



# Evaluation of the Task Compliance of Medical Education Development Centers from the Viewpoint of the Managers of the Centers

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## Abstract

**Background:** Medical education development (MED) centers are established in order to improve the quality of medical education. It seems that after more than two decades since the establishment, the centers still have difficulties to perform some tasks.

**Objectives:** According to the important role of MED centers, the current study aimed at adapting the performances of such centers with their assigned tasks.

**Methods:** The current qualitative applied study was conducted in 2013. The statistical population of the study included managers of MED centers in Iran. Data were collected through a questionnaire containing open questions. During a national meeting the questionnaire distributed among 40 managers of MED centers and then analyzed using content analysis.

**Results:** More than half of the major functions that the managers stated, were referred to the first, second, and fourth tasks of the centers, and only 18% of the major functions were related to other tasks (11 cases). About 28% of the functions performed in such centers had no direct correlation with any of the 14 tasks.

**Conclusions:** Despite the history of MED centers for several decades, they are not justified in respect to their duties. It is recommended that guidelines be developed to address all duties and adequately monitor their implementation.

**Keywords:** Medical Education Development Centers, Performance, Indicator, Quality, Medical Education, Iran

## 1. Background

The capable staff and effective systems are the essential tools to provide acceptable levels of community health services (1). In recent years, in order to provide human resources to the health sector, an increase in the number of medical universities throughout Iran was put on the agenda. The main goal and mission of medical universities is to train qualified and competent staff that have the knowledge, attitude, and skills necessary to maintain and improve the health of the community (2).

Over the years, in order to increase the number of medical universities and to the extent that the number of these universities and graduates reached an acceptable level, due to the fact that many faculty members were not specialized in the teaching method, the quality of medical education was actually faced challenges (3).

The weakness in educational processes, coupled with tremendous evolutions in the advancement of technology

and medical sciences over the past three decades, the need for greater changes in medical education was observed, which led to the first sparks of the establishment of medical education development (MED) centers aimed to qualitatively and quantitatively improve educational services at the national and academic levels (4). After establishing the first development centers in 1958 and 1959 in the United States and its extension to other countries, similar centers were also established in the Iranian health sector since 1990 aimed at improving the quality of education in medical universities (2, 4) and later, their number increased to such an extent that today, 45 medical universities affiliated to the Iranian Ministry of Health and Medical Education benefit from such centers, and they caused a tremendous evolution in the educational systems of medical sciences; in addition, the traditional view of faculty members in teaching also changed and the teachers came to believe that teaching is a kind of science and art (2). These centers, as the mastermind of the universities, are

responsible to promote the quality of education in the Iranian medical sciences and health services universities. To play this critical role, the existence of a permanent mechanism in colleges and educational-medical centers is required to extend education development activities to all levels of university education. Such centers mainly focus on the promotion of the quality of education in a variety of dimensions such as monitoring and coordinating educational programs, assessing new evaluation techniques, analyzing the examination results, comprehensive assessment of university staff, organizing and supervising students, supporting research in education, and coordinating and surveilling the education development offices in colleges and hospitals (5, 6).

In order to achieve such important goals, regulations are approved by the Iranian Ministry of Health, which describes the tasks of education development centers of medical education universities and their affiliated education development offices. According to such regulations, the development centers and their offices should perform the assigned tasks perfectly, but the results of the studies conducted in such centers show that they face challenges. For example, Momtazmanesh and Shoghi Shafagh Aria concluded in their study that despite significant changes and evolutions by the education development centers, inappropriate structure and organization, lack of funding, and inappropriate faculty members' payment system prevented such centers to perfectly play their roles in the promotion of the quality of education (2).

Many of the challenges were not under the control of the education development centers, but some of the problems with goal achievement were due to the mismanagement of the centers authorities, in such a way that many of the tasks in these centers are not performed accurately; some of them are paid excessive attention, while some others are neglected.

According to the goals of the education development centers, it is important to make sure that these centers are effective. Therefore, the formal evaluation of the performance of such centers is one of the critical steps for continuous improvement in medical education (7).

## 2. Objectives

The current study aimed at evaluating the major function of such centers in Iran from the viewpoint of their managers and comparing them with their duties specified in the regulations.

## 3. Methods

The current descriptive and applied study was conducted in 2013. The study population consisted of managers of MED centers participating in the annual conference of MED centers. The data collection tool was a questionnaire consisting of two open ended questions about the performance of such centers, developed by two experts in the field of medical education. The questionnaire items employed the open-ended style in order to let the managers point out the important activities performed in their centers, even the most detailed ones that sometimes were not even mentioned among the tasks defined by MED centers, without any prejudices. For this purpose and to evaluate the degree of adaptation of the activities performed in each center from the view point of the managers of centers compared to the defined tasks, a researcher-designed questionnaire using the opportunistic method was distributed among 40 managers of MED centers affiliated to medical sciences universities of Iran participating in an annual conference in 2013 in Tehran.

After collecting data, the research team members extracted the performance of the centers based on the questionnaires using content analysis method. Then, by reviewing the local duty regulations of MED centers, the functions in different areas extracted from the questionnaires in the previous stage were included in the regulation. Finally, for each extracted task and function, the frequency and percentage were determined. The study was approved by the Ethics Committee of Kerman University of Medical Sciences (ethical code: IR.KMU.REC.1396.33).

## 4. Results

In the current study, the major functions of MED centers were categorized as 14 main tasks and the ones that could not be attributed to any of the main tasks were assigned to "the others" class. Finally, for each task, the frequency (the number of people pointed to a certain function) and the frequency percentage were determined (Table 1).

### 4.1. Task 1

It focuses on guiding, coordinating, implementing, and monitoring the compliance and reviewing the educational programs emphasizing their accountability to community health requirements. Major functions that were recalled by the managers of MDC centers were responsive medicine, responsive training, lesson plan, planning, reviewing the faculty members' lesson plans, and providing feedback. In total, 15.2% of the functions performed by the centers can be categorized in this task group.

#### 4.2. Task 2

It focuses on organizing, planning, implementing, and monitoring the enhancement of faculty members' capabilities in various fields of medical sciences education. In total, 21.4% of the functions performed by the Iranian MED centers can be classified in this group task. Some of the main functions performed by the center authorities, reported in the current study, were holding workshops and journal clubs, empowering faculty members, holding courses for professors, and enhancing professional ethics in different fields of medical sciences in universities.

#### 4.3. Task 3

This task focuses on guiding and supervising the implementation of new educational and evaluation methods to develop and enhance the quality of education in universities. The data obtained from the data analysis showed that only one of such academic centers took a measure (in education quality improvement) regarding this task, or in other words, 0.9% of the major functions performed by the centers could be assigned to Task 3.

#### 4.4. Task 4

This is involved in organizing, implementing, and monitoring the evaluation of faculty members and teaching-learning processes. About 17.8% of the major functions of the centers functions were in line with this task. The most important activities in this regard were to perform evaluations and modify faculty evaluation forms.

#### 4.5. Task 5, 6, and 7

These tasks focus on guiding and monitoring the learner evaluation processes and the analysis of the results of the tests to improve the quality of exams (Task 5), guide and monitor the educational programs of the clinical skills learning center (CSLCs) of universities (Task 6), and organize and monitor the processes of identification, attraction, and growing brilliant talents (Task 7). Few activities were carried out on these tasks. In other words, 0.9% of the major functions performed by the centers were in line with each of these tasks.

#### 4.6. Task 8

This task focuses on guiding, approving, funding, and monitoring the implementation of research projects in education. About 4.5% of major functions of MED centers were in line with this task. "Research in Education", an activity performed by these centers, was attributed to this task.

#### 4.7. Task 9

The task focuses on guiding and supervising the distance learning and electronic learning programs of the university. About 4.5% of the major functions performed by the education development centers were in line with this task emphasizing "e-learning".

#### 4.8. Task 10

This task consists of guiding, coordinating, facilitating, monitoring, and evaluating education scholarship activities based on the relevant regulations. The only activity performed by one of the centers in line with this task was to emphasize the education scholarship debate in the process of upgrading faculty members. In other words, 0.9% of the activities of the centers could be classified in this task group.

#### 4.9. Task 11

It involves monitoring function and coordinating activities of affiliated education development offices. The activities carried out in this regard included the establishment of MED centers in hospitals and educational institutes. About 1.8% of the major functions of the centers were in line with this task group.

#### 4.10. Task 12, 13, and 14

These tasks include providing advice on education at universities to authorities (Task 12), advising on the design and evaluation of university, continuing education programs (Task 13), and participating in meetings, councils, and committees according to the criteria and regulations (Task 14). The findings of the current study showed that not much measure was taken regarding these tasks. About 0.9% of the major functions were in accordance with Task 12 and 0.9% of the functions were in accordance with task 14; however, no action was taken regarding task 13, according to the authorities.

About 27.7% of the functions performed by these centers were not directly related to any of the 14 tasks approved by the Iranian Ministry of Health and Medical Education. These functions included the formation of committees, participation in the student Olympiads and Shahid Motahari Educational Festival, getting a journal publication license, establishment of a CSLC, participation in and leadership of the development of the strategic plan of the university, the development of a university scientific map and strategic plan, attracting the faculty members with a variety of specializations, medical education, high number of medical sciences graduates, strengthening students, specifically motivating them to participate in educational activities, development of postgraduate courses,

activation of all MED centers, assigning managers with related specialties, clear interaction between MED center and the vice-chancellor for research and education deputy, and the faculty tenure.

## 5. Discussion

Education development centers are launched to promote medical education. Education development programs in the main areas include research in education, teacher education, continuing education of graduates, and evaluating and monitoring the educational activities (3). The current study aimed at comparing the compliance of the major functions with the 14 approved main tasks in these centers and, owing to the broad scope of the tasks, addressing the major functions.

Most of the activities pointed out by experts were in Task 2 "organizing, planning, implementing, and monitoring the promotion of faculty capabilities". MED centers took some measures such as holding workshops, journal clubs, the faculty empowerment, and holding courses for professors to strengthen professional ethics in medical sciences. Since one of the goals of these centers is to strengthen the professors to train effective human resources, paying close attention to this task is of particular importance. All functions performed in this field somehow tried to enhance the scientific level of professors. Since many of the abovementioned functions, categorized in Task 2, have more objective and tangible aspects, many universities attempted to perform them.

The task ranked second and the center managers mostly pointed it out was "organizing, implementing, and monitoring the evaluation of faculty members and teaching-learning processes." Certainly, if there were a proper system to evaluate professors, they might have a higher motivation to improve their activities, which in turn improved the quality of education. The results of some studies show that consistent evaluations and correct feedback play an effective role in improving the quality of education (8-11). Through these measures- e. g. evaluating and modifying faculty evaluation forms- such centers tried to meet the objectives of the program.

The third rank task attracting a lot of attention was "guiding, coordinating, implementing, and monitoring the development and revision of educational programs, emphasizing their accountability to community health needs". Major functions performed in this task include responsive medicine, responsive training, lesson plan, planning, reviewing the faculty lesson plan, and providing feedback. Due to the importance of training programs, only their development and implementation is not

enough, and this might be completed when appropriate supervision is also carried out.

As it was observed, more than half of the major functions indicated by the centers were related to tasks 1, 2, and 4, and only 18% of the index functions can be attributed to other tasks (11 cases). It is easy to understand that the focus of the centers was mostly on tasks 1, 2, and 4, and the frequency percentage of the other tasks was very small. This may be due to certain reasons, i. e. specifying a certain limit for any of the tasks (in other words, the centers did not believe in performing all the tasks), lack of knowledge and skills to perform other tasks, or paying less attention to other tasks. However, sufficient monitoring is required on the performance of these centers.

The document on accreditation standards of medical education and development centers states that "centers should have a specific program to evaluate the outcomes of their measures", but the evaluation of the activities of the centers is very difficult and the main problem is the difficulty to define development indicators (12). As a result, the difficulty of the evaluation process and the lack of adequate surveillance over the function of such centers lead to a lack of attention to all tasks. On the other hand, it was observed that about 28% of the functions performed by these centers were not in line with any of the fourteen tasks.

In a research conducted at Tehran University of Medical Sciences, most faculty members stated that addressing some of the side factors reduced the teaching role of faculty members, which in turn affects education as the main mission of the faculty. They also suggested that more attention should be paid to the quality of education (13). The study by Ranjbar and Vahidshahi also showed a decrease in the importance of the status of education and being a teacher for faculty members (14).

Certainly, all roles, tasks, and activities are carried out in the form of a coherent structure. One of the reasons for not focusing on many tasks seems to be the lack of a certain organizational chart and the lack of guidelines to assign time and activity to duties. Haghdoost et al. also considered the lack of a proper organizational chart as one of the major problems of MED centers. They also stated that "introducing a proposed framework by the organization of the MED centers and affiliated offices, respecting to the type of universities set by the headquarters is a solution to this problem" (15).

According to the results of the current study, after several decades of launching MED centers, they have not yet been justified regarding all of their assigned duties. It is recommended that guidelines should be provided in order to pay proper attention to all tasks and have adequate monitoring of their implementation. It is also possible to help such centers to meet their goals as much as possible

through determining the status of such centers in faculties and universities, determining the extent of minimum and maximum time to each task, determining the importance of each task, and defining the activities necessary to perform each task.

### Supplementary Material

Supplementary material(s) is available [here](#) [To read supplementary materials, please refer to the journal website and open PDF/HTML].

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### Footnotes

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**Table 1.** The Compliance of the Major Functions of the Medical Education Development Centers with the Duty Regulations

|         | Main Tasks and Activities of MED Centers of Universities  | Major Functions from the Viewpoint of the Managers of the Centers                                | Frequency <sup>a</sup>            |   |
|---------|---|--|-----------------------------------|---|
|         |   |  | Individuals Pointing to the Topic | Total Frequency Mentioned by Individuals in Each Area |
| Task 1  | Guiding, coordinating, implementing, and monitoring the development and revision of educational programs, with emphasis on their accountability to the health needs of the community covered by the university within the limits of university authority, in accordance with the rules of the Supreme Council of Planning | Accountable medical education  | 2 (1.8)                           | 17 (15.2)   |
|         |   | Accountable medical education  | 2 (1.8)                           |   |
|         |   | Lesson plan  | 8 (7.2)                           |   |
|         |   | Planning   | 4 (3.6)                           |   |
|         |   | Evaluating the lesson plan of faculty members and providing feedback                             | 1 (0.9)                           |   |
| Task 2  | Organization, planning, implementing, and supervising the promotion of faculty members' capabilities in different fields of medical education   | Workshop   | 13 (11.7)                         | 24 (21.4)   |
|         |   | Journal club   | 1 (0.9)                           |   |
|         |   | Empowering the faculty   | 8 (7.2)                           |   |
|         |   | Holding courses for professors   | 1 (0.9)                           |   |
| Task 3  | Guiding and monitoring the implementation of new educational and evaluation methods to develop and enhance the quality of education at universities   | Taking measures in order to improve the quality of education                                     | 1 (0.9)                           | 1 (0.9)   |
| Task 4  | Organizing, implementing, and monitoring the evaluation of faculty members and teaching-learning processes  | Evaluation   | 19 (16.9)                         | 20 (17.8)   |
|         |   | Modifying faculty evaluation forms   | 1 (0.9)                           |   |
| Task 5  | Guiding and monitoring the evaluation process of learners and analyzing the results of exams in order to improve the quality of tests   | A serious test analysis at the university  | 1 (0.9)                           | 1 (0.9)   |
| Task 6  | Guidance and supervision of educational programs at CSLCs of University   | Standardized Patient unit at the councils and decision-making bodies of the university           | 1 (0.9)                           | 1 (0.9)   |
| Task 7  | Organizing and monitoring the processes of identification, attraction, and growing brilliant talents  | Making active the office of brilliant talent recognized by professors and students               | 1 (0.9)                           | 1 (0.9)   |
| Task 8  | Guiding, approving, funding and supervising the implementation of research projects in education  | Research in education  | 5 (4.5)                           | 5 (4.5)   |
| Task 9  | Guiding and monitoring distance learning and e-learning programs of the university  | E-learning   | 6 (5.4)                           | 6 (5.4)   |
| Task 10 | Guiding, coordinating, facilitating, monitoring, and evaluating scholarship activities based on the relevant regulations  | Emphasis on the scholarship debate in teaching in the process of faculty tenure                  | 1 (0.9)                           | 1 (0.9)   |
| Task 11 | Monitoring the performance and coordinating the activities of affiliated subsidiary development offices   | Establishment of educational development centers for hospitals and educational institutes        | 2 (1.8)                           | 2 (1.8)   |
| Task 12 | Providing advice on educational issues to authorities   | Thought room of the Deputy of Education  | 1 (0.9)                           | 1 (0.9)   |
| Task 13 | Providing advice on the design and evaluation of continuing education programs  | -  | -                                 | -   |
| Task 14 | Participation in meetings, councils, and committees based on rules and regulations  | Active participation in the councils and university decision-making bodies                       | 1 (0.9)                           | 1 (0.9)   |
| Others  |   | Forming committees   | 7 (6.3)                           | 31 (27.7)   |
|         |   | Participation in student Olympiad, Shahid Motahari Educational Festival                          | 6 (5.4)                           |   |
|         |   | Getting a journal publication license  | 4 (3.6)                           |   |
|         |   | Establishing a CSLC  | 1 (0.9)                           |   |
|         |   | Participation in and leadership of the development of the strategic plan of the university       | 1 (0.9)                           |   |
|         |   | The development of a scientific map and strategic plan for Kerman University of Medical Sciences | 1 (0.9)                           |   |
|         |   | Attracting the faculty members with a variety of specializations for participation               | 2 (1.8)                           |   |

|              |  |         |     |
|--------------|--|---------|-----|
|              | Medical education, high number of medical sciences graduates                                   | 1 (0.9) |     |
|              | Strengthening students, specifically motivating them to participate in educational activities  | 3 (2.7) |     |
|              | Development of postgraduate courses  | 1 (0.9) |     |
|              | Activation of all MED centers  | 1 (0.9) |     |
|              | Assigning managers with related specialties to the centers                                     | 1 (0.9) |     |
|              | Clear interaction between MED center and the Vice-Chancellor for Research and Education Deputy | 1 (0.9) |     |
|              | Faculty tenure   | 1 (0.9) |     |
| <b>Total</b> |  | 100     | 100 |

Abbreviation: MED, medical education development.

<sup>a</sup> Values are expressed as No. (%).