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Explaining the experiences of education development center specialists about the designed performance excellence award

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Abstract

Background

Medical education development centers, as centers of thought and innovation in the higher health education system, play a key role in improving the quality of medical education. Accurate and comprehensive performance measurement, identification of strengths, distinction between successful and unsuccessful activities, and creation of improvement opportunities are possible using appropriate evaluation frameworks. The aim of this study was to explain the experiences of education development centers (EDCs) specialists about the designed performance excellence award (DPEA) for (EDCs) (DPEAE).

Methods

This study was part of a larger project entitled designing an performance excellence award (PEA) for EDCs (PEAE). The PEAE was designed, and validated. Then, it was implemented to better align its criteria with the activities of EDCs in reality. During the implementation, specialists of EDCs were asked to express their experiences with the DPEAE criteria. Purposeful sampling was used. Ten individuals participated in the study. Data analysis was performed using conventional qualitative content analysis. MAXQUDA20 software was used for data management and initial coding.

Results

Data were categorised into two themes and four categories. Theme of Effective features of the DPEAE with two cateorise of “Effectiveness” and “Guiding light” and Theme of Operational and infrastructure components of the DPEAE with two cateorise of "Key Strategies for Improving the Efficiency and dynamism of EDCs" and "Structural and Infrastructure Requirements of EDCs".

Conclusions

The themes and categories obtained in our study outline an integrated and purposeful administrative-organizational vision for creating a more dynamic organizational environment, where activities, management and leadership, and decision-making in EDCs to be done based on data and accurate evaluation.

Background

In the dynamic world of medical education, continuous improvement of the quality and effectiveness of processes and achievements is vital. Medical Education Development Centers are centers in many universities around the world that have different titles, such as Department of Medical Education, Office

of Medical Education, Center for Health Professional, Faculty Development Center, which have similar and common tasks and work to improve the quality of medical education, support faculty members, innovate in teaching and learning methods, and conduct research in the field of medical education [1–3]. These centers operate in Iranian universities of medical sciences as Education Development Centers (EDCs) and are centers of thought, innovation, and quality improvement in medical education [4]. The importance of the activities of these centers is undeniable. Therefore, it is necessary to accurately and comprehensively assess the performance of EDCs and identify their strengths, weaknesses, and opportunities for strengthening or improving them. According to experts, organizational performance is a strategy for improving competitiveness at the national and global levels and needs to be measured and evaluated [5]. To keep up with the pace of global developments, EDCs need to be on a path to excellence, which means they need to be committed to continuous growth [6]. To achieve this goal, EDCs need appropriate and accurate measurement tools that can distinguish between successful and unsuccessful activities, create a continuous motivation for excellence among employees and managers of these centers to achieve excellence, and expand opportunities for growth and development by creating a performance-based incentive system. Performance Excellence Award (PEA) is a suitable tool for these goals. Excellence Awards (EAs) are a comprehensive framework of all dimensions of an organization that helps managers identify strengths and areas for improvement by continuously evaluating the activities, procedures, processes and results of the organization and plan for their improvement [7]. This study was part of a larger project entitled Designing a (PEA) for EDCs (DPEAE). The study, conducted aim to explain the experiences of EDCs specialists about the DPEAE criteria.

Methods

Study design

This study was part of a larger project entitled DPEAE. In the project, a PEA for EDCs was designed, validated, and validated. (Table 1) Then, it was implemented with the aim of further aligning its criteria with the activities of EDCs in reality. Thus, first, using the convenience sampling method, three EDCs were selected from ten active EDCs at universities of medical sciences located in Tehran. The research team, by attending each of the selected centers, first held a briefing session to familiarize themselves with the objectives of the study and the necessary explanations about its implementation for the managers and specialists of the selected EDCs, and then, after obtaining written consent from them, the (DPEAE) was implemented in those centers. Considering that during the implementation, the specialists were practically exposed to the DPEAE criteria and answered questions based on the documentation, actions, and activities of their centers, the DPEAE criteria and their role in achieving excellence by EDCs were more tangible to them. Therefore, they were asked to express their experience about the DPEAE criteria while being practically exposed to the evaluation.

Table 1
Designed performance excellence award for Education Development Centers

Main criterion	Sub-criterion	Sub-criterion
Leadership	Personality traits	• Trustworthiness • Humanity and altruism
	Job characteristics	• Responsibility • Dynamics and perfectionism • Experience, knowledge and expertise
Strategic planning	Strategic Planning	• Pre-planning factors • Planning factors
	Achieving Strategic Planning Goals	• Optimizing program execution • Program execution and evaluation
Customers and stakeholders	Needs Assessment of Missionaries and Stakeholders	• Understanding different groups of customers and stakeholders • Awareness of the needs, demands and expectations of customers and stakeholders
	Providing Products and Services to Customers and Stakeholders	• Awareness of the quality of products and services provided to customers and stakeholders • Supporting and advocating for the needs, demands and expectations of customers and stakeholders • Communication with customers and stakeholders
Workforce	Workforce Recruitment	• Determining factors for attracting, retaining, and accepting the workforce • Determining responsibility and work hierarchies
	Workforce Retention, Support and Advocacy	• Quality of the work environment, facilities, and physical space • Creating motivational factors
Knowledge Management	Data and Information Management	• Data and information storage and collection • Data and information communication and exchange

Main criterion	Sub-criterion	Sub-criterion
	Information Measurement and Analysis	• Data and information measurement methods • Information analysis and comparison
Process management	Management Processes	• Design and planning for activities • Execution of activities
	Support Processes	• Information and optimization of activities • Control of activities
Results	Leadership Results	• Legitimate Power • Reward Power • Referent Power • Expert Powe
	Product and Service Results	• Quantity of products and services • Quality of products and services
	Customer and Stakeholder Results	• Quality of services to customers and stakeholders • Providing services to customers and stakeholders

Participants and sampling

Participants in the study and sampling method: A purposive sampling method was used. Data were collected from individuals who had rich experiences in EDC and were willing to share their experiences. Semi-structured interviews were conducted. Sampling and data collection continued until data saturation was reached. This means that as interviews with study participants continued, no new data was added to the previous data. Ten individuals participated in this study. (Table 2)

Table 2
Participant Profiles

Sex	**Female**	**10**
Academic Rank	Assistant Professor	4
	PhD Degree	3
	Bachelor's Degree	3
Years of service	More than 1 year and less than 5 years	3
	5 years to less than 15 years	3
	More than 15 years	4
Total		10

Data collection and analysis

Semi-structured interviews were used as the main data collection method. In addition to providing documentation regarding the type of performance and activities of their EDC for evaluation, participants also expressed their experience with each of the DPEAE criteria. First, the research team provided the necessary explanations about the purpose of the study and its implementation orally to three of the participants, and the interview guide (supplementary file), which included the main interview question (Please describe your experiences with each of the DPEAE criteria), was provided to them. While being evaluated, participants also expressed their experiences with each of the DPEAE main criteria and sub-criteria. In the next stage, from the analysis of the three interviews, some exploratory questions (mostly about the ambiguities existing for the participants regarding the provision of documentation for some of the sub-criteria, which were resolved by stating examples. For example: in the main criterion of knowledge management, the participant's question was explained to resolve the ambiguity and methods of measuring data and information, an example of which is that you require the education development offices to conduct self-assessments in relation to the activities related to your unit) were also added to the questions. This process continued until data saturation was reached. It should be noted that informed, free, and voluntary consent was obtained from the participants before conducting the interview. After each interview, the interview transcripts were transcribed and read and listened to word for word by two members of the research team (M, T) several times to immerse themselves in the interview text. Semantic units were identified by identifying and highlighting sentences in each paragraph, and the open coding process (level one) was initiated with an emphasis on explicit and implicit content, and each semantic unit was given a code. Then, the codes were categorized into categories based on spectrum and characteristics. As data analysis progressed, the codes and their placement in categories were repeatedly checked, and in case of disagreement, they were resolved through discussion and dialogue. MAXQUDA20 software was used for data management and initial coding.

Data analysis was performed using conventional qualitative content analysis [8]. In the first stage, after each interview, its text was transcribed and used as the main research data. In the second stage, the interview text was read word for word several times to extract its semantic units. In the third stage, abstracting semantic units and open coding were performed, and the explicit and implicit concepts were revealed as denotative codes. In the fourth stage, similar codes were placed in the same category. Continuous comparison of differences and similarities between codes and their suitability with categories was continuously carried out during the analysis of the interviews, and the codes were moved within categories until the categories were formed. In the fifth stage; at the interpretive level, summary categories and the main concept of each category were determined, and the main and abstract themes were extracted, and the codes were reviewed according to the internal themes and based on the entire data. In the final stage, the information obtained was reported. Also, in this stage, to clarify the extracted codes, categories, and main themes, some quotes from the participants were presented as reassuring documents in the findings.

Rigor of the study

Validity was not a concern in the study. Validity was not a concern in the study because the DPEAE had previously been validated and approved. Intra-coder reliability was used for reliability. In this method, the consistency of the researcher's coding at different times is examined. In this study, the coders coded six times at one-week intervals, and the same results were obtained each time.

Results

Participants' experiences about the DPEAE main and secondary criteria were categorised into two themes: Effective features of the DPEAE and Operational and infrastructure components of the DPEAE. (Tables 3 and 4)

Table 3
Effective features of the (DPEAE)

Open Codes	Categories	Theme
• Valuable and important • Transforming • Promising	Effectiveness	Effective features of the (DPEAE)
• Warning • Informative of work done but considered unimportant • Identifying essential work not done	Guiding light	

Table 4
Operational and underlying components of the (DPEAE)

Open Codes	Categories	Theme
• *Indicates strong and participatory management in the centers* • *A useful and essential tool for the appropriate selection of more capable managers and officials for centers* • *Indicates the importance and necessity of how to attract, retain, and support the workforce in centers* • *Indicates the need for centers to conduct self-assessments for continuous improvement.* • *A useful tool for creating competitiveness of centers in order to create continuous transformation*	Key strategies for improving the efficiency and dynamism of EDCs	Operational and infrastructure components of the (DPEAE)
• *Indicates the necessity of creating a database and central information system for centers* • *Indicates the necessity of creating an organizational structure in centers* • *Indicates the necessity of increasing the financial independence and decision-making of centers*	Structural and infrastructure requirements of EDCs	

The theme “Effective features of the DPEAE” consists of two categories: “Effectiveness” and “Being a guiding light”. (Table 3)

Effectiveness

Participant number 4 stated: "These criteria and questions are very valuable, because they categorize the center's activities well. We do a lot of things at the center but we don't take them seriously. This model is undermining the importance of the center's activities." Participant number 3 stated: "This work that has been done and the questions that are raised are very good. If they are implemented, it will really help the center's transformation." Participant number 1 stated: This is a very good work. One gets hope when you see that at least something is being done somewhere.

Guiding light

Participant number 1 said: "... I'm thinking about the documentation. I was wondering why I haven't thought about the knowledge management criteria questions until now. Why doesn't our unit have any

questions on these matters in the faculty evaluation? Thank you, it informed me." Participant number 7 said: "This is like a warning device. It informs us of the things we need to do but don't do. Of course, it is partly due to the problems that exist, including the lack of financial independence and the power to make independent decisions."

The theme "Operational and infrastructure components of the DPEAE" consists of two categories: "Key Strategies for Improving the Efficiency and dynamism of EDCs" and "Structural and Infrastructure Requirements of EDCs". (Table 4)

Key Strategies for Improving the Efficiency and dynamism of EDCs

Participant number 6 stated: "The process of retaining the workforce in the center is unclear. They can easily remove the workforce. They give a worker some time, he becomes experienced and things become okay for him, then they remove him very easily. The fact that in this model, attracting and retaining the workforce is considered as an evaluation factor for achieving excellence shows how necessary it is to know how to attract and support the workforce, and it shows how important it is." Participant number 2 stated: "We don't have a formal self-evaluation, we don't have an index for it, so we can't compete with centers, but I've always thought that it would be great to create a competition, a ranking between centers, because the superiority of one center encourages the others, and this is great, it both motivates and helps the center grow. I wish we had it. I'm happy that this model can meet our expectations. I think it's a transformative tool." Participant number 1 said: "These leadership criteria are good, and the issues raised, considering that I am responsible for several units, based on my daily experience, are all essential and can be used to select unit managers and center managers."

Structural and Infrastructure Requirements of EDCs

Participant number 9 stated: "We don't have the infrastructure to store and back up, our documentation is good, but we keep it on the hard drive. We don't have a specific platform. I'm saying that if what you've done is going to evaluate the centers, then it wants to compare them, but for this, it is necessary to have a central database. In principle, the model also wants it in the knowledge management criteria, which we don't have." Participant number 5 said: "... But due to the lack of financial independence and the lack of decision-making power of the center's leaders, we have nothing here. The legal power that is in the results of the model's leadership, first of all, requires that the organizational structure of the center be appropriate so that the center has financial independence and decision-making, and the reward power, which is its specific task, also wants financial independence."

Discussion

Existing studies mainly focus on designing models based on existing excellence or quality award models or implementing existing excellence models in organizations or centers, and have emphasized the role of models in improving quality and promoting performance, customer and stakeholder satisfaction and its

effectiveness, or have examined the concepts of quality assurance in educational systems and other organizations [5, 6, 9, 10]. However, in the literature review we conducted up to the time of our study, no study was found regarding the explanation of experts' experiences about the criteria of these models after initial implementations. And we conducted a review and discussion of the differences and similarities of our study with other studies based on the results of existing studies.

In this study, two main themes were obtained: Effective features of the DPEAE and Operational and infrastructure components of the DPEAE. (Tables 3 and 4) According to Table 3, the Effective features of the DPEAE theme has two categories: effectiveness and guiding light. The open codes of these categories show that DPEAE is a key tool that can create positive changes, give hope and motivation, and provide a clear vision for the future. DPEAE also has the role of informing and raising awareness, that is, it informs centers about the work they do but are indifferent to them or do not understand their importance and do it merely to complete the task, and also reminds them of the work that centers need to do but are not doing. Lateh (2024) has implemented the EFQM model in schools in his study and analyzed its results with the aim of creating sustainable education quality in schools. The results of his study showed that the model was effective in improving leadership, adopting creative solutions to overcome financial constraints and deficiencies, optimizing resource utilization, innovation in human resource development, and ensuring sustainable goals. Accordingly, he emphasized that these changes highlight the effectiveness of the model. Although these results do not mention the concepts and terms obtained in our study, these findings show the value and importance of the EFQM model, its promising and transformative nature, and its overall effectiveness. Therefore, it can be said that the above results are in line with our findings on the theme of effective features of the model [11]. Kayyali (2023) has examined quality control approaches in his study. His findings show that all quality or performance measurement tools, including excellence awards, have the potential to increase transparency of activities because they create competition and comparison in organizations or centers that have common goals [6]. This is similar to the traffic light category in the Effective features of the DPEAE theme in our study. The concepts and phrases used in our study in open codes, including open codes informing about tasks that were considered unimportant and identifying essential tasks that were not done, are examples that show that the model has the necessary capability in creating transparency in the performance of activities.

According to Table 4, the theme Operational and infrastructure components of the DPEAE has two categories of Key strategies for improving the efficiency and dynamism of EDCs and Structural and infrastructure requirements of EDCs. The open codes of these categories show that the model criteria provide key strategies, including the type of center management, appropriate selection of centers in order to select more capable people who can motivate the workforce to improve performance, the need for continuous self-assessment, a means of creating competition for continuous transformation, the importance of how to attract and retain the workforce, the need to create an organizational structure, and the need to increase financial independence and decision-making, which are necessary for the dynamism and efficiency of centers and their movement on the path of excellence. These results are consistent with the findings of Ben-Ayed (2017) in his study titled Quality and Excellence: Time for a

National Award in Qatar. He found that models of excellence and quality increase management's commitment to moving on the path of continuous improvement and promotion, which increases the competitiveness of organizations or their centers. On the other hand, in his study, he stated that the functions of excellence and quality models are self-assessment, creating competition between organizations, and a structure for the organization's management system, which is consistent with the findings of our study [9].

Conclusion

The excellence awards are key tools for sustaining transformation and continuous improvement [12]. The themes and categories obtained in our study outline an integrated and purposeful administrative-organizational vision for creating a more dynamic organizational environment, where activities, management and leadership, and decision-making are based on data and accurate evaluation. Managers and employees are motivated through rewards and healthy competition. Self-assessment and ranking processes help create competition and continuous improvement. Improving the information structure and infrastructure and increasing financial and decision-making autonomy are responsive to the large volume of tasks of EDCs so that they can contribute to the increasing quality of medical education in line with global scientific and technological development, and DPEAE can be implemented sustainably in EDCs.

Limitations and suggestions:

The limitation of the study was time. If we had more time, we would have included more EDCs located in Tehran and other cities in the study. We suggest that in order to effectively contribute to the continuous progress of EDCs towards excellence, self-assessment should be institutionalized and cultured in EDCs. Universities should give these centers more autonomy and authority, so that based on the results of self-assessment, they can implement necessary changes in a shorter period of time.

Abbreviations

EDC
Education Development Center
EA
Excellence Award
PEA
Performance Evaluation Award
DPEAE
Designed Performance Excellence Award for EDCs
NASR
The National Agency for Strategic Research in Medical Sciences Education

Declarations

Ethics approval and consent to participate

An anonymous and coded interview guide was provided to the participants that one part was to explain the purpose of the study, delineate who provided with the results, and ensure the confidentiality of information and freedom to participate or withdraw and their informed consent was secured.

This study was conducted in accordance with the ethical principle of the Declaration of Helsinki. All participants participated in this study with informed consent. This study protocol was approved by the National Agency for Strategic Research in Medical Sciences Education (NASR) Committee of Research Ethics (IR.NASRME.REC.1403.124). The questionnaire anonymous and marked with a code was provided to the participants that one part was to explain the purpose of the study, delineate who provided with the results, and ensure the confidentiality of information and freedom to participate or withdraw and their informed consent were secured.

Consent for publication

Not applicable

Availability of data and materials

Data are available from the authors upon the writing agreement of the NASR.

Competing interests

No competing interests.

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Authors' contributions

MT, HM, MD, OE managed writing interviews. MT & HM conducted primary analysis. MD, OE, commented on the coding process. MT wrote the first draft of the manuscript. HM, MD, OE reviewed different drafts of the paper and revised it. All the research team (MT, HM, MD, OE) reviewed the first and final drafts of the manuscript commented on them, and approved the final draft.

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Supplementary Files

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