Establishment of New Evaluation and Accreditation system for Graduate Medical Education in Iran

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ABSTRACT

Graduate Medical Education is one of the stage of the continuum of medical education in Iran. At present, nearly 5500 residents are being trained in 24 specialties and 21 subspecialties in 26 Universities of Medical Sciences. Based on a special Act of National Parliament in 1973, the Iranian Council for Graduate Medical Education is responsible for supervision on the quality of Graduate Medical Education. Despite significant activities in this field during last three decades, there has been no integrated effort for evaluation and accreditation of specialty education units, yet. In this regard, the Secretary of the Council appointed a committee for preliminary studies and presentation of new approaches. In this article, the authors first describe the details of the activities of this committee. Thereafter, challenges of Graduate Medical Education and relevant supervisory bodies have been discussed. In the end, activities for the establishment of new accreditation system of Graduate Medical Education in Iran have been described.

Key words: GRADUATE MEDICAL EDUCATION, ACCREDITATION, IRAN, PROGRAM EVALUATION

Introduction

Like many other countries, medical education in Iran is consisted of 3 parts: Undergraduate Medical Education (UME), Graduate Medical Education (GME) and Continuing Medical Education (CME). Mean duration of UME is seven years. Graduates may practice medicine as general practitioners or continue their education in 24 specialties, the duration of which is 3 to 5 years. Those who can pass the final examination are known as specialists. At present, approximately 5500 specialty and subspecialty residents are being trained in nearly 550 specialty education units in 26 Universities of Medical Sciences. The Iranian Council for Graduate Medical Education is responsible for supervision of specialty education units, and, as well, conducting certificate awarding examinations in related specialties and subspecialties. The Council was established in 1973 based on a special Act of National Parliament. Its members are presidents of Universities of Medical Sciences that train residents, representatives of faculties in major universities and nominees of the Minister of Health & Medical Education.

Accreditation

Accreditation is one of the oldest approaches to program evaluation, which requires a professional judgment of an expert panel. Accreditation is the best known type of formal expertise-oriented program evaluations. The main components of this kind of program evaluation defined by Worthen et al. are:
1- structure or organization established to conduct periodic reviews;
2- published standards (and possibly instruments) for use in such reviews;
3- a prespecified schedule (for example, every five years) on which reviews will be conducted;
4- opinions of several experts combining to reach an overall value judgments and,
5- an impact on the status of program which is reviewed, depending on the outcome.1

Though accreditation has been mainly accomplished for education, it is also used in research and service. Accreditation is divided into two general categories of institutional and program or specialized accreditation. In medicine, accreditation of educational programs indicates that national standards for structure, function and performance are met by a medical education institution’s program leading to an MD degree (undergraduate medical education) or qualifications as a specialist in one of the recognized medical specialties (postgraduate training).2

**Challenges of Medical Education in Iran**

During the last 20 years, based on the policies of the Iranian government for improving public health and increasing the availability of medical services, it was necessary to increase the number of general practitioners and medical specialists. This led to the development of new medical schools in late 1980s and early 1990s, to train general practitioners and residents. Therefore, the number of medical schools grew significantly and reached a total of 40. Similarly, the number of specialty education units nearly doubled. (Figure 1)

The increase in the number of medical education institutions and medical doctors occurred despite scarcity in experienced faculty and physical and clinical facilities. This led to serious concerns about the quality of education provided to the residents.

**FIGURE 1.** Number of Specialty Education Units in Iran

There was another factor that posed a challenge to educational quality. In the mid-1980s, it was decided to combine the health care system and medical education; hence, the role of teaching hospitals in providing service became more significant. Since medical education, especially resident training is mainly accomplished on an apprenticeship model, the increase in the clinical service burden of medical centers made it very difficult to train students and residents properly.

The evolution of medical education has been, more or less, the same. According to the report of World Federation of Medical Education (WFME), during last two decades, medical education has developed in an unstructured manner worldwide. Another factor in Iran that enhances the difficulties is the addition of alternative training facilities to the established academic medical centers. These units of education are particularly attractive for the applicants who were unsuccessful in competing for entrance to established medical schools, but belong to prosperous classes of society. These units not only affect medical education quality, but also distort manpower planning. Meanwhile, people’s expectations from medical doctors is increasing because of the advancement in their level of consciousness.2

**Challenges of Evaluation System of Specialty Education Units in Iran**

Medicine has an ancient history of thousand years in Iran. The distinguished scientists like Razi and Avicena have played an invaluable role for the improvement of this science. Nevertheless, the new modern medical education era started more recently with the establishment of Tehran University of Medical Sciences and its medical school in 1934. Afterwards, other educational institutions were gradually established to train general practitioners. After the development of these institutions, and increase in the number of experienced physicians in all fields of medical sciences, specialties were gradually established. In the 1960s, some medical faculties were already training residents in several specialties, but there was no central supervision on the quality of education and competencies of trainees. As a result, the National Parliament approved a special act for the establishment of the Iranian Council for Graduate Medical Education in the early 1970s.

Besides several other tasks, this Council has been in charge of evaluation and approval of specialty education units. Moreover, the Council makes decision about the policies and procedures of assessment and certification of trainees of these units.
According to one of the approved regulations by Iranian Council for Graduate Medical Education, a specialty board was established in each specialty. The members were elected from among the prominent faculties, who simultaneously assessed and certified the residents and evaluated and approved the specialty education units. For the process of evaluation and approval of specialty units, specialty boards nominated surveyor teams. The surveyor teams do the site visit and interview with administrators, faculties and residents. Finally, they report their observations and propose an approval category for specialty education units. This expertise-oriented program evaluation approach, have many defects in its process. Further details are mentioned below:

1-One of the most important characteristics of an accreditation system is predetermined and published standards. Therefore, the major defects in the procedures of specialty boards and surveyor teams are the lack of predetermined standards for the evaluation of specialty units.

2-Lack of comprehensive policies and procedures in which the exact processes of evaluation, lines of responsibility in various parts of the system, types of approval status categories and the process of decision-making about specialty education units have clearly been defined.

3-A characteristic of the accreditation systems is a prespecified schedule on which reviews will be conducted. In this way, based on the accreditation status of each teaching sites, the date of later evaluation will be determined and the quality of education at that time is again evaluated. In such a way, quality of specialty education units is continuously being monitored. In the evaluations made during the last two decades, some of specialty education units were evaluated just one time and there was no exact schedule for later evaluations.

4-Lack of an integrated organization, based on which all the bodies could function in a determined framework led to interruptions, or sometimes complete obstruction in the process of evaluation.

All these problems necessitate the establishment of an integrated system of accreditation, which provides the possibility for continuous quality assurance and improvement of residency education.

To study the subject and suggest the structure and function of an optimal system, the Secretary of the Iranian Council for Graduate Medical Education appointed an ad hoc committee in 1998. Following an extensive preliminary survey, this committee proposed the establishment of accreditation system, on a scientific basis, for Graduate Medical Education in Iran, under the aegis of the Iranian Council for Graduate Medical Education.

**Action Plan:**

**1- Preliminary studies:**

In the first step, the ad hoc committee studied the accreditation systems all over the world. Clearly, it could be expected that attention is mostly directed toward well-established accreditation systems for medical education, especially Graduate Medical Education. Hence, the experience of accreditation systems that have a long history would be of great importance to our efforts in Iran. Undoubtedly, ignoring the details of the accreditation system in the planning phase could cause various problems in implementation phase. To provide maximal basic and applied knowledge, great efforts were made to collect and review the books, articles, and publications about evaluation and accreditation systems. Studies revealed that the United States of America is the most experienced country in the establishment of accreditation systems, which started accreditation of medical education in the early twentieth century. At present, authentic and experienced accreditation systems in the field of medical education such as Liaison Committee on Medical Education (LCME), Accreditation Council on Graduate medical education (ACGME), and Accreditation Council on Continuing Medical Education (ACCME) are fully active in the U.S. In Canada, Royal College of Physicians and Surgeons of Canada (RCPSC) supervises accreditation system of Graduate Medical Education. Additionally, in recent years, several activities have been made for the establishment of accreditation systems, particularly in the field of general medical education in Australia, Mexico, Malaysia, and Scandinavian countries.

The last efforts for the establishment of an international accreditation system for basic medical education programs are those of WFME, which were published as an initial draft of WFME standards for above-mentioned programs.

**2- Planning phase**

After extensive studies about accreditation systems, the main attention of the ad hoc committee was directed toward planning the new system of evaluation and accreditation for GME. In this stage, based on the collected information and also with full attention to the local context of our
country, it was necessary to exactly determine participant bodies in the accreditation process, their tasks and relationships, type and outline of the standards, accreditation status categories, and evaluation and decision-making process about specialty education units. In this stage, the ad hoc committee, through consultation with pioneers in medical education and successive meeting with authorities in the ministry of Health and Medical Education, Universities of Medical Sciences, chairs of specialty boards, and directors of Educational Development Centers tried to determine all the details in a participatory manner, which meanwhile be compatible with an ideal accreditation system.

3- Approval of the evaluation and accreditation bylaws in the Council
Principles of the new accreditation system for GME were approved at the 51st meeting of Iranian Council for Graduate Medical Education in March 1999. The Secretariat prepared the bylaws for the new system and presented them to the Council for approval. In July 2000, the Council approved these bylaws. Accordingly, new evaluation and accreditation system for GME is composed of a commission (Accreditation Commission) and specialty review committees for each specialty (24 committees for 24 specialties). The main task of specialty review committees are to propose the residency program standards and core educational objectives to the Council for approval, periodic evaluation of residency programs, and, proposing an accreditation status for each program to the Accreditation Commission.

The main tasks of Accreditation Commission are to consult the Council about the proposed residency programs standards (RPS) by Specialty Review Committees, approve core educational objectives, and make decisions about the accreditation status of residency programs. In addition, this commission is in charge of proposing “General Residency Programs Standards” and “University Standards” to the Council for approval. Specialty Review Committees must follow the general standards of residency programs, while compiling their specialty residency program standards. Universities that hold residency programs must follow the university standards for granting accreditation of their residency programs.

For the participation of more professional bodies, based on the enactments of the Council, the members of specialty review committee are elected by the specialty board, professional society and chairs of academic departments in each specialty. The secretariat should also nominate one or two active experts, who are interested in training, for membership in the committee. Furthermore, the exact process of compiling standards and evaluation has been declared in the approved bylaws. It will be discussed in next sections of this article in detail.

4- Developing Residency Program Standards and Core Educational Objectives for each specialty
The next step was to compile standards for each specialty. Each Specialty Review Committees develops an initial draft for standards (based on the outline depicted in Table 1) and objectives. These drafts will be rendered to specialty board, professional society, academic departments that train residents, residents of that specialty, and scientific bodies in other fields of medical sciences for an opinion poll. Afterwards, the specialty review committee will review the suggestions, and revise the initial drafts. Subsequently, the committee sends the proposed drafts to the council. The Council will approve Residency Program Standards after receiving the recommendations of Accreditation Commission about the draft. Afterwards, the Commission will review and approve the core educational objectives. Specialty review committees must review their residency program standards and core educational objectives at least every five years.

Fifteen Specialty Review Committees have been established up to now. Other committees will be established in the following years gradually. Until now, the Council has approved residency program standards in 9 specialties, in addition to approving General Residency Programs Standards.

5- Dissemination of Approved Residency Program Standards
After being approved, residency program standards and core educational objectives are sent to universities of medical sciences all over the country for implementation.

6- Internal Evaluation in Residency Programs
At this stage, based on approved standards, the program directors with assistance of other faculties do internal evaluation of residency programs and try to find appropriate solutions for identified noncompliance with standards. The Secretariat of
ICGME assists the programs by preparing workshops for program administrators. Until now, seven workshops have been held for the chair of departments and program directors of ophthalmology, neurology, pathology, radiology, dermatology, otolaryngology-head & neck surgery and anesthesiology programs. Meanwhile, the Secretariat discussed its plan for the implementation phase of standards with various authorities in the Ministry and Universities for gaining their acceptance and full cooperation.

**TABLE 1. Outline of Residency Program Standards**

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Introduction</td>
<td>Title of specialty, Definition of specialty, Length of the Program</td>
</tr>
<tr>
<td>2-Institutional organization</td>
<td>Medical School, Participating institutions</td>
</tr>
<tr>
<td>3-Program Personnel</td>
<td>Program Director, Faculty, Other Program Personnel</td>
</tr>
<tr>
<td>4- Residents</td>
<td>Resident selection, Number of residents, Supervision, Working environment and Duty hours, Graded responsibility of residents, Other residents, Teaching to medical students and other residents, Promotion and certification</td>
</tr>
<tr>
<td>5-Facilities and Resources</td>
<td>Spaces and educational equipments, Inpatient, ambulatory and other clinical resources, Patient Population, Other required services, Other resources, Library, Medical recording</td>
</tr>
<tr>
<td>6-Educational Program</td>
<td>Program goals and design, Clinical components, Didactic components, Research and Scholarly Activities, Other residency programs</td>
</tr>
<tr>
<td>7- Internal Evaluation</td>
<td>Evaluation of Residents, Evaluation of Faculty in residency program, Evaluation of the Program</td>
</tr>
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8- **Summative evaluations of residency programs**

Finally, Specialty Review Committees will make summative evaluations of all residency programs, to evaluate the compliance of those programs with approved standards. Thereafter, the appropriate suggestion about the accreditation status will be offered to the commission. Commission will make decision about accreditation status category of the program after reviewing the process.

**References**