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Discovering the performance criteria of education development centers of medical sciences universities: A qualitative study

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Abstract:

CONTEXT: Performance is a significant objective of any organization. To grow and develop and to improve the performance of the education development centers (EDCs) of medical sciences universities at Iran, the recognition of the performance criteria of these centers is important. This study was conducted with the aim of discovering the performance criteria of EDCs of medical science universities.

SUBJECTS AND METHODS: This study was conducted using qualitative research and a semi-structured interview. Participants were selected using an expert sampling method is a sub-type of purposive sampling. Twenty-three faculty members and expert staff (11 males and 12 women) participated in the interview. Data were collected using the participant's perception. The data analysis was performed based on the interpretative analysis steps of Gillham and Rubin.

RESULTS: From the analysis of data, seven categories including leadership, strategy, stakeholders, workforce, knowledge management, processes management, and results were obtained.

CONCLUSIONS: The obtained criteria in this study assist managers to design and to develop self-assessment questionnaires and a performance measurement program for EDCs of medical sciences universities. This will facilitate performance evaluation of EDCs.

Keywords:

Education development centers, performance criteria, qualitative method, universities of medical sciences

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Introduction

Performance is a significant objective for any organization or units affiliated with an organization, and it is the tool for growth and development of organizations.^[1] The aim of education development centers (EDCs) is to improve the quality of medical education and the professional development of health personnel.^[2] Due to the important role of these centers on enhancing the quality of medical education, evaluate and monitoring their performance status is crucial, but identify the performance status is possible

by performance criteria, as Krause *et al.* have said performance be specified through a set of criteria.^[3] According to the reports of studies in Iran, the main fields of EDCs including governing and leadership, educational planning, faculty development, assessment, and examination and research in education were used to evaluate the performance of these centers.^[2,4,5] Each of these is a unit in EDC. However, in recent years by extension of the education fields, the duties of EDCs in clinical and nonclinical domains have been widening; also strategies of EDCs for doing these tasks are not the same, and each EDC, appropriate with

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their strategies to doing tasks, establish units that are not similar in all centers.^[6] According to Haghdoost *et al.*'s study, there are gaps in all indicators of EDCs to achieving the standards, and if these gaps are not filled, in the next accreditation, many numbers of centers will be disapproved,^[6] and according to the study by Kalantari *et al.*, EDC tasks have not been justified and it is necessary that programs should be developed to check and control their tasks and to implement of them.^[7] Therefore, creating comprehensive performance criteria to evaluate the performance of EDCs is necessary, but to create the same criteria that can cover all the tasks and activities of the centers despite the difference in the number of units in all medical sciences universities and make possible to compare centers together, it is the best criteria be based on organizational structure and not based on activities, tasks, or fields. Accordingly, the question of this study was what are the criteria that can evaluate the performance of all EDCs based on organization structure and despite the differences in their activities and the number of units? To answer this question, the Baldrige model structure was chosen as a structure of the same for EDCs. The Baldrige model is an organizational self-assessment model and the Baldrige model structure forms seven main criteria including leadership, strategy, customers, measurement, analysis, knowledge management, workforce, operations, and results.^[8] All small and large educational centers, independent and nonindependent, can apply the criteria of this model to evaluate their performance, but this is only a guide and they must describe each criterion according to their organization's activities and duties and this is often difficult and time-consuming for organizations.^[9-11] Hence, creating performance criteria will facilitate performance evaluation for EDCs, and this study was conducted with the aim of discovering the performance criteria of EDCs in medical sciences universities.

Subjects and Methods

This study was qualitative research using the conventional content analysis approach for data analysis wherein codes and categories are extracted from the text data.^[12]

Participants were selected using an expert sampling method which is a subtype of purposive sampling. The researcher here seeks for those that are an expert in the area of the study and have experience. This method is useful to garner further and deeper data.^[13,14] Twenty-three faculty members and expert staff (11 males and 12 women) participated in this study. Inclusion criteria were work experience in EDCs of medical sciences universities and the tendency to be in touch with the researcher, and the exclusion criteria were not willing to participate in the study. Their total work experience in

EDCs varied from 2 to 28 years. Five of the participants were a professor, four of them were an associate professor, nine of them were assistance professor, and the rest were expert staff [Table 1].

Interviews were conducted at the workplace of the faculty members and by the researcher. Each participant was interviewed once and a total of 23 interviews were conducted. Interviews were semi-structured and face-to-face. The interviews were continued until data saturation was reached, a point where no new data from transcripts were obtained. To comply with ethical considerations, this study obtained approval from the Ethics Committee of Iran University of Medical Sciences (IUMS) (Code No. IR.IUMS.FMD.REC1396.9221486206). Information about the research objectives and obtaining permission for the recording of the interviews were provided to the participants. Furthermore, they were assured that their information

Table 1: Demographic characteristics of participants

Participant	workplace (school or EDC)	Academic ranking	Work experience (year) in EDC
1	Medicine and EDC	Professor	28
2	Management	Associate professor	24
3	Allied medicine	Assistant professor	15
4	Nursing and midwifery	Assistant professor	3
5	Allied medicine	Assistant professor	2
6	Medicine	Associate professor	12
7	EDC	Assistant professor	5
8	Public health	Expert staff	20
9	Medicine	Professor	28
10	Medicine and EDC	Professor	20
11	Allied medicine	Assistant professor	27
12	Medicine and EDC	Associate professor	23
13	EDC	Expert staff	11
14	EDC	Assistant professor	6
15	Medicine	Professor	26
16	Medicine and EDC	Associate professor	9
17	Allied medicine and EDC	Assistant professor	6
18	EDC	Assistant professor	3
19	Medicine and EDC	Assistant professor	10
20	EDC	Expert staff	8
21	Medicine	Expert staff	10
22	EDC	Expert staff	15
23	Medicine and EDC	Professor	12

EDC=Education development centers

would remain confidential and they could leave the study at any time.

To carry out the interview, an interview guide was prepared. First, participants were explained that an organizational structure determines job tasks and their performances. It specifies organizational reports where and to whom should be submitted and shows what actions are needed to achieve the organization's goals. Organization.^[15] Then, they were asked leadership, strategy, customers, workforce, management, analysis, knowledge measurement, operations, and results consider the organizational structure of EDCs.^[8]

The interview question was open to extract the concepts from the perception and experience of the interviewees: please describe your job duties at the EDC or EDCs that you have worked and express what actions and behaviors to perform your duties have done.

The data analysis was performed based on the interpretative analysis steps of Gillham and Rubin.^[16,17] In this analysis method, the researcher tries to reveal the latent messages in the written text of the interview. Each of the recorded interviews was written and each text was read and reviewed many times. For each text, the major discussions were highlighted and separated as short and meaningful sentences, and then, the codes were extracted and irrelevant sentences were discarded. After that, the researcher reviewed the texts once more to ensure that no important sentence is omitted. During the next stage, from composition and grouping of codes, subcategories were extracted. More subcategories were extracted from the initial texts and the subcategories were gradually reduced since the interviewees had mentioned similar points. Then, related subcategories were merged and categories were extracted. Categories were merged and themes were obtained.

For the reliability of codes, instruments were used including member check and^[18] an external observer who was a faculty member and was familiar with medical EDCs and qualitative methods.

Results

From the analysis of data, 871 primary codes were extracted. The primary code was finalized to 140 codes. From the combination of the final codes, 33 first subcategories were obtained, and from the first subcategories, 15 s subcategories were obtained, and from the second subcategories, 7 categories were obtained [Table 2].

Discussion

In the present study, 33 subcategories, 15 categories, and 7 categories according to Table 2 for the performance

Table 2: Subcategories and categories of education development centers

First subcategories	Second subcategories	Categories
Reliability	Personality characteristics	Leadership
Altruism		
Accountability	Job characteristics	
Decisiveness		
Perfectionism		
Expertise		
Preplanning factors	Compilation of strategy program	Strategy
Planning factors		
Program execution optimization	Achieving strategy program objectives	
Implementation of programs		
Evaluation of programs		
Identifying different groups of stakeholders	Need assessment of stakeholders	Stakeholders
Awareness from needs, expectations, and demands of stakeholders		
Awareness of the quality of services provided to stakeholders	Providing services to stakeholders	
Support from needs, expectations and demands of stakeholders		
Determining recruitment factors and acceptance of workforce	Recruiting workforce	Workforce
Determining hierarchy of responsibilities and duties		
Quality of work environment and facilities	Maintenance and support from the workforce	
Motivational factors		
Storage and collection of data and information exchange of information	Data and information management	Knowledge management
Methods of measuring data	Measure and analyze information	
Analyzing and comparing data and information		
Planning and design of activities	Managerial processes	Processes management
Implementing activities		
Informing and optimizing activities	Support processes	
Controlling activities		
Leadership power	Results of leadership	Results
Leadership characteristics		
Quantity of product	Results of product	
Quality of product		
Quality of service to stakeholders	Results of stakeholders	
Providing services to stakeholders		

criteria of EDCs of medical sciences universities were obtained. The final results showed that in the EDCs, the concept of customer and stakeholder is the same. Stakeholders and customers in EDCs of medical sciences universities include faculty members and

staff of centers and all internal and external clients; these centers include students, faculty members, and users of research centers. Knowledge-based companies affiliate of these centers, virtual product of these centers, and virtual product users of these centers. Lazaros *et al.* determined criteria of responsibility, vision, respect to the human workforce and prioritizing the organizational profits to personal profits for quality of the leadership performance at university. These can be considered as personality characteristics and job characteristics leadership in our study. Also in study Lazaros *et al.* paying attention to customers' needs and requirements and necessity of data collection regarding the mistakes, complaints and dissatisfaction can be considered as a need assessment of stakeholders in our study. Attention to the quality of the work environment, supporting the facility for the workforce and having a clear job description in order to avoid heavy workload in the study of Lazaros *et al.* are criteria similar to maintenance and support from the workforce in our study.^[19] Furthermore, according to the study of Shibu *et al.*, leadership experience, academic rank, the managers, policy, procedures, learning professional, ensuring efficiency, financial management, and accountability have reported as factors that affect the institutional performance of Wolaita Sodo University.^[20] The similarities of the results of these studies with our study results are due to the concordance of the performance main elements of EDCs with higher education institutions and universities.

In the said study, research management and leadership, research politics and strategies, and the results of the concerned parties as performance criteria of a research center were reported.^[21] Differences observed in extracting criteria of the said study compared to the results of our study are because of the differences in the objectives, mission, and tasks of EDCs compared to research centers.

In the study of the Psomas and Antony, focus on student, leadership, top management commitment, strategic quality planning, process management, and teaching staff and employee involvement have reported as the main quality management elements for higher education institutions.^[22] The results of this study are more different than the results of our study. The results of this study showed that the customer or beneficiary in the centers is a broad subject and not limited to students. Focusing on the workforce at the centers is a much broader concept, not only about training them or engaging them in activities but also about the well-being of employees and the specificity of their duties and responsibilities. However, in terms of senior management, commitment and attention to leadership is similar to our study results.

Conclusions

Based on the vital role of EDCs in the training of physicians, nurses, paramedics, and medical sciences teachers and, in general, promoting the quality of medical sciences education and enhancing community health, the obtained criteria in our study will help managers to design and to develop self-assessment questionnaires and to develop a performance measurement program for EDCs. They will facilitate performance evaluation for managers of EDCs. This will help to improve the performance of centers and the quality of medical education and thus will promote community health. Furthermore, the managers of EDCs in other countries that have tasks similar to tasks of EDCs in Iran including developing curriculum, improving learning and public health through action-oriented research, and building and using knowledge to address the major education and health challenges can test the discovered criteria at our study to evaluate their centers and if needed depending on their cultural, functional, and environmental conditions add or remove criteria to design and develop self-assessment questionnaires for their centers.

It is suggested that medical sciences universities in Iran evaluate the performance of their EDC using obtained criteria in this study to determine the efficient and effective of them. It is also suggested that the subcategories of leadership category can be used as criteria for the selection and appointment of senior managers and managers of different departments of the EDCs. Then, the performance of them is compared with the previous managers to determine the role of these criteria in improving the performance quality of managers.

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Conflicts of interest

There are no conflicts of interest.

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