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Exploring the challenges of educational accreditation of teaching hospitals and providing the solutions

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Abstract:

BACKGROUND: In the recent years, the accreditation of educational institutions and hospitals has attracted a lot of attention in different countries to ensure the quality of medical education. In this regard, examining the experiences of different countries will help to improve the world and local standards. This study was an attempt to explore the lived experiences of senior managers about the educational accreditation challenges and appropriate strategies to overcome these challenges.

MATERIALS AND METHODS: The authors used a phenomenological approach to explore the lived experiences of the senior managers about educational accreditation of teaching hospitals affiliated to Iran University of Medical Sciences. Semi-structured interviews were conducted to reach data saturation. For this purpose, three semi-structured face-to-face interviews and six electronic interviews were conducted. Data were analyzed using the Colaizzi method.

RESULTS: Data analysis showed that the most important challenges of educational accreditation of teaching hospitals were related to standards and criteria, executive policies of accreditation, and educational, attitudinal, and financial infrastructures. The strategies expressed by the participants were categorized into four themes including reviewing and revising standards and criteria, planning for education, providing human and financial resources, and modifying the executive structure of accreditation.

CONCLUSIONS: In order to improve the quality of educational accreditation programs, it is necessary to identify and find a solution for the existing challenges by experiential support of the senior managers of teaching hospitals and the other stakeholders (e.g., faculty members and students). It also provides an opportunity for educational policy-makers to improve the hospital's educational accreditation program.

Keywords:

Accreditation, education, educational status, hospitals, standards, teaching

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Introduction

The health-care global market has an unprecedented influence on medical education around the world.^[1] This has led to an increase in the number of colleges and training centers and also increased attention to the quality of educational programs and institutions. In fact, the quality of higher education institutions is considered as criteria of their performance, and in this

regard, universities use a variety of quality assurance methods to certify their institution or program quality.^[2] Various countries and educational institutions use national and international accreditation programs.^[3,4] For example, the Council for Higher Education Accreditation of the United States of America has developed several policies to assess the quality of higher education in the global context.^[5] Accreditation is similar to an open book test and organizations that incorporate the accreditation process into

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their body of education, awareness, and organizational culture can achieve a higher level of quality in rendering health care.^[6] Accreditation of health organizations aims to improve the quality of health services, to improve the integration of health services management, to establish a database of health service organizations, to increase safety and reduce risks for patients and staff, to provide training and counseling for health service organizations, and to reduce costs. Its focus is on increasing the efficiency and effectiveness of services.^[7] Therefore, in teaching hospitals that are associated with both health and medical education sectors, it is expected to achieve the benefits of medical education and health by implementing accreditation.

Recently, in Iran, accreditation is an issue which has attracted much attention in scientific circles of medical education. In the Iran third and sixth programs of development and medical science education, special attention has been given to the accreditation and efficiency of the evaluation systems.^[8] In this regard, the Medical Educational Accreditation Guidelines for Iranian Teaching Hospitals were developed by the Educational Deputy of Ministry of Health and approved by the Expansion Council of Iranian Medical Sciences Universities. In this guideline, in order to avoid repeated evaluation processes and to expedite the evaluation process, clinical accreditation standards are considered as the basis of medical educational accreditation. Educational standards are divided into nine categories which include educational management, monitoring and evaluation of educational system performance, faculty members, learners, management of space and educational facilities, training in emergency and para-clinic settings, educational processes and programs, patient rights, and clinical research.^[9] These educational standards were revised in 2016; then, all medical universities were notified, and it was decided that all teaching hospitals carry out self-assessment according to these standards in collaboration with their university/school and finally the external evaluation be conducted under the supervision of the Ministry of Health and Medical Education Deputy of Education.^[10] Considering that educational accreditation has been implemented at both levels of self-assessment and external evaluation for teaching hospitals in Iran from 2016, therefore senior managers who involved in this project have many lived experiences. Studying their experiences and transferring these to educational policy-makers and associations inside and outside Iran, will help them to decide on educational standards and implementing them properly to achieve optimal quality.

This study was an attempt to explore the lived experiences of senior managers of teaching hospitals about the educational accreditation challenges and

providing appropriate strategies to overcome these challenges.

Materials and Methods

In this study, a qualitative phenomenological approach was used to collect and analyze the lived experiences of senior managers about educational accreditation of teaching hospitals in Iran University of Medical Sciences, Tehran, Iran. A phenomenology is a form of qualitative research that focuses on the study of an individual's lived experiences within the world.^[11]

Researchers undertaking a phenomenological study investigate various perceptions of, or reactions to, a particular phenomenon. The researcher hopes to describe his/her participant's perceptions and reactions. In reality, the researcher searches for the "essential structure" of a single phenomenon in phenomenological studies.^[12]

Given that the purpose of the phenomenological approach is to identify phenomena through how they are perceived by the people in a situation, therefore this approach is useful to illuminate the lived experiences of senior managers who involved in educational accreditation of teaching hospital from 2016 and can help us to improve educational accreditation.

The experts were selected by purposeful sequential sampling method (snowball method). The inclusion criteria were being a senior manager with lived experience about educational accreditation and participation in the implementation of educational standards. The exclusion criteria were the unwillingness to participate in the study.

Study design

Three semi-structured face-to-face interviews and six electronic interviews were conducted to reach data saturation. Each face-to-face interview was scheduled at a time and place that was convenient for the interviewees. The average time for each interview was approximately 30–40 min. Before each interview, an information sheet was provided to each participant and their informed consents were secured. An open-ended interview questionnaire was developed by the research team after reviewing accreditation standards and literature as well as consulting with field experts. For consistency, a single interviewer interviewed the participants; however, the interview-guided questions were developed by all the researchers. During the interviews, memos were recorded. Afterward, each recorded interview was transcribed verbatim. The transcriptions were returned to participants for member check and their contents were analyzed after their approval. The interviewers were continued till data saturation, when no new data

emerged. The interview-guided questions were as follows:

1. What are your experiences about the educational accreditation?
2. With what challenges have you encountered in implementing educational accreditation in various domains?

We also asked the probing questions such as:

1. What strategies have you adopted to address these challenges (please give the examples)?
2. What strategies do you offer to solve the challenges based on your experiences?
3. Could you please explain more?

Since most managers working in clinical settings had time constraints, it was decided to conduct more interviews electronically. In this regard, the Accreditation Centre of Iran University of Medical Sciences agreement was secured to send e-mails to the participants who were selected to be virtual participants of the study. Afterward, the other managers involved in the educational accreditation were contacted by telephone, and after securing their permission, the interview questions, information sheet, and informed consent form were e-mailed to them. All participants e-mailed their responses to the Educational Accreditation Centre in written form after a maximum of 2 weeks. We called some e-interview participants after receiving their e-mails and reviewing the responses, in order to do in-depth interviews and ask probing questions (such as giving examples, explaining more, etc.,).

Data analysis

We analyzed data by Colaizzi method that the seven-step process in this method provides a rigorous analysis, with each step staying close to the data. Steps included familiarization, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, producing the fundamental structure, and seeking verification of the fundamental structure.^[13]

Therefore, seven steps were taken to reach the study goals. In the first phase of the Colaizzi analysis, at the end of each interview, participants' recorded statements were repeatedly listened and their statements were transcribed verbatim by one of the researchers (A. Z.). Two researchers (Sh. B. and A. Z.) independently read and re-read each transcript to understand participants' feelings and experiences. In the second phase, the same two previous researchers (Sh. B. and A. Z.) underlined the meaningful and relevant statements and phrases about the studied phenomenon and identified the important sentences. The third phase of the Colaizzi method is extracting formulated meanings. In the mentioned phase,

the researchers extracted the formulated meanings for these statements that represented the meaning and the core of the participants' thinking. Then, in order to ensure the accuracy of the relationship, formulated meanings were compared to the original sentences. In the fourth phase, researchers carefully studied the formulated meanings and clustered them according to their similarities. In this way, subtheme categories were formed. In the fifth step, the results were linked together for a comprehensive description of the studied phenomenon and general categories were created. The researchers (Sh. B. and A. Z.) sent two other researchers (K. S. and Z. S.) a copy of their results along with the original descriptions for validation and confirmation of the consistency between these clusters and the original descriptions and similar results were obtained. In the sixth stage, the researchers combined the results and wrote an exhaustive description of the phenomenon. The findings were returned to some of the participants to validate the findings. No new data emerged.

Results

In this study, three managers participated in the interview and six managers sent their written responses. Most of the participants were female ($n = 7$). All of them participated in educational accreditation as an evaluator or responsive manager. Two of the participants were vice-deputy for education and two of them were head of clinical education development office of the teaching hospitals affiliated to Iran University of Medical Sciences. All participants worked in the clinical settings. Table 1 shows selected demographic characteristics of the participants.

Data analysis showed that most challenges for accreditation of teaching hospitals were related to the themes of standards and criteria, executive policies of accreditation, and educational, attitudinal, and financial infrastructures. In Table 2, six emerged subthemes based on the lived experience of participants are listed, including unabridged standards and criteria, problems relating to the implementation of standards and criteria, ignoring personnel, lack of enough resources, inappropriate

Table 1: Demographic characteristics of study participants

Characteristics	n (%)
Sex	
Female	7 (78)
Male	2 (22)
Academic rank	
Professor	2 (22)
Associate professor	2 (22)
Assistant professor	9 (56)

Table 2: Participants' experiences about educational accreditation challenges

Experiences expressed	Subtheme	Theme
Using inappropriate standards	Noncomprehensive standards and criteria	Challenges related to standards and criteria
Not revising the content of the standards		
Confrontation of accreditation standard items with the ministry's regulations and instructions		
Overlapping criteria		
Ambiguity of some of the criteria and different perceptions of them		
Continuous and repeated modification of criteria		
Using the law of all or nothing for a number of criteria		
The uniformity of the criteria for general and specialist teaching hospitals		
Some incomprehensible criteria		
Uncertain and ambiguous indicators for some of the criteria		
Lacking balance in scoring the criteria	Problems relating to the implementation of standards and criteria	
Following accreditation standards of other countries		
Lack of attention to differences among different teaching hospitals		
Using documentations improperly (e.g., using those related to one criterion for another criterion, in practice)		
Lack of clarity of how to implement standards in a teaching hospital		
Not implementing a number of criteria, such as space, that cannot be added to old teaching hospitals or, in many hospitals, there is no nurse manager as a faculty member		
Inapplicability of the same criteria for all fields and degrees such as paramedical and nursing disciplines		
Inaccessibility of some criteria during implementation		
Shortage of time to implement the standards at the first round of accreditation visits		
Not giving a score to related documentation (such as score of faculty evaluation) elsewhere (such as educational development office of a teaching hospital or in medical school)		
Being limited the importance of implementing criteria to a specific time period	Not paying attention to personnel	Challenges related to educational, attitude, and financial infrastructure
Fixed personnel attitudes		
Fixed organizational culture		
Lack of continuing education		
Inadequate education		
Increasing personnel workload		
Lack of motivation in personnel		
Lack of teamwork		
Alienating managers and heads of teaching hospitals lack of knowledge about accreditation and their nonparticipation in the process		
Lack of motivation and belief among managers and officials of teaching hospitals about educational standards and criteria as a tool for quality improvement		
Expensive human infrastructures	Not providing resources	
Low executive power of educational deputies of teaching hospitals for involving adequate human resources		
The need for long time to prepare infrastructures		
The need for high cost to prepare the financial infrastructures		
Financial problems and pressures in hospitals		
Lack of sufficient budget allocation to educational accreditation of teaching hospitals		
Low executive power of educational deputies of teaching hospitals in terms of resources and budget		

Contd...

Table 2: Contd...

Experiences expressed	Subtheme	Theme	
Weak performance of evaluators in terms of knowledge related to evaluation and lack of deep and thorough understanding of standards	Inappropriate performance of evaluators	Challenges related to executive policies of accreditation	
Evaluators' disagreement and involvement of competing factors			
Different perceptions of evaluators about standards and criteria			
Unfamiliarity of a number of evaluators with electronic educational accreditation system			
Individual interpretation of evaluators about criteria			
Lack of proper and equitable training for evaluators			
Lack of a coherent program to monitor and modify the implementation process of the accreditation (meta-evaluation)			Inappropriate implementation of the accreditation process
Lack of enough time to implement a standard after revising standards			
Problems related to the electronic educational accreditation system			
Accreditation as a limited tool for assessment of quality			
Documentation as the only evidence for evaluating hospital's credit			
Structural and organizational accreditation identity ambiguity			
Impact of accreditation on all current processes of teaching hospitals			
Absence of a coherent schedule			
Dissatisfaction of personnel			
Creating stress among middle-level managers and employees in terms of decreased evaluation score			
Stressing too much emphasis on documentation			

performance of evaluators, and inappropriate implementation of the accreditation process.

Some samples of the statements by the participants

- A. "This program needed to educate people due to its nature, structure, location and performance. Because the form and structure of the program, although it was educational but it involved in all the current processes of the hospitals. In addition, the type of writing of the criteria was familiar and understandable to people who had a medical education, but for some people it was a bit hard. It even seemed vague"
- B. "Scoring may vary depending on the evaluation teams, and even competitive factors may be involved"
- C. "Awareness of the criteria is only at the level of the vice chancellor of the hospitals and the operational training unit. It is not institutionalized in the whole hospital, including the learners and the faculty"
- D. "Accreditation standards in some cases do not take into account differences between hospitals. Also, preparing the infrastructure of this program and its implementation requires time and personnel, but due to the fact that the hospitals face a shortage of experienced and accredited personnel in the field of accreditation, this issue has increased workload and consequently stress among personnel"
- E. "Individuals' views on the evaluation of the criteria were different, which can be seen in the scores of respected evaluators in the external evaluation, which is really an important challenge in the implementation of the accreditation."

The strategies outlined by the participants were categorized into four themes, including revising

and modifying standards and criteria, planning for education, providing human and financial resources, and modifying the executive structure of accreditation [Table 3].

Discussion

The purpose of this study was to explore the lived experiences of senior managers about the challenges of educational accreditation and providing appropriate strategies to overcome these challenges. Data analysis indicated that most challenges for accreditation of teaching hospitals were related to the themes of standards and criteria, executive policies of accreditation, and educational, attitudinal, and financial infrastructures. The review of published studies indicates that most of them are related to the clinical accreditation of hospitals. Therefore, there is a need for special development of standards and their implementation in the field of medical education because the patient, the student, and the clinical teacher are involved in this field.

A literature review of the accreditation indicates that the main themes extracted from this study are consistent with other existing studies such as the study of Salehi and Payravi; Mosadeghrad *et al.*; and Mahmoodian *et al.*^[14-16] Soleimani and Heidari, for example, have reported a lack of personnel, lack of sufficient infrastructures and technology, and lack of implementation guidelines as challenges of educational accreditation of teaching hospitals.^[17] Salehi and Payravi study showed that challenges of teaching hospitals accreditation include inadequate standards, high costs, shortage of personnel,

Table 3: Suggested strategies by study participants

Suggested solutions	Theme
Changing standards and criteria according to the country's indigenous conditions	Revising and modifying standards and criteria
Reducing the number of criteria and simplifying, clarifying, and eliminating their ambiguity	
Integrating common criteria or classifying them into one category	
Revising and updating the criteria (periodically)	
Determining the timing for implementing the criteria (2 years or not)	
Preparing the initial draft of criteria and sending them to all the field experts	
Deleting a number of criteria or creating infrastructures to achieve them	
Defining percentages for fully necessary or necessary criteria instead of using all or none for them	
Limiting the number of criteria that are in the form of all or nothing	
Writing an implementation instruction about how to evaluate the criteria	
Paying attention to conditions and facilities available during the revising process	Planning for education
Developing a glossary or terminology for these standards	
Modifying sources related to obtaining and receiving documentation	
Adequate training of evaluators and selecting experienced evaluators	
Adequate training of personnel involved in accreditation	
Paying attention to required abilities, required training, incentives, and punishment	
Planning for continuous training courses	
Providing educational products in the form of a booklet, brochure, or virtual teaching	
Training evaluators and preparing sample checklists for scoring	
Training and informing external evaluators according to the level of expertise of the evaluators	
Stability and nonreplacement of senior teaching hospital managers	Providing human and financial resources
Defining description of tasks for people involved in accreditation	
Defining working hours, type of activity, how to interact within the hospital, education degree of personnel	
Providing executive guarantees to everyone involved in accreditation	
Providing funding and requirement facilities	
Involving physicians who are faculty members in educational accreditation	
Recruiting staff, preferably postgraduate of medical education in hospitals	
Creating a team of supervisors at the Accreditation Monitoring Centers and mentoring of teaching hospitals by them	
Conducting clinical and educational accreditation concurrently	
Providing a detailed accreditation report to teaching hospitals	
Having multiple plans for evaluation of teaching hospitals	Modifying the executive structure of accreditation
Periodically monitoring the teaching hospitals and giving them feedback	
Conducting monthly or seasonal meeting for evaluators	
Holding consultation meetings after accreditation	
Informing evaluation timetables to teaching hospitals	
Definition of educational development office of teaching hospital in the organization chart of the Ministry of Health	
Modifying structural chart of hospitals	

inadequate training, high workloads, stress, lack of motivation, lack of time, inappropriate scoring methods, lack of resources, evaluators' mentality, and lack of sufficient funding.

According to the World Health Organization, the challenges in implementing hospital accreditation are technical, social, and managerial in the Eastern Mediterranean.^[18]

During their study, Ng *et al.* identified the weaknesses of accreditation as follows: increased personnel workload, lack of awareness about continuous quality

improvement, organizational resistance to change, insufficient personnel training, and lack of performance outcome measures. They also identified factors such as "change in organizational culture, multidisciplinary team building, increased interaction and communication and development of suitable accreditation standards for local" as strengths and opportunities of accreditation that contrast the findings of the current study. In the current study, these factors were identified as an accreditation challenge.^[19]

Ho *et al.* study has also revealed that from the perspective of Taiwanese students, aside from the positive effects of

accreditation, the unintended impacts of accreditation include decreasing clinical learning opportunities, increasing trivial workload, and violation of professional integrity.^[20]

The above examples, which are similar and contrast to the current study, show that appropriate decisions should be made to improve accreditation in teaching hospitals. In this regard, the experiences of various organizations and countries at the international level can be used. For example, the experiences of The Royal Australian and New Zealand College of Obstetricians and Gynecologists can be used in the challenges related to standards and criteria. In this college, the purpose of accreditation of sites and hospitals is ensuring about minimum acceptable training standards. It categorizes standards based on the provision of effective training and support for trainees that standards allow for variations in function and location. Standards are broadly applicable to all hospitals and sites in both Australia and New Zealand.^[21]

In addition, another finding of the current study was related to the solutions for these challenges which seem to be a good solution to promote teaching hospital accreditation. The results showed that these strategies are related to reviewing and revising standards and criteria, planning for education, providing human and financial resources, and modifying the executive structure of accreditation. Most of the published studies in this field also suggested staff training, development of appropriate standards and criteria, and providing resources as solutions.^[22]

Limitation

There were two limitations in the current study. Although the study participants were experienced in evaluating other Iranian universities and teaching hospitals, the present study was conducted at one university. Another limitation of the research was the lack of interview with students and staff. These limitations could be addressed and used to guide the future research in this area.

Conclusions

Considering the experiences and solutions expressed in the current study and other studies, it is necessary to improve the quality of accreditation of teaching hospitals in terms of standards and criteria, infrastructures, and executive policies of accreditation. In this regard, strategies such as staff training, development of appropriate standards, and criteria based on effective clinical training, providing human and physical resources, and culture building can be helpful.

Suggestion

It is recommended that further research be undertaken about of educational accreditation from the perspective of the educational staff, the faculty members, and the students.

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Conflicts of interest

There are no conflicts of interest.

References

1. Rizwan M, Rosson N, Tackett S, Hassoun H. Opportunities and challenges in the current era of global medical education. *Int J Med Educ* 2018;9:111-2.
2. Ulker N, Bakioglu A. An international research on the influence of accreditation on academic quality. *High Educ Stud* 2018;44(1):1-12.
3. Alomari JS. Ontology for Academic Program Accreditation. *Int J Adv Comput Sci Appl* 2016;7:123-7.
4. van Zanten M. The association between medical education accreditation and the examination performance of internationally educated physicians seeking certification in the United States. *Perspect Med Educ* 2015;4:142-5.
5. West DJ, Ramirez B, Filerman G, Stanowski A, Vasadze O, Malik AM, et al. Global accreditation strategies in health management education. *Front Public Health* 2019;7:12.
6. Yari Fard K, Saadat M, Azami S, Abdollahi L, Kabiri N, Valizadeh S, et al. Obstacles, Solutions and Potential Implementation of Accreditation in Iranian Hospitals from the Perspective of Senior Managers in University of Medical Sciences, Tabriz and Ardebil: A Qualitative Study. The first Congress on Clinical Governance and Continuous Quality Improvement; Tabriz University of Medical Sciences; 2012.
7. Tabrizi J, Gharibi F. Systematic survey of accreditation models for designing a national model. *Sci J Kurdistan Univ Med Sci* 2011;16(3):95-109.
8. Mirzadeh A, Tavakoli S, Yazdani K, Taj M. Accreditation: A way to quality assurance and improvement. *Iran J Med Educ* 2004;4:105-16.
9. The Evaluation Criteria and Accreditation of Educational Hospitals. Ministry of Health and Medical Education Educational Vice Chancellor; 2016.
10. Guidance for Educational Evaluation and Accreditation Educational Hospitals. Iran: Ministry of Health and Medical Education; 2017.
11. Neubauer BE, Witkop CT, Varpio L. How phenomenology can help us learn from the experiences of others. *Perspect*

- Med Educ 2019;8:90-7.
12. Fraenkel JR, Wallen NE, Hyun HH. How to Design and Evaluate Research in Education. New York: McGraw-Hill; 1993.
 13. Morrow R, Rodriguez A, King N. Colaizzi's descriptive phenomenological method. *Psychologist* 2015;28:643-4.
 14. Salehi Z, Payravi H. Challenges in the implementation accreditation process in the hospitals: A narrative review. *IJN* 2017;30:23-34.
 15. Mahmoodian S, Safaei F, Meraji M, Kimiafar K, Farsinegar N, Ghasemi R. Challenges and strengths of implementing accreditation process from health information management staff perspective. *J Paramed Sci Rehabil* 2016;5:25-33.
 16. Mosadeghrad AM, Akbari-sari A, Yousefinezhadi T. Evaluation of hospital accreditation standards. *RJMS* 2017;23:43-54.
 17. Soleimani A, Heidari Gorji A. Examining the observance level of educational accreditation standards in Iranian hospitals. *Jentashapir J Health Res* 2018;9:e74373.
 18. World Health Organization. Accreditation of Hospitals and Medical Education Institutions-Challenges and Future Directions A. Hospitals. World Health Organization; 2003.
 19. Ng K, Leung GK, Johnston JM, Cowling BJ. Factors affecting implementation of accreditation programmes and the impact of the accreditation process on quality improvement in hospitals: A SWOT analysis. *Hong Kong Med J* 2013;19:434-46.
 20. Ho MJ, Chang HH, Chiu YT, Norris JL. Effects of hospital accreditation on medical students: A national qualitative study in Taiwan. *Acad Med* 2014;89:1533-9.
 21. Accreditation Standards & Guidelines for Hospitals in the FRANZCOG Training Program. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists; 2016.
 22. Mosadeghrad A, Shakibaei E. Hospital accreditation implementation prerequisites. *JHOSP* 2017;16:43-56.