

Evaluation of Medical University Deputies' and Managers' Perspectives on the Outcomes of Institutional Accreditation of Medical Universities from 2018-2019

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Abstract

Background: Accreditation is one of the most important ways of guaranteeing the quality of medical education.

Objectives: The aim of this study was to determine medical university deputies' and managers' perspectives on the outcomes of institutional accreditation in Iran.

Methods: This was a descriptive-analytical cross-sectional study conducted as a census to assess the views of the deputies and managers of 65 medical universities in Iran on the outcomes of institutional accreditation. The research tool was a questionnaire consisting of items about institutional accreditation standards in various fields, which was provided to deputies and managers via email or in person. After data collection, data analysis was performed using SPSS software version 22.

Results: The results showed that from the perspectives of medical university deputies and managers, the outcomes of institutional accreditation were satisfactory in the dimensions of mission, management and goals, resources and facilities, faculty members, and student and cultural activities. Also, the outcomes were reported relatively satisfactory in research and staff training dimensions. The dimensions of staff training and resources and facilities had the lowest (60.34 ± 17.22), and highest (73.83 ± 15.12) mean scores, respectively.

Conclusion: Deputies and managers believed that institutional accreditation had satisfactory impacts on some areas according to the available resources and facilities. Since these areas have a close relationship, the desirability of each area also boosts other dimensions, which ultimately upgrades university credit and qualification.

Keywords: Accreditation, Institutional Accreditation, Outcome, University of Medical Sciences

Background

The higher education system is a dynamic and purposeful network with both quantitative and qualitative dimensions. The coordinated growth of this system requires the parallel development of both quantitative and qualitative arms (1). Today, with the increasing expansion of universities worldwide, many experts argue about the appropriate quality of higher education to achieve high-quality education (2, 3). The trend of developments shows that experts have always been concerned with the quality improvement of universities and higher education institutions (4).

As the optimal performance of any organization requires a continuous monitoring system (5), and assessment is an indispensable component of any activity and executive work (6), the only way to nail the desired success seems to be a quality improvement (7). There are various assessment models to evaluate the quality of higher education, among which the accreditation model has been acknowledged as the most reliable and powerful method due to its maximum compliance with available standards (8). This method has been used as the evaluation model specific for higher education in many countries and universities (9). It can be said that accreditation

is an effective strategy with a wide and deep impact on educational quality improvement and quality assurance, and many experts regard this model as a symbol of quality and its continuous improvement (2, 10). In this regard, the accreditation model, as a comprehensive quality improvement strategy, has greatly contributed to and emphasized continual quality improvement, especially in the education and health sectors (11).

By summarizing the classic definitions of accreditation, this process can be described as the licensing or certification of an educational institution based on the discretion of experts in the field and predetermined instructions (12). Although the concepts of accreditation and certification are usually used interchangeably, credit only refers to organizations, while certification may apply to individuals, as well as organizations (13). From the perspective of medical education, accreditation is capable of simultaneously emphasizing the preservation and uninterrupted quality improvement of educational values and making the educational institution accountable towards social needs (14). Academic credibility is a quality assurance process during which an educational institution is evaluated by an accreditation institution based on predetermined criteria and plays an important role in innovation (15).

The accreditation process encompasses four steps: self-assessment, peer-assessment, issuing accreditation, and re-accreditation. The self-assessment step is a prerequisite and the starting point of the accreditation process (11). In the peer-assessment step, the declarations in the self-assessment report are verified, and the university space, facilities, and equipment are visited in person. In the third step, the accreditation organization sends the visit report to the university, announcing either accreditation or the need for amendments (16). It is noteworthy that accreditation with high quality confirms the comprehensive quality of the whole institution (17).

In recent years, measures have been taken to establish accreditation infrastructure in medical education in Iran, including the health system transformation plan, whose fourth step is concerned with transformation and innovation in education (enclosing 12 packages). One of these packages is related to accreditation that consists of four plans, three of which are required to be implemented by universities (18).

In the study by Yousefi *et al.* (2012) entitled "The development of institutional accreditation system in Iran's universities of medical sciences," the main goal of the institutional accreditation project was boosting medical education quality and trying to establish an accreditation system in the country. The authors believed that this project would improve and guarantee the quality of higher education institutions (14). Evaluation can be valuable if it leads to change in stakeholders, including program managers and implementers (19). According to the result of Frank and Chapman, empowering the managers and staff of the institution is a primary necessity for the successful implementation of the accreditation project in

health centers (20).

An international survey on 44 global accreditation organizations showed that quality improvement was the main motivation for accreditation, according to more than 80% of the respondents (10). Pomey *et al.* (2010) also stated that accreditation was one of the factors influencing progress and change (21).

Managers, administrative staff and quality assurance professionals are expected to be those who understand the definitions, characteristics and principles of quality culture and introduce their strategies, policies and plans for effective quality implementation. (22). Accreditation processes focus on financial items (23), and some studies have declared accreditation as a time-consuming and bureaucratic event that increases the workload and stress of employees (8). Considering the above-mentioned issues, accreditation has a critical role in institutional quality improvement. On the other hand, the first institutional accreditation in Iran's universities of medical sciences dates back to 2016-17.

Objectives

Considering that institutional accreditation can have a positive role in cutting costs, saving time, and boosting the efficiency and productivity of an educational institution, the present study was conducted to investigate the perspectives of Iran's medical universities' deputies and managers towards the outcomes of institutional accreditation.

Methods

This was a descriptive-analytical cross-sectional study, in which six accreditation dimensions were assessed using six separate questionnaires. The accreditation of all universities of medical sciences has been implemented in Iran since 2016-17. The target population in this study included the deputies of universities, managers of universities of the executive units, resources, and facilities, those in charge of staff training, faculty members, students and cultural affairs, research units, the officials of institutional accreditation, and the secretariats of the health system transformation and innovation plan in all medical universities.

The study population included 130 vice-chancellors and managers in universities of medical sciences, who had responsibilities in resources and facilities, staff training, faculty members, students and cultural affairs, and research and technology. The questionnaires were provided to the vice-chancellors and managers through census; thus, they were able to fill the questionnaires if they were interested in participating. For the secretary of the medical education transformation plan office, primary information on the respondent in charge of the target field was obtained by a phone call, and after necessary coordination, the questionnaire was presented in person or sent via email.

Data collection tools were six separate questionnaires assessing the six studied dimensions, which were designed

based on the mandatory institutional accreditation standards. The validity of the data collection tool was verified by the content and face validity methods. The prepared tool was also provided to 20 experts, and after reviewing their opinions and introducing minor amendments, the reliability of the questionnaire was assessed by delivering it to 20 other experts, and a Cronbach's alpha coefficient of 0.89 was obtained.

The first part of the data collection tool addressed the respondent's demographic information, including age, gender, education, work experience, management experience, type of employment, and job status (employee or faculty member). The second part included specialized questions in each dimension, addressing the mandatory standards of institutional accreditation. The responses were provided on a 5-point Likert scale (very much, much, somehow, little, and too little). For data analysis, "very much" and "much" answers were considered satisfactory, the "somehow" answer was considered relatively satisfactory, and the options of "little" and "too little" were regarded as unsatisfactory. Also, an average score, ranging from 0 to 100, was calculated for each domain. The dimensions included mission, goals, and management (27 items), resources and facilities (40 items), staff training (7 items), faculty members (20 items), student and cultural affairs (11 items), and research (25 items). The questionnaire was provided to the target population either in-person or via email. We repeatedly called or met the participants in-person to gather the data through the self-administered questionnaire.

The data, which were kept completely anonymous and confidential, were finally analyzed. It is noteworthy that some questions related to the managers were referred to by them to be answered by the authorities of the relevant accreditation package or the transformation and innovation plan office. This study was approved under the ethics code of "1397. 437 IR.KMU.REC", received relevant permits, and was conducted after necessary arrangements. Data analysis was conducted using SPSS software version 22 and the Chi-square test.

Results

In this study, 104 vice-chancellors and managers responsible for different aspects of institutional

accreditation from 65 universities of medical sciences completed the questionnaire. The response rate was 80%. Most of the respondents were males (68.3%), faculty members (65.4%), and owners of specialized degrees in clinical fields (46.2%) (Table 1).

Regarding mission, goals, and management, 53 managers responded to the questionnaire, of whom 28 cases (52.8%) reported a desirable outcome, and others acknowledged relatively desirable outcomes. Relatively desirable outcomes were related to the fields of assessment and evaluation, feedback, and budget allocation. Concerning resources and facilities, 56 cases responded to the questionnaire, of whom 40 cases (71.4%) reported satisfactory outcomes. Access to public transportation for staff and students was reported with relatively satisfactory outcomes. In the aspect of staff training, 29 (50%) out of 58 participants declared desirable outcomes. Relatively desirable outcomes were related to the annual budget allocated for staff training (based on per capita) and randomly evaluating at least 20% of programs (using appropriate models).

Regarding the dimension of faculty members, 32 (65%) out of 49 participants reported satisfactory outcomes for accreditation. The sub-dimensions with relatively satisfactory outcomes were the appropriate use of faculty member assessment results, seeking faculty members' participation in improving the process, and the workload of faculty members. For the dimension of students and cultural affairs, 51 participants responded to the questionnaire, and 36 cases (70.6%) declared favorable outcomes. Finally, regarding the dimension of research, 54 vice-chancellors and managers provided answers, of whom 24 cases (44.4%) declared satisfactory outcomes for institutional accreditation in this dimension, and 24 cases (44.4%) reported relatively desirable outcomes in terms of assigning research managers and authority delegation to them, the use of study opportunities and scientific trips, budget allocation, and the growth of scientific publications (Table 2).

The means and standard deviations of the scores of different areas based on managers' and deputies' responses were calculated. As it can be seen, the highest mean score was related to the dimension of resources and facilities, and the lowest score was recorded for the dimension of staff training.

Table 1. The Participants' Demographic Features

Demographic variables		N (%)
Gender	Male	71 (68.3)
	Female	32 (30.8)
	No response	1 (0.9)
Level of Education	Bachelor's degree	5 (4.8)
	Master's degree	26 (25.0)
	Ph.D.	48 (46.2)
	General practitioner	17 (16.3)
	No response	8 (7.7)
Employment Status	Clerk	31 (29.8)
	Faculty member	68 (65.4)
	No response	5 (4.8)

Table 2. The means (SD) and frequency of the perspectives of vice-chancellors and managers of medical universities towards the outcomes of institutional accreditation in various fields

Accreditation field	Score (0-100) Mean (SD)	Outcome N (%)		
		Satisfactory	Relatively satisfactory	Unsatisfactory
Mission / Goals	71.67 (16.14)	28 (52.8)	25 (47.2)	0 (0)
Resources / Facilities	73.83 (15.12)	40 (71.4)	12 (21.4)	4 (7.2)
Staff training	60.34 (17.22)	29 (50)	26 (45)	3 (5)
Faculty members	66.74 (15.58)	32 (65)	15 (31)	2 (4)
Students / Cultural affairs	62.01 (15.24)	36 (70.6)	14 (27.5)	1 (1.9)
Research	69.55 (17.07)	24 (44.4)	24 (44.4)	6 (11.2)

Based on the Chi-square test, demographic variables (gender, education, and employment status) were not significantly associated with the vice-chancellors' and managers' viewpoints regarding different dimensions of mission, goals and management, resources and facilities, staff training, faculty members, students and cultural affairs, and research ($P > 0.05$).

Discussion

Our results showed that based on the participants' viewpoints in the dimensions of mission, goals, and management, 52.8% declared satisfactory outcomes, and 47.2% reported relatively satisfactory outcomes for institutional accreditation. Among the items of this dimension, satisfactory outcomes were obtained for the characterization, comprehensiveness, and clarity of the university mission and goals and performing assessment and reporting its results. On the other hand, relatively satisfactory outcomes were reported for the dimensions of the assessment process, receiving feedback, and budget allocation. According to these results, it can be said that universities are more focused on goals, statements, missions, and programs; however, there seems to be a long way ahead to reach a desirable status in the assessment of the rate of goal achievement. Gilavand and Maraghi (2017), in their research entitled "Assessing the quality of educational services of Iranian medical universities," stated that these universities could focus on the goals and fill the gaps by relying on their strengths and opportunities, reducing weaknesses, and avoiding risks and turning them into opportunities (24). The results of a study by Alani *et al.* (2015), entitled "The quality of services in higher education in Brunei," emphasized the role of university managers in the effective quality improvement of provided services, achievement of the goals of the university, and doing the employees' jobs more consciously and accurately (25). The results of this study also emphasized the role of managers' and employees' performance in achieving the desired outcome. On the other hand, Safavi *et al.* (2011) and Khodadadi *et al.* (2014), who studied the status of internal assessment in various departments of different faculties and universities, showed the strong position of the dimension of goals, mission, and management (26, 27). The findings of Ajam Zibod *et al.* (2011), Abedini *et al.* (2013), Ahmari *et al.* (2013), and Najafzadeh *et al.* (2014) revealed that the dimension of goals, mission, and management had a satisfactory level,

which was consistent with the results of the present study (28-31). The results of studies by Mirzaei *et al.* (2012) and Rahimifard *et al.* (2013) on the internal assessment and that of Mosleh *et al.* (2016) on the external assessment of departments in different faculties and universities showed the relatively favorable status of the field of goals, mission, and management (32-34). According to the results of the present study, it can be said that managers pay more attention to issues, such as goals, statements, and missions, leading to the achievement of the desired level in this area. Thus, it is expected to reach the desired level in other areas as well by allocating budget, planning, cooperation, and paying more attention in the future. The results of another study by Baziar and Mohammadi (2016), who investigated the internal assessment of the Department of Statistics of the University of Science and Culture, showed the unsatisfactory status of organizational structure, facilities, and management (35). This was inconsistent with the results of the present study and may indicate the more attention of the Ministry of Health and Medical Education and its managers to accreditation and their steps towards universities' goals and missions according to institutional accreditation standards.

Regarding resources and facilities of medical universities across the country, desirable, relatively desirable, and undesirable outcomes were reported as 71.4%, 21.4%, and 7.2%, respectively. Among the standards of this aspect, the items related to space and physical facilities, safety standards, practical training facilities and equipment (laboratories, skill labs, and library), information systems, and facilities of student dormitories had desirable conditions. However, staff transportation had a relatively satisfactory outcome. It seems that despite financial shortages, the deputies of development and resource management in universities have paid good attention to the standards of this field. Asiyai and Okoro (2019) studied the management strategies used to improve higher education performance in Nigeria and declared that allocating adequate budget to higher education (for improving students' skills, equipping laboratories, subscribing to credible journals, purchasing textbooks, etc.) could upgrade the efficiency and quality of education (36). On the other hand, the results of studies by Khosravan *et al.* (2010) and Safavi *et al.* (2011) on the internal assessment of educational departments showed a strong rank for the dimension of resources and facilities (27, 37); the results of these studies were in line with those

of the present study. The results of another study by Salimi and Bagherzadeh (2015) on the external assessment of educational departments showed the satisfactory condition of resources and facilities (38), which was in parallel with the present study results. It seems that budget allocation and paying attention to institutional accreditation standards by universities' deputies and managers of development and resources have contributed to the favorable outcomes observed in this area. The desired status observed in this dimension is expected to increase the quality and efficiency of universities in terms of student learning, ultimately boosting university credibility.

According to the managers' perspectives regarding staff training, satisfactory, relatively satisfactory, and unsatisfactory outcomes were reported to be 50%, 45%, and 5%, respectively. Of the seven standards in this field, five had a desirable outcome, and two had a relatively desirable outcome. Therefore, it can be said that from the perspective of deputies and managers, the outcome of institutional accreditation has been satisfactory in the field of staff training. It seems that following institutional accreditation, activities in this field became systematic, leading to a satisfactory outcome. Managers are also expected to pay more attention to the annual budget allocated for staff training. Shariatmadari *et al.* (2014) appraised the effectiveness of in-service courses in boosting employees' performance and stated that training, if it is purposeful, planned, and continuous and encompasses different levels of the organization, can help increase staff's job skills and provide the opportunity to increase their knowledge and awareness (39). Therefore, it can be stated that universities should allocate a certain per capita budget to staff training to be able to hold necessary training courses to improve employees' knowledge and skills. Also, assessments should be conducted regularly and uninterrupted to upgrade the system.

In the dimension of faculty members, desirable, relatively desirable, and undesirable outcomes were reported to be 65%, 31%, and 4%, respectively. Regarding the standards of this field, a satisfactory outcome was observed for appropriate employment policy, distribution and number of faculty members, continuous training, assessment, feedback, and promotion of faculty members. On the other hand, the use of assessment results, faculty members' participation in process improvement, and the workload of faculty members received relatively satisfactory outcomes. It seems that the universities under the supervision of the Ministry of Health and Medical Education have met acceptable performance in this field and fulfilled institutional accreditation standards in this area. Taheri *et al.* (2017) explored the educational needs of the faculty members of Guilan University of Medical Sciences and concluded that participation in training courses could improve the faculty member's educational capabilities and, subsequently, education quality (40). This was consistent with the present study results, where the deputies and managers, who themselves were faculty members, declared a favorable outcome in this dimension.

The results of Salimi & Bagherzadeh (2015) and Baziar & Mohammadi (1395) regarding the internal assessment of educational departments showed a relatively satisfactory status for the dimension of faculty members (35, 38). According to the results of the present study, in order to nail desired outcomes in this dimension, more attention should be paid to appropriately use the results of faculty member evaluation, motivating them to prevent scientific stagnation and reducing the high workload of faculty members.

Regarding students and cultural affairs, the outcomes in medical universities across the country were reported to be 70.6% satisfactory, 27.5% relatively satisfactory, and 1.9% unsatisfactory. Among the standards of this dimension, those with a satisfactory outcome included the provision of necessary services to students, presenting appropriate extracurricular programs, attracting students' participation in the affairs related to them, and handling disciplinary issues. Therefore, it can be concluded that universities' activities in this field were compatible with accreditation standards. Also, extracurricular programs held by the Ministry of Health, Treatment, and Medical Education, such as cultural festivals, Quran and Etrat festivals, etc., can be interesting for students and motivate them to participate in competitions for acquiring national rankings for universities, helping to achieve favorable outcomes in this field. Feizi *et al.* (2015) investigated Iran's medical universities' cultural infrastructure and performance from four perspectives of cultural affairs, facilities, the performance of organizations and centers, and the performance of cultural affairs deputies. According to the results of the recent study, in parallel with strengths (holding programs based on already scheduled annual plans, awarding the winners of competitions and festivals, etc.), there were clear weaknesses in some dimensions (41). According to the respondents in the present study, it seems that the dimension of students and cultural affairs has the highest capacity for the applicability of accreditation standards so that they have been implemented in all dimensions, leading to satisfactory and relatively satisfactory outcomes in most dimensions.

Regarding the dimension of research, satisfactory, relatively satisfactory, and unsatisfactory outcomes were reported to be 44.4%, 44.4%, and 11.2%, respectively. Short and long-term plans, holding regular meetings, and reviewing and supporting research projects and publications attained desirable outcomes in this dimension. Besides, the dimensions of criteria for enacting and delegating authority to research managers, the use of study opportunities and scientific trips, budget allocation, and increasing the number of publications obtained relatively desirable outcomes. Shoja & Darvish Motavali (2015) evaluated the efficiency of research activities of 14 branches of Islamic Azad University during three periods from 2010 to 2013 and demonstrated that only four branches achieved high efficiency in this dimension (42), which was in agreement with the results of the present study. It seems that the research deputies of Iran's

medical universities work in a completely systematic way. In addition, research activities are among mandatory institutional accreditation standards, and faculty members are required to obtain a minimum research score for promotion and obtaining annual ranks. This can be a leverage for boosting universities' research activities, creating competition between universities and, ultimately, satisfactory outcomes in this dimension.

In conclusion, according to the present study results, the following items are suggested. Regarding the great scope of institutional accreditation, the Ministry of Health, Treatment, and Medical Education is suggested to design a comprehensive database to designate the documents and results related to each accreditation area in every university; hence, access to these data would be facilitated for relevant experts. Considering that some medical schools in the country are operating as academic units, it is suggested to include them in institutional accreditation programs more seriously. During institutional accreditation meetings (national, regional, or at poles), it is recommended for internal and external evaluators to share their experiences of the process so that other centers can strengthen institutional accreditation standards and resolve their weaknesses. It is also recommended to use leading countries' experiences in the field of institutional accreditation.

Conclusion

According to the results of the present study and the perspectives of medical universities' deputies and managers on the outcomes of institutional accreditation, more satisfactory outcomes were reported in the dimensions of research, staff training, faculty members, students and cultural affairs, mission and goals, and resources and facilities, respectively. Since these dimensions are tightly related to each other, an improvement in each dimension can upgrade and strengthen other dimensions, which ultimately increases university credibility and quality. On the other hand, it seems that the executive plans and instructions issued by the Ministry of Health, Treatment, and Medical Education have a central role in achieving desirable institutional accreditation outcomes in universities.

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

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