



Comparison of self-study and external evaluation of educational hospitals, whether accreditation is effective on the quality of education

Fariba Jokar¹, Maryam Avizhgan², Hossein Mahjobipoor³, Behnoosh Shojaei⁴

Abstract:

BACKGROUND: Self-study and site visit are two main steps of institutional accreditation, but the divergence between the point of view between internal and external evaluators is always considered to be the major challenge to all types of accreditation. In this regard, the aim of this study is to compare the results obtained from self-study and site visit of accreditation standards in teaching hospitals.

MATERIALS AND METHODS: A descriptive analytical study was conducted using secondary data in 2021. The examined sample included the accreditation documents of five teaching hospitals having performed self-assessment and external evaluation in 2018. Data analysis was done using descriptive statistics (frequency, percentage, mean, standard deviation) and analytical statistics (independent *t*-test) for each. Statistical analysis was conducted with IBM SPSS Statistics 25.0.

RESULT: The results obtained from the comparison of mean in the area of "monitoring and evaluating the effectiveness of the educational system" showed that there was a significant statistical difference between the results of self-study and those of external evaluation ($P = 0.01$). They also indicated that the external evaluators assessed the level of the standard higher than self-evaluators. In other standards, there was no significant difference between the results obtained from review of self-assessors and external evaluators.

CONCLUSION: The findings showed the difference between the results from self-study and external evaluation only in "monitoring and evaluating the effectiveness of the educational system." The close similarity between the result of internal and external evaluators can be caused by two factors: the clarity of standards and the quantitative nature of hospital accreditation, and the proper training of evaluation teams. Setting the basic criteria for choosing valuable assessors and providing effective training in the field of accreditation can be play an important role in congruency between the results.

Keywords:

Accreditation, accreditation self-study, accreditation standard, external evaluation, teaching hospital

Introduction

Medical universities in Iran, not only train students, but also deliver and oversee health services to the community.^[1] Health professionals education is a part of the higher education system dealing with human life. Since a core of the health professionals education process is carried out in teaching hospitals, if suitable and

high-quality educational programs and environments are not provided, irreparable damage is caused to the health of society and the scientific reputation of the universities and graduates.^[2] Therefore, educational institutions must put their best efforts into providing effective and efficient hospital training. One of the ways to ensure the quality of education is accreditation. Through accreditation,

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 License (CC BY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Jokar F, Avizhgan M, Mahjobipoor H, Shojaei B. Comparison of self-study and external evaluation of educational hospitals, whether accreditation is effective on the quality of education. J Edu Health Promot 2026;15:64.

¹Department of Medical Education, Medical Education Research Center, Isfahan University of Medical Sciences, Isfahan, Iran, ²Medical Education Research Center, Isfahan University of Medical Sciences, Isfahan, Iran, ³Department of Anesthesiology, School of Medicine, Anesthesiology and Critical Care Research Center, Al-Zahra Hospital, Isfahan University of Medical Sciences, Isfahan, Iran, ⁴Education Development Office, School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Dr. Maryam Avizhgan,
Associate Professor,
Medical Education
Research Center, Medical
Education Development
Center, Isfahan University
of Medical Sciences,
Isfahan, Iran.
E-mail:
maryamavizhgan@gmail.com

Received: 24-04-2024

Accepted: 24-12-2024

Published: 27-02-2026

the organizational efficiency is examined using the standards set by an external organization, leading to decisions made regarding the institution's compliance with the standards and the institution's accreditation status.^[3] Although accreditation improves the satisfaction of health service providers,^[4] develops learning,^[5] and facilitates communication,^[6] it faces many challenges, including the lack of necessary infrastructure, increased employee workload, employee resistance, high cost, the time-consuming implementation of standards,^[7] legal support, workforce recruitment and training, documentation, and technology.^[8]

Several studies have been conducted regarding the accreditation of teaching hospitals, some of which have pointed to its positive effects, including decreasing the costs,^[9] and improving accountability.^[10] On the other hand, several studies have suggested neutral or even negative impacts of accreditation, including lack of attention to daily activities,^[6] lack of significant relationship between accreditation and quality,^[11] and reducing costs.^[12] But the crucial point in teaching hospitals is the effects of accreditation on the promotion and improvement of the education quality.

The education provided in teaching hospitals must be in line with national accreditation standards as much as possible and be improved constantly. As accreditation allows the possibility of systematic information collection,^[13] ensures the educational environment,^[14] and continuously improves its quality,^[15] it is a well-known approach used in universities and world-renowned teaching hospitals, having a special place in monitoring and evaluation. Accreditation of teaching hospitals is a process of systematic assessment and determination of credit by an external organization using standards. Accreditation standards of teaching hospitals were set in nine areas, and 81 standards were developed in 2015. They are governmental and completely mandatory in terms of structure and administrative system. The fields of standards include education management (10 ones), monitoring and evaluating the effectiveness of educational system (7 ones), academic faculty members (13 ones), learners (9 ones), facilities management (including space, installations, equipment), financial and human resources management in research and education (12 ones), training of learners in emergency and para clinic departments (6 ones), educational programs and processes (11 ones), respect for patient rights in the educational procedure (7 ones), and teaching hospitals as an area of clinical research (6 ones).^[16]

External evaluators obtain and record information through observation, interview, and document review.^[17] Several studies indicate evaluators acting to their taste,

inexperience, and disagreement, emphasizing the importance of carefully selecting and training the evaluators.^[18-25] Self-study is consequently perceived as a challenge rather than a chance for development within the institutional community. The self-study process possesses the potential to provide advantages to both participants and institutions in numerous ways. So, the expanding body of knowledge advocates for institutions to regard self-study as a catalyst for positive transformation and ongoing enhancement.^[26] The significant challenge is the difference in the views of self-assessors and external evaluators in accreditation, so the purpose of this study is to compare and analyze the results obtained from self-study and external evaluation of teaching hospitals accreditation in Isfahan University of Medical Sciences.

Materials and Methods

Study design and setting

This descriptive-analytical study was conducted in teaching hospitals of Isfahan Medical Science University in 2021.

Study participants and sampling

The statistical sample includes the accreditation documents of five teaching hospitals, selected by a census method. There is a system for entering the self-study and site visit data.

Data collection tool and technique

The data related to self-study and site visit were extracted in 2019 in a short time by using the secondary data. In order to coordinate the extraction of data, a data collection form containing the results of self-assessment, the name of the hospital, and columns related to the standards score of each area was included. Also, the same information was collected about the external evaluation results.

Ethical consideration

This project was financially supported by the Medical Education Research Center of Isfahan University of Medical Sciences, with scientific code 2400164 and ethical code IR.ARI.MUI.REC.1400.007. The names of the hospitals were not mentioned to observe ethical rules and maintain confidentiality.

Statistical analysis method

Data analysis was conducted with SPSS software 25.0 and with descriptive statistics (frequency, percentage, mean, and standard deviation) by level (absolutely essential, necessary, and developmental), area (nine areas of accreditation), hospital, and type of evaluation (self-assessment and external evaluation). Independent t-tests were used to compare self-assessment

and external evaluation. All statistical analyses were conducted using a significance level of 5%.

Findings

The two data sets of evaluations, collected in five hospitals at short intervals 2019, were included in the study. The scores of the standards were calculated based on self-study and external evaluation separately for each area and level. The lowest score was related to the standard “teaching the students in emergency and para clinic departments,” with 21.1 ± 4.8 and 22.3 ± 0.7 in self-study and external evaluation, respectively. The highest scores were reported on the standard “educational programs and processes” in self-study and “monitoring and evaluating the effectiveness of the educational system” in the external evaluation with 67.3 ± 4 and 69.5 ± 10.2 , respectively [Table 1].

Regarding the essential standards, the lowest average scores were related to the standard “teaching hospitals as an area of clinical research,” with 6 ± 0 and 4.8 ± 2.7 in self-study and external evaluation, respectively. In self-study and external evaluation, the highest scores were reported on “educational programs and processes” with 34.4 ± 3 and “monitoring and evaluating the effectiveness of the educational system” with 41.4 ± 6.7 , respectively. Regarding the essential standards, the lowest average scores in the self-assessment and the external evaluation were related to “respecting patient rights in educational processes” and “teaching the students in emergency and para clinical departments,” with 6.5 ± 3.7 and 7.5 ± 3.1 , respectively. The highest average scores in the self-assessment and the external evaluation were related to “academic faculty members” and “monitoring and evaluating the effectiveness of the educational system,” with 22.5 ± 3.6 and 28.1 ± 4.3 , respectively. The lowest average scores in developmental standards were related to “students” with 4.5 ± 1.7 and 3.6 ± 1.3 in the self-study and the external evaluation, respectively, and the highest scores were reported on the standard “facilities management (including space, installations, and equipment) and financial and human resources management in research and education” with 18.2 ± 9.1 and 17.8 ± 3.6 in self-study and external evaluation, respectively [Table 1]. The “monitoring and evaluating the effectiveness of the educational system” indicated that comparing the results of self-study and external evaluation was significant ($T = 2.34$ and $df = 8$, $P = 0.01$), showing that the external evaluators saw the condition of educational hospitals better than the self-evaluators. The majority of standards about the facility management area did not fulfil according to site visit reports. In regard to self-study reports, fewer standards gave a zero-point score (35 vs 10) [Table 2].

Discussion

The purpose of this study was to compare and analyze the results obtained from the self-study and the external evaluation of teaching hospitals educational accreditation. Comparing the average score between self-study and external evaluation by each area and level in all hospitals showed no significant difference except for “monitoring and evaluating the effectiveness of the educational system.” It could be due to the quantitative approach in the accreditation of teaching hospitals, the clarity of standards and indicators, and the existence of clear and transparent guidelines. Mossadegh Rad also believes that the relationship between the self-study of hospital and accreditation evaluation teams report is not well known.^[21] One of the points to consider in the final results of each accreditation is the evaluators’ opinions and decision-making models, influenced by their subjective judgment and taste or their strictness or laxity.^[19]

In most areas, external evaluators have given more points to the standards than the self-study committee. Considering that the self-study results are more advisory and corrective, it can be said that the evaluators have given points more carefully and in a great deal of time. They also make the situation more understandable. Of course, the judgment may be made based on different matters, or disagreements among evaluators may be caused due to the content of the standard context. Consistent with this study, Mosadeghrad and Nabizade^[18] state that the purpose of self-study is that the hospital managers and employees gain knowledge about their strengths and weaknesses and implement corrective measures because its results are not directly used in the hospital accreditation.

The researchers did not find a similar study on the comparison of self-study and external evaluation. Lack of agreement among evaluators; the unreliability of the accreditation process; the irrational number of evaluators;^[18] weakness in selecting, training, and evaluating the efficiency of accreditation evaluators;^[22] acting arbitrarily;^[23] lack of supervisory and educational roles;^[24] limited knowledge of evaluation; lack of deep and complete understanding of standards; individual interpretation;^[25] and lack of a specialized team in some areas^[19] are among the most significant challenges in the accreditation of Iran’s hospitals.

The findings showed that the highest unfulfilled frequency in the developmental standards was determined regarding the inter professional collaboration process, gaining the cooperation of a basic-science specialist in

Table 1: Percentage of self-study and external evaluation scores in teaching hospital

Area	Standard level	Hospital1			Hospital2			Hospital3			Hospital4			Hospital5			Self-study		External evaluation		
		Self-study	External evaluation	Self-study	External evaluation	Self-study	External evaluation	Self-study	External evaluation	Self-study	External evaluation	Self-study	External evaluation	Self-study	External evaluation	$\bar{X}$	SD	$\bar{X}$	SD		
Education management	Absolutely essential	29	82.8%	35	100%	-	-	35	100%	18	51.4%	24	63.9%	32.5	92.8%	35	100%	28.6	7.5	32.8	4.9
	Necessary	15.5	86.1%	15.5	86.1%	-	-	18	100%	11.5	63.8%	11.5	68.6%	15.5	86%	15.5	86%	14.5	2	16.2	2.8
	Developmental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	44.5	84%	50.5%	95.3%	46.5	87.7%	53	100%	29.5	55.7%	35.5	67%	48	90.6%	53	100%	43.8	8.3	49	7.6
Monitoring and evaluating the effectiveness of educational system	Absolutely essential	27.5	58.5%	43	91.5%	-	-	47	10	23.5	50%	31	66%	15.5	33%	39	83%	25.5	8.3	41.4	6.7
	Necessary	27.5	86%	23.5	73.4%	-	-	32	100%	18	56.2%	23.5	73.4%	8.5	36.5%	29.5	92.3%	24	75%	19.5	8.3
	Developmental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	55	69.6%	66.5	84.2%	65.5	82.9%	79	100%	41.5	52.5%	54.5	69%	24	30.4%	68.5	86.7%	49.1	16.6	69.5	10.2
Faculty members	Absolutely essential	21	67.7%	28	90.3%	-	-	31	100%	18.5	60%	14	45.3%	28.5	92%	31	100%	23.4	4.5	26.4	7.1
	Necessary	23	79.3%	29	100%	-	-	29	100%	17.5	60%	17	58.6%	26	89.6%	29	100%	23.5	81%	23.5	81%
	Developmental	9.5	32.7%	23	79.3%	-	-	19.5	67.2%	13.5	46.5%	12	41.4%	12	41.3%	16	55.2%	16	55%	16	55%
	Total	53.5	60%	80	89.9%	65	73%	79.5	89.3%	49.5	55.6%	43	48.3%	66.5	74.7%	76	85.4%	65	73%	65	73%
Learners	Absolutely essential	19	86.3%	19	86.4%	-	-	22	100%	14	63.6%	14	63.6%	14	63.6%	22	100%	19	86.3%	19	86.3%
	Necessary	22	100%	22	100%	-	-	22	100%	11	50%	11	50%	15	68%	22	100%	17	77.3%	17	77.3%
	Developmental	6	100%	6	100%	-	-	3	50%	3	50%	3	50%	3	50%	3	50%	6	100%	4.5	1.7
	Total	47	94%	47	94%	45.5	91%	47	94%	28	56%	28	56%	32	64%	47	94%	42	84%	42	84%
Facilities management and financial and human resources management in research and education	Absolutely essential	34.5	75%	40.5	88%	-	-	46	100%	34.5	75%	33.5	72.8%	32.5	70.6%	43.5	94.6%	43	93.4%	43	93.4%
	Necessary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Developmental	29	90%	29	90.6%	-	-	26	81.3%	17	53%	17	53.1%	9	28%	9	28.1%	16	50%	16	50%
	Total	63.5	81.5%	69.5	89.1%	54.5	69.9%	72	92.3%	51.5	71.5%	50.5	64.7%	41.5	53.3%	52.5	67.3%	59	82%	59	82%
Training of learners in emergency and para clinic departments	Absolutely essential	10	100%	10	100%	-	-	10	100%	10	100%	4	40%	4	40%	10	100%	8.5	3	8.8	2.7
	Necessary	5	50%	7.5	75%	-	-	10	100%	7.5	75%	7.5	75%	10	100%	10	100%	5	50%	5	50%
	Developmental	6	50%	12	100%	-	-	6	50%	6	50%	6	50%	6	50%	6	50%	12	100%	12	100%
	Total	21	65.6%	29.5%	92%	14	43.8%	26	81.3%	23.5	73.4%	17.5	54.7%	20	62.5%	26	81.3%	27	84.4%	27	84.4%
Educational programs and processes total	absolutely essential	37	92.5%	37	92.5%	-	-	33	82.5%	30.5	76.3%	15.5	38.8%	33.5	82.7%	33	82.5%	36.5	91.3%	34.4	3
	necessary	20	87%	20	87%	-	-	20	87%	20	87%	12	52.2%	20	87%	20	87%	17	74%	17	74%
	developmental	7.5	35.7%	17.5	83.3%	-	-	13.5	64.3%	13.5	64%	13.5	64.3%	13.5	64.2%	13.5	64.3%	13.5	64.2%	12	3
	total	64.5	76.8%	74.5	88.7%	74	88.1%	66.5	79.2%	64	76.2%	41	48.8%	67	79.8%	66.5	79.2%	67	79.8%	67.3	4

Contd...

Table 1: Contd...

Area	Standard level	Hospital1			Hospital2			Hospital3			Hospital4			Hospital5			Self-study			External evaluation					
		Self-study	External evaluation		Self-study	External evaluation		Self-study	External evaluation		Self-study	External evaluation		Self-study	External evaluation		$\bar{X}$	SD	$\bar{X}$	SD					
respect for patient rights in the educational procedure	absolutely essential	18	75%	24	100%	-	-	24	100%	18.5	77%	15.5	64.6%	21	87.5%	24	100%	24	100%	20.4	2.8	21.2	4		
	necessary	6	54.5%	9	81.8%	-	-	11	100%	2	18.8%	7	63.6%	11	100%	11	100%	7	63.6%	6.5	3.7	9.4	1.7		
	developmental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	total	24	68.6%	33	94.3%	21.5	61.4%	35	100%	20.5	58.5%	22.5	64.3%	32	91.4%	35	100%	31	88.6%	31	88.6%	25.8%	5.4	30.6	5.5
Teaching hospitals as a field of clinical research	absolutely essential	6	100%	6	100%	-	-	6	100%	6	100%	6	100%	6	100%	6	100%	6	100%	6	0	4.8	2.7		
	necessary	25	92.5%	27	100%	-	-	27	100%	10	37%	7.5	27.8%	22	81.4%	27	100%	18	66.7%	18	66.7%	18.8	6.5	19.5	10.3
	developmental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	total	31	94%	33	100%	30	90.9%	33	100%	16	48.5%	13.5	40.9%	28	84.8%	33	100%	24	72.7%	24	72.7%	25.8	6.1	24.3	12

the clinical laboratory and improving the educational environments without reducing the hospital settings. Results of studies have also pointed to challenges such as lack of human resources,^[27] the inadequacy of physical structure,^[23] unclarity of legal basis and accreditation processes,^[28] and lack of commitment and participation of managers and faculty members^[29] in establishing the standards. Supporting experienced managers and other stakeholders of teaching hospitals^[25] and to conduct the necessary research^[30] have been emphasized to improve the quality of services and identify solutions for the existing challenges.

Describing and analyzing the level of standards in teaching hospitals, clarifying the weaknesses by the standard and area, and then giving feedback to all the stakeholders to improve the quality of education and eliminate the shortcomings are among the opportunities and strengths of the study. In addition, clarifying the strengths of each hospital and presenting them to the stakeholders will lead to exchange the experiences and use them in other hospitals. Determining the main criteria for selecting competent evaluators and providing targeted theoretical and practical training in evaluation principles and practices have resulted in an impartial judgment.

Limitations and recommendations

One of the limitations of this study was the use of secondary data. It is also suggested for future studies to use the qualitative approach of interview with external evaluators and people who have done the self-study.

Conclusion

Comparing the average score of self-study and external evaluation by each area and level in all hospitals showed that except for “monitoring and evaluating the effectiveness of the educational system”, there was no significant difference in the other areas. The external evaluators scored higher than the self-assessors on most of them, but they also gave them more zero scores. The results of this research indicate that the training conducted by the accrediting body should include an interactive program where external evaluators receive essential training alongside the self-evaluation team. Additionally, the study’s findings suggest that standards associated with infrastructure have the potential to get students attention, who are the primary beneficiaries of education.

Acknowledgment

The researchers consider it necessary to express their sincere gratitude to all the teaching assistants and accreditation experts of medical education centers.

Table 2: Unmet standard in the self-study and the external evaluation of educational accreditation in teaching hospitals

Area	Standard level	Hospital1		Hospital2		Hospital3		Hospital4		Hospital5		Total number	
		self-assessment	external evaluation	self-assessment	external evaluation	self-assessment	external evaluation	self-assessment	external evaluation	self-assessment	external evaluation	self-assessment	external evaluation
Education management		0	0	0	0	0	0	0	0	0	0	0	0
Monitoring and evaluating the effectiveness of educational system	Absolutely essential	0	0	0	0	2	1	0	0	0	0	0	3
	Necessary	0	0	0	0	0	0	0	0	0	0	1	0
	Developmental	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	2	1	0	0	0	0	1	3
Faculty members	Absolutely essential	0	0	0	0	1	0	0	0	0	0	0	1
	Developmental	1	1	1	1	2	1	0	1	0	1	3	6
	Total	1	1	1	1	3	1	0	1	0	1	3	7
Learners		0	0	0	0	0	0	0	0	0	0	0	0
Facilities management and financial and human resources management in research and education	Absolutely essential	0	0	0	0	0	0	0	0	1	2	1	2
	Necessary	0	0	0	0	0	0	0	0	0	0	0	0
	Developmental	1	0	0	0	2	1	2	2	3	5	4	7
	Total	1	0	0	0	2	1	2	2	3	5	5	9
Training of learners in emergency and para clinic departments	Absolutely essential	0	0	0	0	1	0	0	0	0	0	0	1
	Necessary	0	0	0	0	0	0	0	0	1	1	0	1
	Developmental	0	0	0	1	1	1	0	1	2	3	1	5
	Total	0	0	0	1	2	1	0	1	3	1	1	7
Educational programs and processes	Absolutely essential	0	0	0	0	2	0	0	0	0	0	0	2
	Necessary	0	0	0	0	1	0	0	0	0	0	0	1
	Developmental	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	3	0	0	0	0	0	0	3
Respect for patient rights in the educational procedure		0	0	0	0	0	0	0	0	0	0	0	0
Teaching hospitals as a field of clinical research	Absolutely essential	0	0	0	0	0	0	0	0	0	1	0	1
	Necessary	0	0	0	0	2	0	0	0	3	0	0	5
	Developmental	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	2	0	0	0	4	0	0	6
Total number		2	1	1	2	14	3	5	3	13	10	35	35

Financial support and sponsorship

This project was financially supported by the Medical Education Research Center of Isfahan University of Medical Sciences, with scientific code 2400164 and ethical code IR.ARI.MUI.REC.1400.007.

Conflicts of interest

There are no conflicts of interest.

References

1. Yousef A, Changiz T, Avizhgan M, Jokar F, Ehsanpour S, Yamani N. Revision of institutional accreditation standards and processes in Iranian medical universities. *J Edu Health Promot* 2024;13:460. [Persian].
2. Afari Asl M, Chehrzed M, Shafipour S, Ghanbari A. Quality of educational services from viewpoints of nursing and midwifery students of Guilan University based on Servqual model. *Res Med Educ* 2014;6:50-8. [Persian].
3. Shaw CD. The external assessment of health services. *World Hosp Health Serv* 2004;40:24-7.
4. Peter TF, Rotz PD, Blair DH, Khine AA, Freeman RR, Murtagh MM. Impact of laboratory accreditation on patient care and the health system. *Am J Clin Pathol* 2010;134:550-5.
5. Mate K, Rooney AL, Supachutikul A, Gyani G. Accreditation as a path to achieving universal quality health coverage. *Global Health* 2014;10:68.
6. Pomey MP, Lemieux-Charles L, Champagne F, Angus D, Shabah A, Contandriopoulos AP. Does accreditation stimulate change? A study of the impact of the accreditation process on Canadian health care organizations. *Implement Sci* 2010;5:31-44.
7. 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.
8. Al Kuwaiti A, Al Muhanna FA. Challenges facing healthcare leadership in attaining accreditation of teaching hospitals. *Leadersh Health Serv (Brad Engl)* 2019;32:170-81.
9. Piontek FA, Coscia R, Marselle CS, Korn RL, Zarling EJ. Impact of American College of Surgeons verification on trauma outcomes. *J Trauma* 2003;54:1041-6; discussion 1046-7.
10. Al-Awa B, Al-Mazrooa A, Habib H, El-Deek B, Al-Noury K, El-Hati T, et al. Impact of Hospital accreditation on patients' safety and quality indicators at King Abdulaziz University hospital in Saudi Arabia. *Res J Med Sci* 2011;5:43-51.
11. Sack C, Lütke P, Günther W, Erbel R, Jöckel KH, Holtmann GJ. Challenging the holy grail of hospital accreditation: A cross-sectional study of inpatient satisfaction in the field of cardiology. *BMC Health Serv Res* 2010;10:120.
12. Griffith JR, Knutzen SR, Alexander JA. Structural versus outcomes measures in hospitals: A comparison of Joint Commission and Medicare outcome scores in hospitals. *Qual Manage Health Care* 2002;10:29-38.
13. Sharifi M, Raeissi P, Gorji HA, Aryankhesal A. Developing a model for accreditation of Iranian teaching hospitals: A qualitative study. *Ethiop J Health Sci* 2019;29:657-68.
14. Standards for Accreditation Commission on Institutions of Higher Education New England Association of schools and Colleges, Revisions Effective July 1, 2016. Available from: <http://www.neche.org>.
15. Hadavand S. Accreditation: Means of controlling the quality of education. *Tadbir* 2010;204:57-62.
16. Soleimani A, Gorji AH. Examining the observance level of educational accreditation standards in Iranian hospitals. *Jentashapir Journal of Health Research*. 2018;30;9:e74373.
17. Mosadeghrad AM, Akbari-Sari A, Yousefinezhadi T. Evaluation of hospital accreditation standards. *RJMS* 2017;23:43-54. [Persian].
18. Mosadeghrad AM, Nabizade Z. Evaluation of Iranian hospital accreditation system. *Payesh (Health Monitor)* 2018;17:617-29. [Persian].
19. Ghadami L, Masoudi Asl I, Hesam S, Modiri M. The survey of effective factors on hospital accreditation scoring method in Iran. *J Healthc Manag (J Health Syst)* 2018;9:45-59. [Persian].
20. Ghazanfari F, Mosadeghrad A, Pooyan E, Mobaraki H. Iran hospital accreditation standards: Challenges and solutions. *Int J Health Plann Manag* 2021;36:958-75. [Persian].
21. Mosadeghrad AM, Jaafari PE, Ghazanfari F. Hospital accreditation methods in Iran: Challenges and solutions. *Payesh (Health Monitor)* 2021;20:655-70. [Persian].
22. Teymourzadeh E, Ramezani M, Arab M, Foroushani AR, Sari AA. Surveyor management of hospital accreditation program: A thematic analysis conducted in Iran. *Iran Red Crescent Med J* 2016;18:e30309. [Persian].
23. Yahyavi F, Nasiripour A A, Keikavoosi Arani L. Challenges of implementation of Iranian national hospital accreditation standards (3rd Edition 2016) for Tehran's Islamic Azad University Hospitals. *Med Sci* 2018;28:252-7. [Persian].
24. Bukonda N, Tavrow P, Abdallah H, Hoffner K, Tembo J. Implementing a national hospital accreditation program: The Zambian experience. *Int J Qual Health Care* 2002;14(Suppl 1):7-16.
25. Bigdeli S, Arabshahi SK, Sohrabi Z, Zazoly AZ. Exploring the challenges of educational accreditation of teaching Hospitals and providing the solutions. *J Edu Health Promot* 2021;10:144. [Persian].
26. Walton AV. Applying a Systems Thinking Approach to the Experience of Self-Study for Institutional Accreditation: A Phenomenological Study. Drexel University; 2022.
27. Soleimani A, Heidari Gorji A. Examining the observance level of educational accreditation standards in Iranian hospitals. *Jentashapir J Cell Mol Biol* 2018;9:e74373. [Persian].
28. Mate KS, Rooney AL, Supachutikul A, Gyani G. Accreditation as a path to achieving universal quality health coverage. *Global Health* 2014;10:68.
29. Saadati M, Yarifard K, Azami-Agdash S, Tabrizi J. Challenges and potential drivers of accreditation in the Iranian hospitals. *Int J Hosp Res* 2015;4:37-42. [Persian].
30. Yarmohammadian MH, Khorsani E, Norouzinia R, Mirzaei S, Ehsanpour S, Yamani N, Rezaei F. Institutional accreditation in medical education: The experience of the survey visit teams. *J Educ Health Promot* 2020;9:39.