2.7 Realize the importance of lifelong learning and strive for continuous professional education.
- 2.8 Recognize the various features of medico-legal aspects of the dental profession.
- 2.9 Recognize the limitation of their current knowledge and clinical abilities and realize the need for proper referral.
- 2.10 Evaluate and respond to ongoing dental technology.

## **3-Academic Standards**

### **3.1 Knowledge and understanding**

Upon completion of an undergraduate dental program, the graduate must know and understand the biomedical, dental, and behavioral sciences that form the basis of human health and disease including:

- 3.1.1 The interrelationship between different systems of the human body.
- 3.1.2 The principles of pathogenic mechanisms and manifestations of human diseases which are of dental significance.
- 3.1.3 Basis and significance of oral health promotion, nutritional education and prevention of oral diseases in population based approaches.
- 3.1.4 Prevention and management of the medical emergencies.
- 3.1.5 Maintenance of infection control and a safe working environment.
- 3.1.6 Basis of practice management.
- 3.1.7 Principles of evidence-based dentistry and its relation to scientific research.
- 3.1.8 Ethical and medico-legal aspects relevant to the practice of dentistry and research.
- 3.1.9 Social and psychological issues relevant to dental care with emphasis on behavioral management.

## **3.2 Intellectual Skills**

The Dental graduate must be able to:

- 3.2.1 Integrate basic biomedical, behavioral and dental sciences with signs, symptoms and physical findings of the disease.
- 3.2.2 Differentiate between normal and abnormal features that are particularly relevant to dental practice.
- 3.2.3 Identify, prioritize and generate a list of potential patient's clinical problems.
- 3.2.4 Analyze, interpret, and integrate collected diagnostic data to solve clinical problems based on current evidence.
- 3.2.5 Design appropriate treatment plan for different dental problems.
- 3.2.6 Assess and evaluate the effects of medications taken by the patient on dental management.
- 3.2.7 Reason deductively in clinical problem solving.

### **3.3 Practical and clinical Skills**

The graduate must be able to:

- 3.3.1 Establish a comprehensive patient's history, perform clinical examination, request and evaluate appropriate investigations.
- 3.3.2 Review the body systems and consult with other health care professionals, when required.
- 3.3.3 Detect abnormal and pathological conditions, as well as etiological and/or risk factors that may contribute to disease process.
- 3.3.4 Perform a range of clinical procedures which are within the scope of general dentistry, including:
  - a. Applications of preventive procedures.
  - b. Application of different local anesthetic techniques.
  - c. Extraction of teeth and removal of roots when necessary.
  - d. Diagnosis of commonly encountered oral lesions.
  - e. Performance of the necessary radiographs.
  - f. Performance of non-surgical periodontal treatment and monitor treatment outcomes.
  - g. Restoration of carious and non-carious tooth defects with emphasis on basic concepts of esthetics.
  - h. Basic endodontic procedures
  - i. Rehabilitation of partially and completely edentulous patients.
  - j. Diagnosis and prevention of developing malocclusions.
  - k. Basic pedodontic treatment.

3.3.5 Apply current infection control guidelines.

3.3.6 Control different levels of patient's anxiety and apprehension in different age groups.

3.3.7 Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures.

3.3.8 Prescribe and monitor the effects of appropriate pharmaceutical agents taking into consideration drug and patient factors.

### **3.4 General and Transferable Skills.**

The graduate must be able to:

3.4.1 Work in collaboration as a member of an interdisciplinary team.

3.4.2 Communicate effectively in multicultural work environment using verbal and non-verbal means.

3.4.3 Recognize and effectively utilize all sources for continuing professional development and life – long learning.

3.4.4 Adopt a creative attitude in an ethical and scientific approach.

3.4.5 Self evaluate professional abilities, performance, and progress.

3.4.6 Recognize professional responsibility towards the surrounding community.

3.4.7 Use information technologies to enrich and diversify professional experience.

3.4.8 Recognize the basic concepts of quality assurance and practice management.

3.4.9 Prioritize workload and manage personal stress in the frame work of proper performance and management.

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#### 4- NARs characterization for The Dental Discipline.

##### 4.1 Indicative curricula content by subject area.

Table: indicative curriculum content

Subjects	Range	Characterization
Basic sciences	28%-32%	Physics, Chemistry, Bioscience, Human anatomy, growth and genetics, Physiology, Biochemistry, Microbiology and immunology, General histology, Pharmacology , General pathology Oral biology , Dental anatomy and oral physiology, Dental biomaterials and Oral Pathology
Medical and Dental sciences A- Didactic	21%-25%	Internal medicine, General surgery, Restorative dentistry, Prothodontics, Oral and maxillofacial surgery and general anesthesia, Diagnostic sciences, Oral medicine, Oral maxillofacial radiology, Periodontics, Endodontics, Orthodontics and dentofacial orthopedics, Pediatric dentistry, Public health and community dentistry.
B- Laboratory and clinical	33%-37%	
complementary sciences	5%-8%	-behavioral science - law, ethics and professionalism -Information technology
Subtotal		
Discretionary subjects	6-8%	
Total	100%	

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