In the Name of God

Islamic Republic of Iran
Ministry of Health and Medical Education
Deputy for Education

Periodontics

Degree: Specialty equivalent to Master of Science

Total Course Credits

- The common basic sciences 11.5
- The specific sciences 11.5
- The related sciences 13
- faculty-presented related sciences 80

Program Description

Since periodontal diseases are some of the most common infectious diseases afflicting man and given the burden of these diseases on the health system and the importance of preserving teeth and the health of the surrounding tissues, it is absolutely important to train periodontists. Considering rapid advances in science in all the branches, especially the biomedical sciences, and changes in treatment methods and attitudes, the Supreme Committee of periodontics was founded in order to revise the syllabus of periodontics specialty course. The Committee evaluated the curricula all over the world comprehensively and analyzed the existing situation in order to revise the curriculum and prepare new educational guidelines for this specialty course.

Major Changes in the Curriculum

The major changes include special attention to new biomedical sciences in the specialty course, vertical and horizontal integrations in the whole curriculum, special attention to professional principles and professional ethics and incorporation of some selective programs into the curriculum.

Definition

Periodontics is a branch of dental science that deals with the protection, preservation and promotion of the health of periodontal tissues and implants (including prevention, diagnosis and treatment), reconstruction of hard and soft tissues of jaws and replacement of lost teeth with dental implants. This dental branch lays great emphasis on preservation of the health of teeth and dental implants by using all the preventive and new treatment modalities.

History and Evaluation of Periodontics

A. World: The first evidence about man's awareness of periodontics dates back to ancient Egypt, where manuscripts and skeletal evidence indicate the presence of periodontal diseases. The majority of techniques and procedures in dentistry date back to Middle Ages and Renaissance period. In the United States, designing of periodontal surgery courses began in the first decade of the 20th century. In 1913, the first college to train oral hygienists was founded by Alfred Fones.

B. Iran: Avicenna, the famous Iranian physician and philosopher (980¬?1037 AD) has alluded to a large number of medications for the treatment of periodontal diseases and has explained many surgical procedures in his work, The Canon, which is a comprehensive book on medicine and possibly the most renowned medical text of all ages.

The first contingent of periodontics postgraduate students began their studies in Tehran University of Medical Sciences in 1976. Considering the ever-increasing rate of progress in various sciences and information explosion in the world, it was deemed absolutely necessary to revise the educational curriculum of periodontics. Such a responsibility was shouldered by the Commission For Curriculum Programming in Dentistry and the first revision after the Cultural revolution was made in 2000. After 10 years, the Supreme Committee of the periodontics specialty course was made responsible by the Secretariat of Dental Specialty Courses to revise the curriculum again based on the needs and the guidelines of the Secretariat and by using the resources available and comprehensive evaluation of the curricula all over the world.

Mission

Our mission is to train capable and ethical specialists who are able to render comprehensive services in relation to prevention, protection and preservation of orodental health, including periodontal medicine, periodontal plastic surgery, reconstructive surgeries of orodental soft and hand tissues and implants.

Admission Requirements

- Holding an DDS or DMD degree
- Having passed the National Entrance Exam

Expected Competencies at the End of the Program

General Competencies*

Specific Competencies and Skills

At the end of the program learners will be competent in performing following procedures:

- Accurately evaluating and examining the patients, the intraoral and extraoral soft and hard tissues and arriving at a correct diagnosis based on this information and information collected from patients' complaints and histories;
- Determining prognosis by considering all the collected data;
- Preparing a treatment plan for comprehensive treatment (disciplinary and interdisciplinary);
- Preparing a report and register the patients' medical records;
- Carrying out phase I periodontal treatment;
- Carrying out various periodontal and implant surgeries, including periodontal flap surgeries, gingivectomy, curettage, biopsies, various reconstructive and resective periodontal surgeries, root resection and hemisection, periodontal plastic surgeries, preprosthetic surgeries and implant surgeries to place them in all the oral cavity regions and edentulous areas, various bone reconstruction surgeries, including bone grafts, guided tissue regeneration, sinus lifting procedures and implant-related soft tissue surgeries;
- Minimizing pain and discomfort after surgeries if necessary;
- Managing wounds;
- Evaluating the outcomes of treatment to render adjunctive treatment to maintain or improve the treatment outcomes if necessary;
- Diagnosing and treating any biologic complications around implants;
- Designing and carrying out a relevant research project, including literature review, statement of problem and the aims and hypotheses of the proposed research;
- Preparing scientific articles;
- Correctly observing the infection control principles;

- Evaluating the conditions and complications of other dental therapies in terms of damages to periodontal and peri-implant tissues;
- Rendering periodontal and implant treatments to special patients;
- Resuscitating patients (basic and advanced);
- Rendering treatment under general anesthesia and sedation;
- Managing medical emergencies.

Educational Strategies, Methods and Techniques*

Student Assessment (Methods and Types)

- Formative
- Summative
- Comprehensive exam

Ethical Considerations*

*Note: The related document(s) can be found at http://hcmep.behdasht.gov.ir/.

The overall structure of the course:

Duration of the Course
The specialty course of periodontics lasts 3 years and is a full-time course based on the guidelines of the Council for General and Specialty Dental Courses.

The Educational System
The educational system of periodontics specialty course is a semester-based system. The lessons are presented in theoretical, practical, theoretical-practical and workshop formats in three sections of basic sciences, related sciences and core lessons.

Combination of Lessons
The curriculum of periodontics specialty course consists of three sections of basic sciences, related sciences and core lessons.

Basic Sciences Lessons
These lessons are considered the bedrock of other related and core lessons. These lessons are offered to teach, reminded and deepen the subjects, some of which have been alluded to during the general dental course. The basic sciences lessons consist of a total of 23 units of the whole specialty course lessons, including common basic sciences and specific basic sciences courses.

Related Sciences Lessons
These lessons discuss the interdisciplinary relationships with other dental and medical specialty courses and teach correct knowledge, creativity and decision-making to the post-graduate students so that they become familiar with the capacities, priorities, limitations and latest advances in related sciences and become able to participate in teamwork to provide comprehensive treatment for the patients. These lessons consist of 17 units and are presented jointly by the relevant educational groups.

Core Lessons
These lessons comprise the main content of the specialty course and are presented to promote the knowledge level, awareness and proper and qualitative skills in the specialty field of periodontics. These lessons comprise a total of 80 units of the whole specialty course lessons and are presented by the periodontics educational group.

There are a total of 120 units in the periodontics specialty course. The post-graduate students enter their relevant educational groups from the very first semester and the specialty lessons are presented to them.

Table 1. The common basic sciences courses in Periodontics MSc

Code of the course	Course title	Units and the course types			Total hours of the courses			Total units
		Theoretical	Practical	Workshop	Theoretical	Practical	Workshop	
1	Medical education (1)	-	-	1	-	-	51	1
2	Medical education (2)	-	-	2	-	-	102	2
3	Histology and embryology	0.5	0.5	-	9	17	-	1
4	Research methods and EBD	-	-	2	-	-	102	2
5	Applied English language	1	-	-	17	-	-	1
6	Clinical photography	-	-	1	-	-	51	1
7	Medical emergencies	-	-	0.5	-	-	24	0.5
8	Medical laws and professional ethics	-	-	1	-	-	51	1
9	Infection control and patient safety	-	-	1	-	-	51	1
10	Clinical management and authority	-	-	1	-	-	51	1
Total		1.5	0.5	9.5	26	17	483	11.5

Table 2. The specific basic sciences courses in Periodontics MSc

Code of the course	Course title	Units and the course types			Total hours of the courses			Total units
		Theoretical	Practical	Workshop	Theoretical	Practical	Workshop	
11	Applied immunology	1	0.5	-	17	17	-	1.5
12	Applied anatomy	1	0.5	-	17	17	-	1.5
13	Oral and maxillofacial pathology	1	0.5	-	17	17	-	1.5
14	Genetics in periodontics	0.5	-	-	9	-	-	0.5
15	Applied pharmacology	2	-	-	34	-	-	2
16	Oral physiology and biology	1	-	-	17	-	-	1
17	Tissue engineering, biomaterials and new technologies in periodontology and implants	1	1	-	17	34	-	2
18	Applied oral microbiology	1	0.5	-	17	17	-	1.5
Total		**8.5**	**3**	-	**145**	**102**	-	**11.5**

Table 3. The related sciences courses in Periodontics MSc

Code of the course	Course title	Units and the course types			Total hours of the courses			Total units
		Theoretical	Practical	Workshop	Theoretical	Practical	Workshop	
19	Orthodontics	1	1	-	17	34	-	2
20	Occlusion	0.5	0.5	-	9	17	-	1
21	Endodontics	0.5	0.5	-	9	17	-	1
22	Oral and maxillofacial diseases	1	1	-	17	34	-	2
23	Internal medicine	2.5		-			-	2.5
24	Anesthesia	1.5		-			-	1.5
25	Dental prostheses and implants	3		-			-	3
26	Restorative dentistry	0.5	0.5	-	9	17	-	1
27	Oral and maxillofacial surgery	1	1	-	17	34	-	2
28	Oral and maxillofacial radiology	0.5	0.5	-	9	17	-	1
Total		**17**		-	-	-	-	**17**

Table 4. The core courses in Periodontics MSc

Code of the course	Course title	Units and the course types			Total hours of the courses			Total units	Prerequisites
		Theoretical	Practical	Workshop	Theoretical	Practical	Workshop		
29	Case presentation (1)	2	-	-	34	-	-	2	
30	Case presentation (2)	2	-	-	34	-	-	2	29
31	Case presentation (3)	2	-	-	34	-	-	2	30
32	Literature review (1)	2	-	-	34	-	-	2	
33	Literature review (2)	3	-	-	51	-	-	3	32
34	Literature review (3)	3	-	-	51	-	-	2	33
35	Thesis (1)	-	-	2	-	-	102	2	
36	Thesis (2)	-	-	2	-	-	102	2	35
37	Thesis (3)	-	2	-	-	68	-	2	36
38	Thesis (4)	-	-	2	-	-	102	2	37
39	Thesis (5)	-	-	2	-	-	102	2	38
40	Periodontology (1)	4	-	-	68	-	-	4	
41	Periodontology (2)	4	-	-	68	-	-	4	40
42	Periodontology (3)	4	-	-	68	-	-	4	41
43	Implant preclinic	-	1	-	-	34	-	1	
44	Periodontics preclinic	-	1	-	-	34	-	1	
45	Implant clinic (1)	-	3	-	-	102	-	3	48
46	Implant clinic (2)	-	3	-	-	102	-	3	45
47	Periodontology clinic (1)	-	8	-	-	272	-	8	
48	Periodontology clinic (2)	-	10	-	-	340	-	10	47
49	Periodontology clinic (3)	-	12	-	-	408	-	12	48
50	Participation in teaching students (1)	-	2	-	-	68	-	2	
51	Participation in teaching students (2)	-	2	-	-	68	-	2	50
52	Participation in teaching students (3)	-	2	-	-	68	-	2	51
Total		**26**	**46**	**8**	**442**	**1564**	**408**	**80**	-

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