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Original Article

Evaluation of the Realization of the Management and Leadership Axis in the National Accreditation Standards Program in Shiraz Hospitals, Iran, 2017

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Abstract

Introduction: Accreditation is one of the standard assessment systems in hospitals used for its importance, efficiency, and critical role in improving health care services. According to the statistics, one of the primary accreditation axes is the management and leadership axis. Considering the close relationship between management and clinical issues in hospitals, this study aimed to evaluate the realization of the management and leadership unit in Shiraz hospitals.

Methods: The research population in this applied field study included 33 public and private hospitals in Shiraz (i.e., charitable, military, and affiliated hospitals). According to the Ministry of Health's announced checklist, all data were gathered from the hospital accreditation program during 2017 (the latest overall accreditation) completed by trained assessors. The accreditation certificate was issued. All data regarding Shiraz hospitals were collected from the accreditation portfolio of hospitals after obtaining the required permits. Data were analyzed in inferential levels, using SPSS25 software.

Results: The study results demonstrated that the average percentage of realizing the sub-axes of the governing team, executive management team, quality improvement, error management, disaster risk, and human resources management in public hospitals was higher than that of the private and affiliated ones. The average percentage of realization of the sub-axes' supply and accommodation management and food management increased in private hospitals compared to the public ones.

Conclusion: The results showed that the average achievement percentage of six sub-axes was higher in public hospitals than the private and affiliated ones. Therefore, it reveals that public hospitals have paid more attention to infrastructural issues while working on the leadership axis than the other hospital types. The higher achievement percentage is necessary to deliver better service to patients.

The public hospitals manifested a better performance in meeting the standards of this axis. The study conducted on these criteria showed that infrastructural issues were more considered while being developed. Meanwhile, there is a need to pay more attention to the promotion of the processes as well as infrastructural matters to improve the level of safety and the services provided to patients.

Keywords: National accreditation, Management, and leadership axes, Hospital quality management.

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Background

Accreditation is one of the standard assessment systems used for its significance, efficiency, and critical role in promoting health services (1). It is a process. Its purpose is to improve and standardize the hospital activities' performance from various aspects based on the documentation of activities and the axes of external and, most often, voluntary evaluation (2).

In the past 50 years, accreditation has played a significant role in evaluating health and medical organizations worldwide. Medical institutions' evaluation and accreditation have significantly contributed to healthcare services' quality and safety and increased organizations (3). Focusing on the increase in efficiency and effectiveness of services

reduces unnecessary costs and increases medical institutions' productivity. Insurance companies also recognize the importance of accreditation in improving hospital services quality and prefer to work with hospitals with accreditation certificates (4).

The objective of hospital accreditation is to assess the hospital services' quality, safety, and effectiveness (5). Accreditation helps hospitals increase their capacity to deliver high-quality services (6). It is a suitable strategy for improving hospital services' quality and safety, providing appropriate services to patients (7), and improving hospital performance (8). Besides, the accreditation of medical institutions has a significant role in increasing the trustworthiness of the services provided in these organizations (9). Also, accreditation can enhance the satisfaction of doctors, nurses, and other health service providers (10), develop organizational and individual learning (11) and facilitate external and intra-organizational communications (12). It will also help hospital managers use the proposed analyses, refine and determine the policy guidelines and practical methods, and encourage them to use clinical protocols and procedures.

Currently, the process is compulsory and non-voluntary, and it is performed through the Ministry of Health and Medical Education. Failure of hospitals to achieve the acceptable score leads to a reduction in their income from the insurance companies and annulling their permit in the worst circumstances (13). The accreditation of hospitals began in Iran in 2012. Accreditation standards of the United States, France, Egypt, and Lebanon have been studied to develop the hospitals' accreditation standards in Iran (14). Each country wishing to apply for the accreditation program should try to indigenize the standards using other international practices (15). To indigenize the standards means to correspond and make the standards compatible national laws and the cultural, social, political, and religious prerogatives of that country (16). The national accreditation standards of Iran have been developed in 8 areas and 248 bars (17).

A sample of this study by Bohigas et al. (1986) was conducted in the provinces of the Catalan region of Spain with the indigenization of accreditation standards, which resulted in acceptable and practical findings (18).

While being trained, accreditation assessors will identify and record the required correspondence about hospital activities determined by observing, interviewing, and reviewing the documents. Based on the results, the hospitals' accreditation certificate is issued. The management and leadership axis is one of the eight most crucial national accreditation axes. As management and clinical issues are closely interlinked, the effort to upgrade these standards will lead further to the achievement of national accreditation goals, i.e., improving the patients' quality and safety. The management and leadership axis includes eight sub-axes and 58 standards as follows:

1. Sovereign team sub-axis. 2. Executive management team sub-axis, 3. Quality improvement sub-axis, 4. Error management sub-axis, 5. Risk of accidents and disasters management sub-axis, 6. Human resources management sub-axis, 7. Supply and accommodation management sub-axis, and 8. Food management sub-axis. (17).

Accordingly, as the National Accreditation Program is new in Iran, there are confidential results; yet, there isn't any reliable study on this subject. Therefore, we decided to compare the hospitals in Shiraz in a survey regarding their achievement of management and leadership axis, its sub-axes, and standards, so that their problems, obstacles, weaknesses, and strengths would be recognized. The results would also help provide solutions to tackle the deficiencies and focus on stability with appropriate analysis. The rate of management and leadership axis achievement percentage would be improved and, eventually, the quality of services and safety of the patients would be increased.

The purpose of this study was to compare the degree of realization of the standards of management and leadership axis in the national accreditation program in the public, private and exceptional hospitals of the city of Shiraz, which includes 33 hospital units.

Accreditation is one of the standard assessment systems used for its significance, efficiency, and critical role in promoting health services (1). Accreditation is a process. Its purpose is to improve and standardize hospital activities' performance from various aspects based on the documentation of activities and the axes of external and, most often, voluntary evaluation (2).

In the past 50 years, accreditation has played a significant role in evaluating healthcare organizations worldwide. Evaluation and certification of medical institutions have contributed significantly to the quality and safety of healthcare services and increased efficiency (5). Focusing on the increase in efficiency and effectiveness of services reduces unnecessary costs and increases medical institutions' productivity. Insurance companies also recognize the importance of accreditation in improving the quality of hospital services.

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The accreditation of hospitals began in Iran in 2012. Accreditation standards of the United States, France, Egypt, and Lebanon have been studied to develop the hospitals' accreditation standards in Iran (17). Each country wishing to apply for the accreditation program should try to indigenize the standards using other international practices (15).

Bohigas et al. (1998) compared the relevant accreditation programs with managerial problems in 6 hospitals. Despite the differences between the creditors, they have seen remarkable similarities. It has been argued that accreditation assessors have standard features worldwide in terms of occupation, education, work experience, and expectations.

A review of Bohigas et al. (1986) suggests that although accreditation has been designed for the degree of compliance of each hospital with the existing standards and the credibility of each hospital is identified upon it, comparison of the hospitals and analysis of the results can improve the weaknesses of the hospitals (19).

Methods

Based on the support system, hospitals are divided into public, private, and affiliated hospitals. This study is descriptive, aiming to compare the rate of achievement of management and leadership axis in the national accreditation Program in the public, private and exceptional hospitals of Shiraz (33 hospitals) that were published in 2019.

In this research, the researcher collected the data through Iranian hospitals' accreditation schedule in 2017 and the website www.accreditation.behdasht.gov.ir and the Accreditation Bureau of the Medical Department of Shiraz University of Medical Sciences database. Data collected from hospital accreditation was verified through checklists based on national accreditation standards and communicated by the Ministry of Health and Medical Education. The validity and reliability of the information were confirmed by the Ministry of Health and Medical Education. The data were completed by trained assessors presenting at various hospitals, and the story was then uploaded to the system, where it is weighed and rated. The results were uploaded as a percentage of achievement on www.accreditation.behdasht.gov.ir, and the Accreditation Certificate of hospitals was issued on its axes.

Different hospitals have been compared to realize the management and leadership axis and its sub-axes in this research. Due to the confidentiality of the hospitals' information and the impossibility of disclosing any of their cases, the hospitals' name, achievement percentage of this component's standards, and hospital rankings were refrained to be noted. However, the hospitals' orders based on the rate of the achievement of the standards of this component, along with the details for decision making, were delivered to the senior managers of Shiraz University of Medical Sciences.

After collecting the data, descriptive and inferential analyses were conducted using SPSS25 software. The data consisted of quantitative variables, namely, hospital units. Inferential analyses included the Kolmogorov–Smirnov, correlation, and regression tests to measure the normality of the data, the correlation between the research variables, and the variables' effectiveness. In the descriptive section, graphs, concentration, and distribution indices of variables were presented. The parametric method was used after data were collected, normalized, and confirmed.

Statistical sample status on the supportive system was distributed as follows: based on the support system, hospitals were divided into public, private, and affiliated hospitals. 46 percent of the study population were public (15 hospitals), 39 percent private(13 hospitals), and 15 percent affiliated (5 hospitals)

Results

Descriptive Statistics

Descriptive data about the hospitals in Shiraz city regarding the supportive system is presented in the Table and the Diagram below. The hospitals' distribution in terms of a supporting system is shown in these two Tables and diagrams.

Descriptive information about the hospitals in the city of Shiraz regarding the supportive system is presented in Table 1.

Kolmogorov–Smirnov Test

Kolmogorov–Smirnov test was used to measure the normality of the data. In this regard, given the significance level obtained from this test in Table 2, the distribution of each research variable's scores was at a level of error of 0.05. Therefore, parametric tests were selected and used.

Before examining the hypotheses, it was necessary to test and analyze the correlation between the research variables. The results shown in Table 3

Table 1: Distribution of statistical sample status on the supportive system

Support system	Frequency	Percentage
Public Hospitals	15	46
Private Hospitals	13	39
Special Hospitals	5	15
Total	33	100

Table 2: Results of Kolmogorov-Smirnov test

Variable	Significance Level	T-value
Sovereignty Team	0.521	2.23
Executive Management Team	0.817	3.17
Quality Improvement	0.513	2.09
Error Management	0.718	2.57
Risk of Accidents and Disasters Management	0.940	3.15
Human Resources Management	0.724	3.56
Supply and Accommodation Management	0.519	2.79
Food Management	0.902	2.34

Table 3: The Pearson correlation coefficient between research variables

Variable	Sovereignty Team	Executive management	Quality improvement	Error management	Risk management	Human Resources	Supply and Accommodation management	Food management
Sovereignty Team	1							
Executive management team	37/0	1						
Quality improvement	*34/0	47/0	1					
Error management	*57/0	36/0	*46/0	1				
Risk management	46/0	46/0	*59/0	42/0	1			
Human Resources management	*61/0	48/0	39/0	53/0	63/0	1		
Supply and Accommodation management	31/0	31/0	51/0	57/0	61/0	*60/0	1	
Food management	47/0	51/0	33/0	45/0	29/0	32/0	41/0	1

demonstrate that there was a significant positive correlation among all variables based on the Pearson correlation test results.

Research hypotheses

The major hypothesis is that to what extend the realization of the management and leadership unit in Shiraz hospitals differs among different hospitals.

Discussion and Conclusion

According to Tables 4 and 5, the results of testing the hypotheses are as follows:

The average achievement percentage of the sovereignty team's sub-axes, executive management team, quality improvement, error management, risk of accidents and disaster management, and human resources management in the public hospitals was higher than that of private and exceptional hospitals. Such a significant difference confirms the hypotheses one to six. Based on the results, the average achievement percentage of supply and accommodation management and food management axis in public hospitals was more than that of the private and exceptional hospitals, but this did not make a significant difference, which led to the rejection of the hypotheses seven and nine, concerning the global accreditation program policies which highlight the confidentiality.

Table 4: Hypotheses Test Results (Reference: Research Calculations)

No.	Hypothesis	Significance Level	T-value	Test Result
1	The average percentage of the sovereignty team sub-axis achievement in public hospitals was higher than that of the private and exceptional hospitals in 2017.	0.018	2.508	Confirmed
2	The average percentage of the executive management team sub-axis achievement in public hospitals was higher than that of the private and exceptional hospitals in 2017.	0.048	062/2	Confirmed
3	The average percentage of the quality improvement sub-axis achievement in public hospitals was higher than that of the private and notable hospitals in 2017.	0.002	012/2	Confirmed
4	The average percentage of the error management sub-axis achievement in public hospitals was higher than that of the private and notable hospitals in 2017.	0.026	340/2	Confirmed
5	The average percentage of the risk of accidents and disasters management sub-axis achievement in public hospitals was higher than that of the private and notable hospitals in 2017.	0.004	082/3	Confirmed
6	The average percentage of the human resources management sub-axis achievement in public hospitals was higher than that of the private and notable hospitals in 2017.	0.007	902/2	Confirmed
7	The average percentage of the supply and accommodation management sub-axis achievement in public hospitals was higher than that of the private and exceptional hospitals in 2017.	0.169	407/1	Rejected
8	The average percentage of food management sub-axis achievement in public hospitals was higher than that of the private and notable hospitals in 2017.	0.634s	4	Rejected

Table 5: Test results of the first hypothesis (Reference: Research calculations)

No.	Sub-axis	Support system	Number	Mean	Standard Deviation
1	Sovereignty team	Public	15	65.53	5.29
		Private and affiliated	18	54.64	16.03
2	Executive management team	Public	15	78.22	7.68
		Private and affiliated	18	70.79	12.10
3	Quality improvement	Public	15	72.31	13.11
		Private and affiliated	18	58.94	22.73
4	Error management	Public	15	68.10	8.04
		Private and affiliated	18	55.06	20.24
5	Risk of accidents and disasters management	Public	15	59.78	11.50
		Private and affiliated	18	43.92	43.92
6	Human resources management	Public	15	74.83	6
		Private and affiliated	18	62.97	71/14
7	Supply and accommodation management	Public	15	69.84	79/9
		Private and affiliated	18	63.61	62/14
8	Food management	Public	15	72.13	30/12
		Private and affiliated	18	69.13	40/21

Considering the higher percentage of the achievement of the sovereignty standards in public hospitals than private and exceptional hospitals and since state centers do not have any sovereignty teams, the same executive management team is responsible for delivering this axis; senior executives of hospitals should, therefore, directly get engaged in accreditation standards and meet them. Still, in the private sector, the task is on hospitals' principal shareholders, which are often non-therapeutic and focus on the center's outcomes. It seems that the presence of medical members in the team is likely to address this challenge.

In the executive management team axes, in the private sector, most of the people who played a key role, e.g., the chief technician, are specialists affiliated to the medical departments, especially in operation rooms. Most of their time is spent with the patients in the operation rooms instead of paying attention to managerial affairs. Therefore, they will be separated from management and administration and their relative supervisions. On the other hand, in public hospitals, the chairman and the chief technician will focus solely on managerial affairs and have more administrative responsibilities. For critical positions, therefore, using a managerial competencies model is recommended.

In the quality improvement axis, the instability of the presence and implementation of the expert in charge of improving the quality of private hospitals

and people's tendency to be employed in the public sectors have led to a lack of continuity and pursuit of meeting the standards of this axis, which mainly include supervision, consistency, and implementation. Therefore, the instability of the individual position, which centralizes accreditation at the hospitals, leads to the dispersion of a quality improvement office in private centers. The lack of coordination between the improvement and level managerial offices, on the other hand, can be regarded as a disadvantage for the quality improvement unit performance.

In the error management axis, since the private sector tries to deny the errors to protect the public image, it can report unexpected events and root out the causes to take suitable action afterward. Therefore, it is suggested that the private centers involved in reporting and its correct management would be encouraged to influence other centers.

The risk of accidents and disaster management axis includes two standards: structure management, non-structure management, and the hospital's performance at the time of crisis. The second is the technical and installation standards. Since most private hospitals change their utilization without the necessary and accepted infrastructure and operate as hospitals, it is often impossible to standardize the existing spaces. They lack the essential and standard infrastructure for such services. Therefore, it is recommended that the private sector should be a health center with the specialists' management and expertise.

In the human resources management axis, what is certain is the selection, absorption, implementation, and enhancement of human resources in public hospitals. This is entirely in line with the Ministry of Health criteria. People must obey the rules, standards, and implement the measures due to official and contract recruitment, job security, and stability. Sustainability also motivates them to function. On the contrary, in the private centers, due to instability in the workplace, arbitrary implementation of individuals, and payment dissatisfaction, temporarily strengthening of these forces can directly affect the performance of this component. Therefore, it is suggested that consistent and stable laws should be established in private centers to ensure job security for individuals.

In the supply and accommodation management axis, the implementation and establishment of the Health Promotion Plan of the hospitalization package in public centers led to exceptional attention to the facilities, services, and patients' basic needs and companions. Within this timeframe, basic requirements such as beds, bed linens, amenity and accommodation facilities, and beautifying the medical spaces were prioritized by managers. This led to public places to approach the private centers in hospitalization, such that if these categories of standards and requirements are accurately implemented, due to the limited space structure in private centers, we will see a long-term surplus in the private sector over the public ones.

In the food management axis, one of the factors influencing the reduction of scores gained in the private sector is the lack of kitchens in these centers and frequent outsourcing of these units, which met the minimum standards in providing food services to patients and their companions. This is because hospital substitutes could not gain the maximum score in this category unless they would meet all the necessary standards for the provision of ingredients, procurement, and food distribution at the patients' beds in the best way. Such an important task would be facilitated with the specialists' expert supervision in environmental health and nutrition, which was not entirely possible in the private sector. However, in the public sector, all of the above steps were urgently addressed by health and nutrition experts. Hospital management was carried out due to establishing a kitchen in the hospital. Therefore, it seems that the kitchen is one of the most inseparable parts of the hospitals responsible for the preparing, cooking, and distributing food, and continuous monitoring should be conducted on such an essential process.

Ethical Considerations

It should be noted that since hospital information is confidential and that the results are being held by the accreditation administrative, the relevant data were given to the surveyor while obtaining the necessary permissions and the researcher's obligation in line with the principle of secrecy.

Regarding the global accreditation program policies that highlight the results' confidentiality, similar studies are insufficient, following the country's accreditation standards. Therefore, it is not possible to compare the research conducted with them. Also, due to the program's novelty and the confidentiality of its results in Iran, no similar research was found which results could be compared with ours.

Conflict of Interest: None declared.

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