

In the Name of God

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

Rheumatology Degree: Subspecialty

Introduction:

As an important clinical specialty, rheumatology is rapidly developing worldwide. Due to its close relationship with other developing fields, such as immunology, genetics, and molecular biology, the pathogenesis of rheumatic diseases and new therapies are based on the discoveries in these fields. Immunopathogenesis and immunogenetics explain rheumatology diseases. In future, gene therapy will replace targeted biological medications which are currently used in some cases.

Increased number of the older adults who need this subspecialty highlights the need for such specialists in the society. Rheumatologists are physicians trained for rheumatic diseases based on organized subspecialty curricula.

This curriculum was developed based on the principles in the strategic fellowship program and the expert opinions of faculty members of universities training fellows in rheumatology and by reviewing the fellowship curricula of accredited American and European universities.

Definition and Duration of the Training Program:

Rheumatology is a branch of internal medicine including a wide range of inflammatory, non-inflammatory, degenerative diseases in musculoskeletal and other systems. During this course, the students are educated in the areas of prevention, diagnosis, and treatment of diseases and patient care. Duration of this training course is 24 months.

Aims:

1. To Train subspecialists to provide the best preventive, diagnostic, educational services.
2. In next 10 years, we are expected to achieve a good level of education, research, and public health in the field of rheumatology and will achieve the first place in the Middle East.

Expected Competencies at the End of the Program

General Competencies*

Main procedural skills (diagnostic-therapeutic procedures):

- Arthrocentesis
- Using polarized light microscopes
- Intra-articular and periarticular injections in different joints
- Needle biopsy of the synovial membrane
- Bone densitometry
- Joint ultrasound

Educational Strategies, Methods and Techniques*

Student Assessment:

Assessment Methods:

These methods should assess different aspects of students' abilities, including their medical knowledge, overall competencies, and performance. These methods include:

- A. Knowledge assessment methods: written exams (multiple choice, explanatory, and short answer) and oral exams
- B. Competence assessment methods: OSCE (Objective structured clinical examination)
- C. Performance assessment methods: Clinical assessment in the workplace, such as:
 - Mini-Clinical Evaluation Exercise or mini-CEX
 - Case Based Discussion or CBD
 - Multi-source (360°) feedback or MSF
- D. The overall assessment by professors individually or by the jury (medical knowledge, giving lectures and articles in journal clubs, visiting patients, clinical judgment, taking into account humanitarian principles in dealing with patients and colleagues, professional behaviors and attitudes)
- E. Assessing students' portfolios, including logbooks

It is recommended to apply all A, B, and C methods along with the overall assessment. Among A, B, and C methods, at least one method should be used. In addition to diversity in types of exams, diversity in the number of exams and examiners is also emphasized.

Periods of Assessment:

- A. Continuous assessment using students' logbooks
- B. Written and oral exams annually

The overall assessment by professors individually at the end of each period or every six months; and at the end of 2nd year

Ethical Considerations*

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

Overall Structure of the Course

| Educational ward, unit, or education setting | Syllabus- Measures | Duration (month) |
|--|--|------------------|
| Rheumatology ward and clinic | Visiting and managing inpatients and outpatients, hospitalizing and following up patients, participation in educational courses, medical consultations and shifts according to the curriculum organized by the ward, performing procedures, conducting research (thesis and research projects) | 23 months |
| Physical medicine and rehabilitation unit | Principles of rehabilitation, sports medicine and exercise therapy, familiarity with methods and tools used in physical medicine and mobility aids, electrodiagnostic principles | 1 week |
| Pathology ward | Familiarity with the pathology of joints, synovial tissue, bone, muscle, skin, kidney, and vessels associated with the field of rheumatology | 1 week |
| Immunology ward | Familiarity with antibodies and measuring them, complements, immunofluorescence, flow cytometry, PCR, HLA typing, production of immune cells and polyclonal and monoclonal antibodies | 1 week |
| Orthopedic ward | Familiarity with indications, surgical procedures, preparations before surgery and follow-up after surgery (the proposed program is attached) | 1 week |

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