



Progress of Development in Generations of the National Hospital Accreditation Program in Iran

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Abstract

Background: Studies have often examined the challenges presented to the implementation of accreditation. Nonetheless, after developing and implementing four generations of accreditation over 25 years, multiple questions have been left unanswered regarding the number of resolved challenges, the emergence of new challenges and problems, as well as the mitigation of these problems by policymakers and managers for the next generations.

Objectives: Therefore, the present study aims to explain the development progress of the last two generations of the National Hospital Accreditation Program (NHAP) with the previous versions in Iran.

Methods: As a qualitative research, Semi-structured interviews were conducted in 2020. Through purposive sampling, 20 hospital managers at different levels with experience in all four generations participated. Thematic analysis was used to analyze.

Results: The themes included designing the measurement criteria, the supervisor's performance (university and ministry), the hospital's performance, the measurement process, as well as announcing the results and outcomes. Moreover, the status of the development of the national accreditation with previous versions was explained in categories, including improvable points, improved problems, and cases of deterioration.

Conclusion: The revision process of the NHAP in Iran is indicative of an upward trend, and almost proper modifications have been made. Significant changes have been made since the third generation. Changes in performance-oriented and highlighted patient safety have been very helpful. Changing the assessment of universities affiliated to Ministerial, which is trying to become partly external evaluation. In addition, some positive changes have been achieved in the fourth generation, including a significant reduction in criteria, more professional evaluators, elimination of document uploads, and the definition of outpatient criteria. The improvable points were as follows: defining some measurement criteria, limitations of physicians' criteria, evaluating input instead of output, lack of medical guidelines, failure to pay attention to hospital-type criteria, lack of continuous monitoring of universities, and lack of motivation mechanisms for new criteria.

Keywords: Accreditation, Credentialing, Health care evaluation mechanisms, Health care quality, Quality assurance

1. Background

Performance measurement and quality improvement have always been a great concern to managers and policymakers; nonetheless, it is crucial to consider the implementation tools of the programs and the management of the barriers posed to these programs, and the most important point is to avoid mistakes (1,2). Hospital grading system was initiated by the Ministry of Health and Medical Education (MOHME) of Iran in 1998 in accordance with legal requirements, and thereafter, the medical universities were required to conduct the annual audit of their hospitals (3). Over the past two decades, this program has been revised for several times in terms of performance and content and is currently in function as a nationwide hospital accreditation. Since the implementation accreditation program, the numerous hospitals involved (annually about 900 hospitals since 2011 and 500-750

hospitals during 1998-2010), as well as multiple executive and content challenges, have been studied by researchers in recent years (4-6).

In 1998, MoHME formulated a national accreditation plan for general hospitals and designed two major forms: "A" and "B." However, the program was criticized since it mainly focused on hospital structure and neglected the effectiveness of treatment. Another point was the impartiality of evaluators. These criticisms led to the revision of standards and the evaluation system based on global accreditation programs. The new version of hospital accreditation standards was published in 2010.

The first comprehensive program of hospital accreditation with 8,104 measurement criteria was executed in 37 hospital wards in 2013. Thereafter, the program was modified, and 36 hospital wards and 2157 measurement criteria were evaluated in 2015 (7). A comprehensive guide to the third

generation of accreditation standards, with 8 subjects, 248 standards, and 903 measurement criteria, was developed in 2016 based on the results and feedback given to the MoHME and was announced to hospitals (8). And finally, the fourth generation, with 110 standards and 514 measurement criteria, was developed in 2019.

2. Objectives

Studies have often examined the challenges presented to accreditation implementation (5,9-11). Nonetheless, after developing and implementing four generations of accreditation over 25 years, multiple questions have been left unanswered regarding the number of resolved challenges, the emergence of new challenges and problems, as well as the mitigation of these problems by policymakers and managers for the next generations. During the transfer journey of a program, sometimes it takes a long time to achieve success in implementation. In light of the., the present study aimed to explain the progress of the development of the last two generations of the National Hospital Accreditation Program with the previous versions in Iran.

3. Methods

3.1. Study design and sampling

This qualitative study was conducted in Iran from February to June 2021 following a round of conducted the fourth generation of national accreditation. The research community included hospital directors, managers, and other levels of management, such as matrons, in Iranian hospitals. The participants were selected purposefully and non-homogeneous so that hospital staff at different management levels, who had the experience of the last two and previous generations of accreditation, participated in this study. Considering the fact that in qualitative research, the precise sampling volume cannot be estimated from the outset, the number of participants in this research was identified in the process of collecting and analyzing the data and according to the process of interviews. Therefore, the sampling process continued until reaching the data saturation point and a total of 20 interviews were conducted.

3.2. Data collection

Individual semi-structured interviews were used to collect the data. An interview guide was prepared based on the research goals and an extensive review of the literature. The interview guide form was arranged in two sections, including demographic information and an informed consent form. The forms were available to each participant before the commencement of the interview. To thoroughly examine participants' opinions, open-ended questions, ranging from more general questions to

specific ones, were used.

After the announcement of the cooperation by each participant, an appointment was made at their convenient time. Each individual interview lasted from 45-95 min, based on participants' responses and interests. The interviews were recorded with the participants' consent during the interview. The recorded content was transcribed by one of the research partners, and the written content of the interviews and primarily extracted codes were given to some participants to modify, delete, and add parts. In order to ensure the accuracy and validity of the data in this research, various methods, such as consultation with two colleagues and one expert familiar with the qualitative research, targeted sampling, simultaneous analysis with the collection of information, and the transcription of interviews were used by one of the research partners.

3.3. Analytical approach

To analyze data, the deductive content analysis approach was used. Data analysis based on the deductive approach included the following steps: (1) typing the interviews, (2) perusing each interview line by line, (3) using the analysis framework, (4) allocating codes and forming themes in the matrix, (5) extracting main themes related to the aim of research in inductive content analysis, and (6) classifying data based on the similarities and differences and forming the subthemes. The coding and classifying stages were performed by MAXQDA software (version 12).

4. Results

The participants of this study were senior, middle, and operational hospital managers in Iran. Based on the results, 11 participants had more than 20 years of work experience, and 70% of subjects were present in all three generations of national accreditation (Table 1). The participant's responses to the interview questions on four generations of hospital accreditation programs in Iran were analyzed, and the extracted semantic units were summarized in detail in the following paragraphs and tables (tables 2-4). Firstly, the status of the development of the national accreditation with previous versions was explained in categories, including improvable points, improved problems, and cases of deterioration. Following that, the themes, including designing the measurement criteria, supervisor's performance (university and ministry), hospital's performance, measurement process, as well as announcing the results and outcomes, were extracted.

4.1. Designing the measurement criteria

The improvements in the accreditation program include the changes in designing the measurement

Table 1. Demographic characteristics of participants

Row	Education	Age	Position
1	Bachelor of Medical Records	55	Head of the quality improvement office
2	Master of Health Services Management	30	Head of the quality improvement office
3	Master of Nursing	53	Head of the nursing unit
4	Bachelor of Accounting	50	Hospital manager
5	Bachelor of Medical Records	39	Head of Administrative Affairs
6	Master of Environmental Health	45	Responsible for environmental health
7	Master of Nursing	57	Head of the nursing unit
8	Bachelor of Nursing	57	Head of Infection Control unit
9	Master of Nursing Education	47	Educational Supervisor
10	Master of Educational Management	57	Head of Education Department
11	Master of Health Services Management	43	Head of Administrative Affairs
12	Physician	48	Dean of hospital
13	Master of Nursing	35	Hospital manager
14	Master of Nursing	55	Head of the nursing unit
15	PhD in Health Services Management	42	Head of Administrative Affairs
16	Master of Nursing	45	Head of the nursing unit
17	PhD in Health Services Management	40	Hospital manager
18	master of accounting	47	Head of the nursing unit
19	Physician	39	Dean of hospital
20	Master of mechanical engineer	36	Head of the facilities unit

criteria from documentation-oriented to performance-oriented. "If I want to compare it with the previous versions, it was a little harder to get a score. Although the number of measurement criteria has been decreased, it requires more effort. There are more to do in practical parts" (P5). The enrichment of previous measurement criteria, including more comprehensive measurement criteria, was another advantage of the last two generations of hospital accreditation. "The criteria were modified.

In the latest generation, we were confused by contradictory points in the measurement criteria of previous versions; nonetheless, they are now more comprehensive" (P13). The emergence of new measurement criteria, such as the highlighted components of patient safety, was another subtheme

in this category. "In my idea, the main strength was summarizing the safety-related issues. They defined a new organizational position called: "patient safety coordinator," who must be a doctor or a nurse with at least five years of work experience. They formed a safety team consisting of doctors, hospital officials, and middle managers, and this is a very good action" (P2).

One of the negative points in designing the measurement criteria in the latest generation of accreditation, compared with the previous ones, was the emergence of new measurement criteria, such as money-seeking measurement criteria. "There was no problem with the measurement criteria. For instance, we were weak in four items, and the managers did not cooperate since the program needed a lot of money and they allocated limited funds" (P7).

Table 2. The improvable points compared to the last two generations of hospital accreditation with the previous versions

Theme	Subtheme	code
Designing the measurement criteria	☒ Defining measurement criteria	* Not defining some measurement criteria (security department, Para clinic, nuclear medicine)
	☒ Physician's measurement criteria	* Limitations of measurement criteria related to physicians
Performance of the supervisor organizations (MoHME and the related universities)	☒ Evaluating input instead of output	* Evaluating input instead of output in some measurement criteria
	☒ Medical guidelines	* Lack of medical guidelines for standard care
	☒ Type of hospital	* Not Regarding the type of hospital in accreditation
	☒ Untrained officials	* Employing untrained officials
	☒ Continuous monitoring approach	* Lack of a continuous monitoring approach by the universities
	☒ Training (the missing ring of accreditation in supervisor organizations)	* Poor training of the surveyor * Poor training of the personnel * Lack of a continuous training approach * Not providing the legal infrastructure * Not providing the recourse infrastructures
Performance of the center	☒ Motivation mechanisms	* Lack of motivation mechanisms for new measurement criteria in the hospital
	☒ Collaboration of the personnel	* Inadequate collaboration of the personnel
Measurement process	☒ Time for evaluation	* Not allocating enough time for evaluation
	☒ Fear of evaluators	* A false fear of evaluators in all generations
	☒ Personalization evaluation	* Personalization evaluation by the surveyors' characteristics * Personalization evaluation due to failure to review all documents
Announcing the results	☒ Role of the supervisor organizations	* Role of the supervisor organizations in the results
	☒ Lack of infrastructures	* Dissatisfaction with the result due to lack of infrastructure

Furthermore, the emergence of some infrastructure-dependent measurement criteria was another code of this subtheme. "The measurement criteria were good and enough; nonetheless, the surveyors required something that did not exist in our ward, such as facilities and workforce. For example, one of the measurement criteria required one nurse for three newborns, while there are 31 infants in our ward, and the nurse-to-newborn ratio is 1:10.

The infrastructure and devices are not provided. One of the surveyors came to our ward and said that

there were two newborns on the resuscitation bed, while the bed should be used only for resuscitation; this was mentioned as a problem by the surveyor" (P9). The workload was increased despite a decrease in the number of measurement criteria. "If I want to compare the last two generations of accreditation with the previous versions, it was a little harder to get a score. Although the number of measurement criteria has been decreased, it requires more effort. There are more to do in practical parts" (P15).

Table 3. The improved problems compared to the last two generations of hospital accreditation with the previous versions

Theme	Subtheme	code
Designing the measurement criteria	<input checked="" type="checkbox"/> Emergence of new measurement criteria	<ul style="list-style-type: none"> ✓ Highlighting patients' safety issue ✓ defining outpatient measurement criteria since the fourth generation ✓ Emergence of money-loving measurement criteria ✓ Emergence of some infrastructure-dependent measurement criteria
	<input checked="" type="checkbox"/> Enrichment of previous measurement criteria	<ul style="list-style-type: none"> ✓ Enhancing the managers' role and the weight of their measurement criteria=>higher participation of the managers ✓ Outcome-orientation of accreditation measurement criteria since the third generation <ul style="list-style-type: none"> ✓ More difficulty of measurement criteria ✓ More comprehensiveness of measurement criteria ✓ Paying more attention to details in measurement criteria <ul style="list-style-type: none"> ✓ Stability of generality of measurement criteria ✓ Increased scientific credit of measurement criteria
	<input checked="" type="checkbox"/> Change in the approach of designing the measurement criteria	<ul style="list-style-type: none"> ✓ Changing the measurement criteria from organization unit based to functional based <ul style="list-style-type: none"> ✓ Increasing the clarity by functional integration of measurement criteria ✓ Changing the approach of measurement criteria from documentation-oriented to process-oriented <ul style="list-style-type: none"> ✓ Emergence of a systemic vision since the third generation of accreditation
	<input checked="" type="checkbox"/> Documenting	<ul style="list-style-type: none"> ✓ Documenting accreditation process <ul style="list-style-type: none"> ✓ Holding training courses ✓ Virtual training for the personnel
Performance of the supervisor organizations (MoHME and the related universities)	<input checked="" type="checkbox"/> Relative improvement of employee empowerment	<ul style="list-style-type: none"> ✓ Increased collaboration of universities as a result of the effect of the ministerial surveyor on their performance <ul style="list-style-type: none"> ✓ Helping the private hospitals by training their personnel ✓ Synergy among hospitals and their universities <ul style="list-style-type: none"> ✓ electronic accreditation process
	<input checked="" type="checkbox"/> A relative increase in university collaboration	<ul style="list-style-type: none"> ✓ improve enough time for implementing the measurement criteria since the fourth generation
	<input checked="" type="checkbox"/> Synergy of performance <input checked="" type="checkbox"/> Electronic process	
Performance of the center	<input checked="" type="checkbox"/> Improve Enough time for implementing	
	<input checked="" type="checkbox"/> training approach <input checked="" type="checkbox"/> external (ministerial) surveyor	<ul style="list-style-type: none"> ✓ developing training approaches in hospitals ✓ the effect of the external (ministerial) surveyor on an increased collaboration of managers and employees <ul style="list-style-type: none"> ✓ State surveyor=> more anxiety, more efforts
Measurement process	<input checked="" type="checkbox"/> The superiority of ministerial surveyors over the provincial surveyors	<ul style="list-style-type: none"> ✓ Creation of a competitive atmosphere due to the strictness of the ministerial surveyor <ul style="list-style-type: none"> ✓ more weight of standards skillful ministerial surveyors ✓ Getting new viewpoints and perspectives of the ministerial surveyors <ul style="list-style-type: none"> ✓ Preventing bias in the evaluation due to no conflict of interests ✓ Checklist-based evaluation (more principled performance) <ul style="list-style-type: none"> ✓ Employing trained surveyors
	<input checked="" type="checkbox"/> Comprehensive view in the evaluation	<ul style="list-style-type: none"> ✓ Replacing hospital inspection with a comprehensive view in the evaluation
	<input checked="" type="checkbox"/> Comprehensive evaluation method <input checked="" type="checkbox"/> Decrease task of uploading data	<ul style="list-style-type: none"> ✓ Comprehensive evaluation method (based on documents, observation, and interview) <ul style="list-style-type: none"> ✓ Decrease additional task of uploading data by the personnel since the fourth generation
	<input checked="" type="checkbox"/> Mechanical evaluation	<ul style="list-style-type: none"> ✓ Mechanical evaluation (excessive dependence on the documentation) since the fourth generation
Announcing the results	<input checked="" type="checkbox"/> speed of announcing	<ul style="list-style-type: none"> ✓ speed of announcing the results
accreditation outcomes	<input checked="" type="checkbox"/> Operational accreditation	<ul style="list-style-type: none"> ✓ Functionality of measurement criteria ✓ Higher effectiveness due to lower documentation
	<input checked="" type="checkbox"/> Promoted quality of the units	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Promoted quality of the units by changing measurement criteria
	<input checked="" type="checkbox"/> Change in patients' views	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Change in patients' views towards choosing hospitals due to the importance of patients' safety
	<input checked="" type="checkbox"/> physician collaboration	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> A relative increase in physician collaboration

4.2. Performance of supervisor organizations (MoHME and the medical universities)

The relative improvement in employee empowerment, including personnel training, through virtual social networks, was one of the improvements in training courses mentioned in the interviews. "At the moment, we learn about the required measurement criteria and documents through two Telegram channels; it is beneficial. These courses should be held for all people, at least for the directors to share their experiences and knowledge" (P11).

From participants' perspective, the relative increase in collaboration among medical universities in recent years was one of the positive points. The increased collaboration was due to the effect of external surveyors (ministerial surveyors). Helping private hospitals through training was a subclass of this category. "The universities provided the necessary facilities, they provided a refrigerator, we did not have enough workforce, but now we have two new personnel, they helped us as much as possible" (P19). In some cases, this increased collaboration was attributed to an external surveyor. "In the recent accreditation, the surveyor was external; therefore, the collaboration of the university was more than in the past. They provided us with whatever we wanted, and there was more collaboration" (P4).

The participants also asserted that after the revision of the accreditation program, MoHME did not provide the hospitals with enough opportunities to implement the measurement criteria. "If we take a look at the accreditation program from the beginning,

the measurement criteria have been presented with a little delay, and there was a short interval between proposing the measurement criteria and the evaluating process" (P16).

Separate implementation of educational and medical accreditation was one of the weak points of the latest accreditation program. "Apart from medical evaluation, educational accreditations should be performed simultaneously (i.e., evaluating the medical documents and records, as well as the doctors' performance, at the same time. This is not desirable since neither the students nor the residents are informed" (P14).

4.3. Performance of the center

In this theme, developing an educational approach in the hospital was one of the codes cited as one of the improved problems in the last two generations of accreditation. "The education was good. Comprehensive, continual, and appropriate courses were held by the hospital" (P3). The lack of motivation mechanisms in the hospital due to the absence of a feedback system was another negative point cited as a decline in the accreditation conditions compared to the previous ones. "I can definitely state that most of my colleagues were not motivated to participate in the accreditation program (enthusiasm and any factor that increases the enthusiasm for cooperation) either due to the payments or any other causes. Nevertheless, they made their efforts and answered the surveyors' questions very well" (P6).

Inadequate cooperation of the collaborators was

Table 4. Deterioration problems compared to the last two generations of hospital accreditation with the previous versions

Theme	Subtheme	code
Designing the measurement criteria	↓ Weights of measurement criteria	↓ Uncertainty of the weights of measurement criteria
	↓ Responsibility in multifunctional measurement criteria	↓ Uncertainty of responsibility in multifunctional measurement criteria
	↓ Fear of measurement criteria	↓ A false fear of measurement criteria
	↓ Increased workload	↓ increased workload despite the decreased number of measurement criteria
Performance of the supervisor organizations	↓ Educational and medical accreditation	↓ Separation of educational and medical accreditation?!
	↓ Change of the surveyors	↓ Change of the surveyors=> elimination of the supervisory role of the universities
Performance of the center	↓ Lack of motivation mechanisms	↓ lack of motivation mechanisms in hospitals due to the lack of a feedback system
		↓ Elimination of the role of encouragement and punishment by the university
Measurement process	↓ Challenges by state (ministerial) surveyors	↓ Lack of consultative approach and sympathy among the surveyors ↓ Shortsighted ministerial surveyor
		↓ Selecting or training surveyors without considering their expertise and abilities
		↓ The state (ministerial) surveyors' unfamiliarity with hospital culture ↓ The provincial surveyors' high level of understanding
	↓ Fixed number of days of evaluation	↓ fixed number of days of evaluation in spite of the complexity of the measurement criteria
Announcing the results		↓ Uncertainty of the weights of the measurement criteria ↓ Ambiguous results
	↓ Dissatisfaction with the results	↓ The effect of inexperienced surveyors (ministerial surveyors) on the results
accreditation outcomes	↓ Dissatisfaction of the employees	↓ Increased dissatisfaction among the employees due to increased workload and lack of human force
	↓ Demotivation due to lower scores	↓ Demotivation due to lower scores (dissatisfaction with the result due to the habit of getting a score on documentation)

one of the problems that remained after three generations of accreditation. "The collaborators' cooperation changed. In some cases, they were not willing to cooperate; however, in other cases, where people were aware of accreditation, they cooperated more. Accreditation began among the nursing staff who carefully followed the instructions step by step; nonetheless, the administrative department was not as good as the nursing staff" (P17).

4.4. Measurement process

The majority of participants regarded the superiority of the ministerial surveyors to the provincial surveyors as one of the strengths of the last two generations of accreditation. It included the national surveyors, more anxiety, more effort, and a competitive atmosphere due to the strictness of ministerial surveyors and their abilities and viewpoints, preventing bias in accreditation since there was no conflict of interest among the surveyors who used checklists (more principled performance) and were well-trained. "We checked the server. They found fault with one item and I get delighted. I thought there was no problem; however, there was one little problem which was left unnoticed. The surveyor overlooked that, and I obtained the score; however, he drew my attention to the problem. The surveyor was knowledgeable and this is very important" (P10). "The evaluation process was better than the past when the surveyors were quite strict." (P18).

Of course, there were some problems with this evaluation process, such as the challenges that resulted from the ministerial surveyor. Some believed that provincial surveyors were much more familiar with hospital conditions, culture, and facilities than ministerial surveyors. "The reason I was satisfied with the previous versions was that we were evaluated by experts (medical experts from universities) for 4-5 hours. They were aware of the affairs, facilities, and the number of workforce and problems of hospitals; therefore, we could easily explain everything to them. They were our coaches; accordingly, we were less anxious to answer their questions; moreover, they performed the evaluation with the highest standards of respect in a friendly manner." (P8).

The lack of sympathy and consultation approach in the ministerial surveyors was another weakness. "The surveyors have no time for training. They just evaluate. Whenever we asked them a question, they told us, "you should follow the measurement criteria". Well, we really thought that we followed the measurement criteria, but we wanted to know about their opinion (P20). Selecting or training ministerial surveyors without paying attention to their expertise and abilities was the other code mentioned in the interviews. "Accreditation should be conducted by

experts (Surveyors) (i.e., laboratory surveyors should be laboratory technicians, or the person who evaluates me as the infection control supervisor should be familiar with this field). However, three surveyors are selected, and they are not familiar with most of my tasks and measurement criteria, even those who work in the field of environmental health" (P6). Mechanical evaluation (too much dependence on the checklist), shortsighted provincial surveyors, as well as the elimination of the encouraging and punishing role of the universities were among other negative points in this subtheme. "In the new accreditation program, the encouraging and punishing roles of the universities and deputies are eliminated. In the past, the centers were monitored twice a year, and the surveyors were informed of the conditions. If I could not get a good score, I knew that they would intervene. They would either encourage or punish me. Deputies' roles in monitoring and evaluation have faded. There are some periodical assessments which are not effective since they do not care about it" (P11).

4.5. Announcing the results:

From the perspective of some of the participants, the quick announcement of the results was one of the problems improved in the latest accreditation. "The results were announced earlier compared with previous years" (P1). On the other hand, more personnel were dissatisfied with the announced results and the conditions of the third generation. "I was not satisfied with the results at all. We evaluated the quality of all devices and equipment of the same company. The blood bank scored 89 (The highest score was given to blood bank quality control); however, the wards obtained very low scores on quality control, while in my opinion, they were better than the blood bank" (P4). In some cases, this dissatisfaction was due to unclear weights of measurement criteria, the ambiguity of the announced results, or the effect of unskilled surveyors, all of which led to low scores. "Non-expert surveyors were the reasons for lower scores" (P2).

4.6. Accreditation outcomes

Most participants believed that accreditation has become operational (i.e., the measurement criteria have become performance-oriented, and there was higher effectiveness due to less documentation). "The performance of the hospital was better. For example, for several years, we had not measured the harmful factors; however, we measured them this year (it was more effective than the previous versions). The hospitals had to meet the requirements of the measurement criteria, and regarding the performance, the last two generations were much better than the previous versions since this year, the measurement criteria were mostly performance-

oriented, and there was less documentation; therefore, the hospitals had a better performance" (P5). Moreover, quality improvement in units due to the changes in measurement criteria, changes in patients' viewpoints in choosing hospitals caring about patients' safety, and increased collaboration of doctors were other improved problems. "Providing facilities for patients' safety and preparing colleagues were the effects of accreditation" (P6).

One of the negative points of the last two generations of accreditation was the demotivating effect of the lower scores (dissatisfaction with the results due to the habit of getting scores on documentation). "In the recent generation, the results have not been announced in detail. If there are 10 items in the measurement criteria and you get a score of 40, it is not specified where you scored less. There may be 20 choices, and I might think that they were all at a good level; nonetheless, I do not know which item has been weak from the surveyor's viewpoint. The ministry just provides an overall score, not a detailed analysis" (P2).

5. Discussion

As evidenced by the results of this study, differences between the two last generations of national accreditation and previous versions include improvable points, improved problems, and cases of deterioration. Moreover, the themes encompass designing the measurement criteria, the supervisor's performance (university and ministry), the hospital's performance, the measurement process, as well as announcing the results and outcomes. One of the codes mentioned by the participants was: "Disregarding the type of hospital in accreditation." In a similar vein, based on the results of a study in Kazakhstan, in some cases, accreditation standards do not consider the differences between organizations; therefore, appropriate standards are needed for evaluating organizations (12).

The challenges of hospital accreditation in the Eastern Mediterranean countries considered by the World Health Organization (WHO) included failure to consider all types of hospitals in compiling the standards and prioritizing them (13). "Highlighting safety aspects" was another feature of the recent generation. Although quality and safety standards improvement were also taken into account in the second generation, in the third version, safety aspects were considered separately by a responsible person (14). Patient safety has always been emphasized by WHO; for example, Australian accreditation reforms have improved the quality and safety of health care (15, 16).

"Lack of a consultation approach among the surveyors" was another problem with the last two generations of accreditation. The WHO has referred to some challenges for hospital accreditation in the

Eastern Mediterranean, such as misperception of the roles of surveyors (17). Furthermore, "selecting or training surveyors without paying attention to their expertise and abilities" was a code indicated in the interviews. Most of the challenges faced by hospital managers during accreditation were related to disagreement among the surveyors (8).

Changes in the selection and arrangement of surveyors can exert significant effects. In the past, MoHME was mainly responsible for policy making, as well as formulating guidelines and supervisory checklists, while universities were mainly the executors of evaluations and supervisory processes (18). In the first and second generations, a large number of people with different specialties from the same province evaluated the hospitals; nonetheless, it was difficult to educate and coordinate the surveyors, resulting in different attitudes among them (8,10). "Surveyor education" was another problem. They were not motivated to perform their tasks since they were not well trained and could not use the same approach in their evaluation (9, 14).

"Mechanical evaluation" (excessive dependence on checklists) was another problem with the third generation of accreditation since if accreditation is merely based on standards, it cannot provide a good picture of healthcare quality in hospitals (11). Moreover, personalization evaluations were common problems with all versions of accreditation, except the fourth generation. According to the studies, it is believed that standardized assessment necessitates the recruitment of capable and professional surveyors with hospital experience and related education, general knowledge, as well as desirable personal and professional ethics (14, 19).

One of the positive points about the last two generations is the substitution of documentation-oriented standards with performance-oriented ones. In addition, the experience of Zambia was indicative of a change from a standard approach to a functional performance (19). Studies on the first and second generations of accreditation demonstrated that managers and staff mainly focused on documenting the processes (7,10). The participants believed that the previous standards and criteria were rich, and similar standards were integrated. The previous versions of the accreditation program in Iran faced challenges in terms of the content and ambiguity of accreditation standards and criteria (7,9,10). On the other hand, a large number of criteria in the first version was a source of dissatisfaction (8,14).

The decreased number of standards in the second edition did not satisfy the hospital managers and staff. The lowest dissatisfaction was related to the consideration of national regulations and by-laws in accreditation standards (9). It suggests that a mere reduction in the number of criteria is not sufficient, and all their aspects should be taken into consideration. Nonetheless, the workload was

increased despite the decreased number of standards. In general, accreditation in its initial stages caused a lot of workloads, and there were not enough personnel to cope with it (14, 19). According to a systematic review in world studies, accreditation has been recognized as a time-consuming activity, creating administrative bureaucracy, increasing workload, and causing stress among employees (20).

The participants also referred to "Strict accreditation standards and false fear of the standards." In the previous versions of accreditation, there was a problem of imbalanced standards for various hospital departments and scoring scales which led to a negative attitude toward accreditation among administrative staff and nurses (7, 14). "Uncertainty of the weight of standards" was another problem in the last two generations of accreditation. In the second generation, dissatisfactions were mostly due to equal weights of the standards and lack of transparency of measurement criteria (9).

"Increased collaboration of universities with hospitals" was an improvement caused by the presence of external surveyors. "Electronic processes" was also among the positive points of the last two generations of accreditation. Nevertheless, the participants were dissatisfied with the increased workload. One of the main challenges of previous versions of accreditation was a lack of commitment among managers and leaders (21, 22). "Inadequate collaboration of colleagues" was another problem which required improvement in accreditation. The reform experience in Australia also emphasized the development and maintenance of stakeholders' understanding of accreditation program requirements (16). The main challenges of the accreditation process include the participation of the staff, creating a sense of collaboration among them, and communication among the departments (23). Nevertheless, according to studies in Iran and other countries, not all hospital personnel participate in accreditation, and the majority of tasks and documentation processes are performed by nurses, and physicians do not do anything (8,24).

In general, the studies pointed out that participation and collaboration of all beneficiaries in accreditation are necessary for quality improvement (17, 25). The Australian experience illustrated the crucial role of key stakeholders as the main facilitators of national accreditation reforms (15). Therefore, according to studies in other countries, it is crucial for stakeholders to participate in other international health system reforms (26-29). From the perspective of a number of participants, the speed of announcing the results was one of the improvements of the third generation of accreditation. This is in contrast with the findings of the Accreditation Program in Zambia, where a delay

was reported in announcing written results (19).

"Independent accreditation of educational and medical systems" was another weak point cited by the participants. "Poor staff education" was another problem. Studies in the world demonstrated that accreditation training has a positive effect on the performance of residents (8, 14, 30). "Lack of motivation mechanisms in hospitals" was another code that can be associated with inadequate collaboration among colleagues. The experience of Zambia in hospital accreditation was indicative of the government's failure to make decisions about incentives and feedback (19).

"Inappropriate reflection of results in evaluation days" was a negative aspect of all accreditation versions, except the fourth generation. Hospitals were never given enough time to implement the standards (8). Inexperienced surveyors imposed their personal viewpoints (31, 32). Nonetheless, there were also some participants who believed that three days of inspection were sufficient in the last two generations (8).

On the other hand, a large number of participants were dissatisfied with the announced result. They attributed the low scores to a lack of infrastructure and believed that the emergence of money-oriented criteria and some infrastructure measurement criteria in the new generation had doubled the pressure. According to studies in Iran and other countries, the implementation of accreditation standards in hospitals has not been very successful due to financial limitations (8, 16, 35).

"Unrealistic accreditation on the results" was mentioned as the remaining problem of the accreditation program. The accreditation department should be independent to prevent any pressure, personalization viewpoints, and bias (8). Accordingly, in line with the results of a study in Zambia (19), "Failure to provide legal infrastructures" was another remained problem identified in the present research. Policymakers in developing countries should consider the accuracy of establishing accreditation systems by creating the required infrastructures for healthcare organizations (32).

5.1. Limitation and recommendation

Some experts were not willing to cooperate and participate in the interviews. Attempts were made to solve this problem by sending official recommendation letters. However, this can be explored from other perspectives, such as differences in participants or other study methods can be used.

6. Conclusion

Hospital accreditation has transferred from high-income to middle- and low-income countries and has been challenging. During the transfer journey, sometimes, due to the inadequacy of the

selected model or incorrect understanding of the original model, it takes a long time to achieve success in implementing the program. The revision process of the National Accreditation Program in Iran is indicative of an upward trend in the program, and almost proper modifications have been made.

Significant changes have been made since the third generation of accreditation. Of course, we cannot expect the same results from established accreditation programs with an experience of more than 40 years. The implementation of quality management in the health sector entails a targeted, long-term, inclusive, and sustainable program; therefore, reforms in accreditation programs need time and precise planning; moreover, hospital standards should be gradually developed and customized according to their resources and capacities.

Another fundamental difference between the accreditation model in Iran and other countries is the similarity between the organization evaluator and the organizations being evaluated. During the accreditation generations, university surveyors change to the Ministerial surveyors leads to to become partly external evaluation organization. Changes in performance-oriented and highlighted patient safety have been very helpful. There have been also positive changes in the fourth generation, including a significant reduction in measurement criteria, more professional evaluators, the elimination of document uploads, and the definition of outpatient measurement criteria.

The improvable points were as follows: defining some measurement criteria, limitations of measurement criteria that related to physicians, evaluating input instead of output, lack of medical guidelines, failure to pay attention based on hospital-type criteria, employing untrained officials, lack of infrastructures, lack of continuous monitoring by the universities, not providing the infrastructures, inadequate collaboration of the personnel, lack of motivation mechanisms for new criteria, and personalization evaluation.

The present study aimed to compare the fourth generation of accreditation with the previous generations and divide these differences and similarities into three areas: improvable points, improved problems, and cases of deterioration that have worsened or appeared in the fourth generation of accreditation. Therefore, policymakers can use the results to improve the formulation and implementation of the accreditation program.

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Footnotes

Conflicts of Interest: The authors declare that they have no conflict of interest.

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Ethics approval and consent to participate: a written consent form was obtained from those who agreed to take part in the interview.

Availability of data and material: Some experts were not willing to cooperate and participate in the interviews. Attempts were made to solve this problem by sending official recommendation letters.

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