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# Structural challenges in the health domain of the health system reform: A qualitative study

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## Abstract:

**BACKGROUND AND AIM:** Considering that the Qom University of Medical Sciences was a pioneer to implement the health system reform (HSR) in the domain of health services and the lack of a study that has addressed the challenges and strategies to promote the HSR in the health domain, this study was designed to explain the structural challenges and its solutions in the health domain of the HSR in the city of Qom, Iran, 2017.

**MATERIALS AND METHODS:** This study was a qualitative research. The health managers, the health-care providers, and the recipients of health services referring to the health centers in Qom were the participants in this study who were selected using the convenience sampling method. The data were collected using individual interviews and with the guidance of a semi-structured questionnaire. Collected data were analyzed by the qualitative content analysis method with an inductive approach. After extracting the challenges of the HSR in the health domain through a qualitative approach, these challenges were prioritized through Delphi's technique in terms of relevance and resolving strategies.

**RESULTS:** From the perspective of the study participants, the structural challenges of HSR in the health domain in order of importance and priority included problems due to the SIB system, defects in the instructions, the disruptions caused by multitasking, poor service coverage, incomplete health-care packages, and the shortage of resources.

**CONCLUSION:** According to the findings of this study, we hoped that the HSR in the health area can be improved to increase its success by modifying the guidelines and the coverage of services, modifying the SIB system, providing requires resources, completing the service packages, and solving the multitasking problem.

## Keywords:

Challenges, health services, health system reform, Iran, primary health care, structure

## Introduction

Over the past few decades, factors such as changes in people's lifestyles, increased incidence of non-communicable diseases as well as the increased diagnostic-therapeutic costs have caused the health system failure in responding to the health priorities of the people.<sup>[1]</sup> As a result, the attention of the policy-makers has been drawn to change the existing programs and provide new plans. One

of these changes is the health system reform (HSR).

The reform of the health system is considered as a continuous improvement cycle of policy-making in the health domain,<sup>[2]</sup> which includes the ongoing process of planning, legislating, implementing, and evaluating of the changes in the health system.<sup>[3]</sup> This cycle is accepted as a common international practice<sup>[4]</sup> and is increasingly running and pursuing in most societies.<sup>[2]</sup> For example, in Ireland, improving the health, well-being, and quality of life of people, prevention, early intervention, and empowering the

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people to take care of their health are defined as general objectives in the HSRs, which details include Ireland without smoking, reducing obesity and increasing physical activity, promoting sexual health, reducing drug abuse, and positive aging. Accordingly, many advances have been obtained in promoting the health of the community and confronting various types of public health challenges.<sup>[5]</sup> In 2010, the United States has passed its first comprehensive HSR in the form of the Affordable Care Act (ACA). The controversial part of the US Health domain Reform system is the provision of affordable health insurance for most US citizens and the legal residents, which has now faced many challenges. However, some parts of the reforms system of the health system of the United States aimed at improving the quality, efficiency, and medical care of the United States appears to be a good model for the international community.<sup>[3]</sup> In Korea, due to the aging of the population of this country, the emphasis of the National Health Insurance Plan was on how to pay the health-care providers, especially for the elderly and the price adjustments.<sup>[6]</sup> China, with the goal of providing equal access for citizens to basic health care, has provided some reforms based on three basic principles of strengthening the role of government in health, justice, and market regulation. Accordingly, China has made changes in the health system, including public financing, the expansion and development of primary health centers, and increased subsidies for universal insurance coverage.<sup>[7]</sup> In 2003, Turkey began the transitional health system plan aimed at easy access, efficiency, and effectiveness of the health services for people. It also introduced the 2008 National Health and Social Security Act with the goal of covering all the people. In 2010, the Family Practitioners' Plan covered all Turkish residents as well. To increase efficiency, Turkey established the performance-based payment in all hospitals and health-care provider centers in 2004. The health information system was upgraded and turned into a case-hybrid system, which increased the efficient use of resources.<sup>[8]</sup>

In our country, Iran, the pressure has increased for creating a responsive and accountable health system in recent years considering the role of health, prevention, self-care and special attention to nontherapeutic expectations due to its efficient and widespread functions, as well as the rising public expectations in terms of provision and improving safety, and the increased quality and equity of health services.<sup>[9]</sup> The result of these changes was the implementation of the HSR in the health domain in 2014 by the Ministry of Health and Medical Education of Iran.<sup>[10]</sup> Certainly, implementation of this plan, like any other project implementing across a vast country like Iran with such a population and area, will face problems and has strengths and weaknesses. Identifying, assessing, and introducing these factors

to policy-makers and administrators can help them overcome these deficiencies and achieve the objectives of the plan. As there was no available study, which has examined the challenges and strategies for promoting the HSR in the health domain and since the Qom University of Medical Sciences has begun implementing this project in Iran, the present study was designed to explain the structural challenges and its resolving solutions in the health domain of the HSR in the city of Qom.

## Materials and Methods

The present study was a qualitative research of content analysis type, which was conducted to explain the challenges of the HSR in the health domain and its solutions in the city of Qom.

The research environment was health-care center affiliated with the health deputy of the Qom University of Medical Sciences. The participants in the study included technical and operational managers and health-care providers affiliated with the health deputy of the Qom University of Medical Sciences and clients who referred to the health-care centers. Operational and field managers were enrolled in the study through census sampling method. Hence, by referring to the health deputy of the Qom University of Medical Sciences, the researcher requested all the operational and field managers to express their views on the challenges of the HSR in the health domain and the solutions to resolve them. Finally, 22 operational and field managers participated in this study. Using the convenience sampling method, health-care providers and clients of health-care centers were included in the study. In overall, 118 health-care providers (midwife, health education expert, psychologist, nutritionist, physician, dentist, environmental health expert, and male health caregiver) and 15 clients answered the interview questions. The sampling continued until data saturation. The inclusion criteria involved the willingness to participate in the study and the ability to express individual perspectives and experiences. The exclusion criteria were only the decision to discontinue the participation in the study.

The participants' experiences and views on the structural challenges and solutions to resolve them in the health domain of the HSR in the urban area were gathered by individual interviews and using a semi-structured questionnaire include following questions: What are the challenges of the HSR in the health domain in your opinion? What do you suggest as solutions to resolve these challenges? and more exploratory questions were asked according to the participants' response.

The collected data were analyzed using conventional content analysis method with an inductive approach.

Thus, immediately after recording each interview, the researcher prepared a word-by-word transcription of the interview. The provided text was then read line by line to determine the important sentences and phrases, which were underlined and their essence was labeled (coding). Then, the similar codes were merged and categorized to form the subcategories. Subsequently, they were named based on the ideas they had covered. The subcategories were compared with each other, and in the case of similarity, they gathered together, leading to the appearance of the main categories. In addition, the manuscripts of the participants were collected and analyzed. Sampling continued until no new codes were achieved from data analysis.

### Trustworthiness and rigors

Using diversity in the selection of the participants, the review of the handwritten documents by the participants, we attempted to increase the credibility of data. Reliability was confirmed recoding the transcribed interviews another colleague. Furthermore, transferability of data was achieved by completely and constantly recording the researcher's activities about data gathering and analysis.<sup>[11]</sup>

The Delphi method was used to prioritize challenges after extracting the structural challenges of the HSR in the health domain [Table 1]. This methodology is used in prioritization, planning, and evaluation.<sup>[12]</sup> The sampling was done for this step by purposive sampling method. The participants at this stage were operational and field managers of the health deputy of the Qom University of Medical Sciences. After selecting the panel members, the members were officially invited to participate in the panel during the first round and the oral consent for cooperation was obtained from them. Based on the willingness of the participants, the initial version of questionnaire was sent to the members in print or electronic form. These questionnaires had been designed and developed to get written comments from the panel members about the importance and the possible solutions of the challenges of the HSR in the health domain. After 14 days, the comments and suggestions of the panel members were collected. A content analysis was done on the opinions of the experts in the analysis and its results during the second round, together with the results of analyzing the experts' opinions and their degree of agreement on the importance and prioritization of challenges were provided to the panel members on a 6-option Likert scale (from quite agree<sup>[6]</sup> to quite disagree) [Table 1].<sup>[11]</sup> The written answers of the members to the Delphi questionnaire were analyzed. Then, the prioritization of the challenges was approved and finalized with an agreement rate of about 82%.

**Table 1: The questionnaire used to prioritize the challenges by Delphi method Challenges**

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Problems due to the SIB system
Disturbance in the students' education process
Disruption of face-to-face communication with the clients
Unfamiliarity of the SIB designers with clinical work
Lack of connection to level 2 services
Time-consuming process of data recording
Dependence on technology
Defects and errors in the system questions
Defects in the instructions
Unclear instructions
Opposite instructions
Instable instructions
Disruptions caused by multitasking
Client's distrust and dissatisfaction
Interdisciplinary animosity and hostility
Lack of job identity
Job dissatisfaction
Sense of blame among care provider
Poor service coverage
Equality and not justice in the distribution of services
Failure to achieve universal coverage
Difficulty in client accessing to health-care centers
Incomplete health-care packages
Lack of physician in the health center
Lack of pharmacy
Lack of paraclinical services
Lack of health services at levels 2 and 3
Defects in the referral and follow-up of the patient
Lack of social services
The shortage of resources
Shortage of workforce
Shortage of finance
Shortage of facilities and physical space

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### Observing ethical considerations

During the study process, the necessary permits and letters of recommendation were acquired and submitted to the research units. The objectives and methodology of the research were explained to the participants. It was explained to them that the text of the interview would be maintained anonymously and their information will be kept confidential. Furthermore, informed consent was received from the participants for participation in the study and recording of the interview. The participants were assured that they could withdraw from the study at any time.

### Results

After analysis, the study data were categorized into 430 codes, 29 subcategories, and 6 categories, as presented in Table 2.

From the perspective of the study participants, the structural challenges of HSR in the health domain in

**Table 2: Structural challenges of the health system reform in the health domain in the city of Qom from the perspective of managers, clients, and care providers**

Category	Sub category	Priority score in delphi
Problems due to the SIB system	Disturbance in the students' education process	3.18
	Disruption of face-to-face communication with the clients	
	Unfamiliarity of the SIB designers with clinical work	
	Lack of connection to level 2 services	
	time-consuming process of data recording	
	Dependence on technology	
	Defects and errors in the system questions	
Defects in the instructions	Unclear instructions	2.86
	Opposite instructions	
	Instable instructions	
Disruptions caused by multi-tasking	Client's distrust and dissatisfaction	2.7
	Interdisciplinary animosity and hostility	
	Lack of job identity	
	Job dissatisfaction	
Poor service coverage	Sense of blame among care provider	2.66
	Equality and not justice in the distribution of services	
	Failure to achieve universal coverage	
Incomplete health care packages	Difficulty in client accessing to health-care centers	2.54
	Lack of physician in the health bases	
	Lack of pharmacy	
	Lack of paraclinical services	
	Lack of health services at levels 2 and 3	
The shortage of resources	Defects in the referral and follow-up of the patient	2.26
	Lack of social services	
	Shortage of workforce	
	Shortage of finance	
	Shortage of facilities and physical space	

order of importance and priority included problems due to the SIB system, defects in the instructions, the disruptions caused by multitasking, poor service coverage, incomplete health-care packages, and the shortage of resources. These categories are explained below:

### Problems due to the SIB system

The process of making the health records electronic, although seems to be a good plan, has turned into a barrier to the optimal delivery of health services due to

defects and problems in the system. From the viewpoint of the participants in this study, the main problems of the SIB system are disturbance in the students' education process, disruption of face-to-face communication with the clients, unfamiliarity of the SIB designers with clinical work, lack of connection to level 2 services, time-consuming process of data recording, dependence on technology, and defects and errors in the questions.

### *Disturbance in the students' education process*

Since every caregiver is responsible for entering the information of the client in the system and due to caregivers' concerns about the incorrect information recording, they are not willing to give this duty to the students and trainers. As a result, the students do not have the opportunity to get involved with the work in the system, independently carry out the health care for the clients, enter the information into the system, observe the system messages, and follow them up.

"The students cannot see the patient's records, which causes problems in their education process."

### *Disruption of face-to-face communication with the clients*

The participants in the study stated that entering the information in the SIB system (due to the network problems, high number of the questions, and the lack of skill of the care providers) takes a significant attention and time from the care providers so that it reduces the face to face communication between the care provider and the clients. As a result, it reduces the attention to the client, decreases the time spent on the individual counseling, and reduces the quality of health care.

"The face-to-face training time with the client is little, which reduce the quality of services."

"Recently, the care providers are more concerned about completing and accuracy of electronic records other than the health of people and improving it."

### *Unfamiliarity of the SIB designers and developer with clinical work*

Due to numerous defects and problems in the SIB system, the study participants believed that the system designers were unaware of the guidelines of the provision of health services and were completely unfamiliar with the way of providing health services; thus, this lack of familiarity has caused the problems found in the system.

"One of the key challenges of this reform was the synchronization of implementation the SIB system with the implementation of the HSR, which showed that a number of engineers unfamiliar with the health and treatment services have been the designer of the care providing forms for mothers, children, and the patient care."



### *Lack of connection to level 2 services*

Failure to establish a proper and efficient electronic communication between health services at level 1 with higher levels of the health care through the SIB system has caused disruption in the referral and follow-up of the patients in the treatment section.

“Failure in connecting the SIB system to the level 2.”

### *A time-consuming process in recording the data*

Recording information with plenty of details and occasionally repeated in the SIB system as well as the lack of skills in working with the system and disruptions due to the use of technology has caused dissatisfaction of the health-care providers due to the time-consuming process of working with the SIB system. The study participants stated that such conditions have increased the time needed for each client, the clients’ waiting time and dissatisfaction, and reduced the quality of providing services.

“A mother is hurrying and heavily pressured by his husband that how much does it take to inject a vaccine; but the system wants a high statistics from us; we have to fill out several questionnaires at the same time. Then, we hear swearing and bad things; why does it take so much time for a vaccine?”

### *Dependence on technology*

Like other electronic systems, one of the weaknesses of the SIB system is its dependence on technology and its vulnerability. The study participants pointed to this fact that events such as computer system interruptions, power outages, or disconnection to the Internet and the university network, prevent the startup and proper functioning of the SIB system. The result will be disruptions in the provision of health services, impairment in the completion of the client’s record, and waiting and dissatisfaction of the clients.

“The power outage and Internet disconnection at the peak of the work is one of the concerns of most personnel in this regard.”

### *Defects and errors in the system questions*

Despite the gradual resolving of the problems and deficiencies of the SIB system, the health-care providers were still dissatisfied due to some defects in the system causing disruption and ambiguities in the process of providing health services.

“The SIB system has many bugs and errors.”

### **Defects in the instructions**

The study participants believed that the guidelines related to the health services are unclear, inconsistent, and unstable, which have disrupted the delivery of health services and confusion among the care providers.

### *Unclear instructions*

A number of participants emphasized that various implementation aspects are not considered in the formulation of guidelines. Therefore, when performing, the care providers will encounter many problems.

“The instructions issued and communicated by the ministry are mainly unconsidered instructions. Due to lack of experience, they communicate an instruction that In implementing, we will face some sort of problems.”

### *Opposite instructions*

The participants believed that some of the instructions are in contradiction and some of them will not be issued at the right time.

“Sometimes, the matter is the transposition of new guidelines and directives, and sometimes there is a contradiction or interfering with the tasks in them. For example, a mental health authority communicates a program for the mental health, which has been predicted already in the family health protocols.”

### *Instable instructions*

The participants emphasized that the deficiencies in the guidelines lead to the system’s requirement for frequent modification and correction of the procedures. This causes confusion among the care providers and clients as well as leading to the waste of time and money.

“Each time, we encounter a series of new protocols such as changing the Pap test conditions, etc.”

### **Disruptions caused by multitasking**

Distrust and dissatisfaction of the clients, interdisciplinary animosity and hostility, lack of job identity, job dissatisfaction, and sense of blame among care provider were some of the problems resulting from multitasking according to the participants view in the present study.

### *Distrust and dissatisfaction of the clients*

Integration of job descriptions of health-care providers with a variety of specialties in a person entitled as the care provider has caused confusion in the clients since they do not know what the specialty of each of the health-care providers is and what kind of services they offer.

“When they see, the same person who collects the specimen for Pap test injects the vaccines and also does the pregnancy exam, while she is not the midwife, they tend to go to specialized centers.”

### *Interdisciplinary animosity and hostility*

Overlapping and interference of the description of duties of care providers graduated from different disciplines have caused confrontation and annoyance among them.

"If anyone is asked to do tasks related to their own specialty, these conflicts will not occur among the personnel."

#### *Lack of job identity*

Combining the description of tasks of multiple disciplines and assigning this combined tasks to those have studied and graduated in a discipline with the specific description of tasks has caused confusion and a sense of contradiction between different graduation lines and the job positions in the health-care providers.

"One of the weaknesses is that one person asked all kind of things: Focusing on the pregnant, the child, the middle-aged, and the elderly. S/he had to know about all the booklets. I'm a midwife myself. But, I do not have the focus on the pregnant as before. I knew the booklet completely, now, I do not know what to do."

#### *Job dissatisfaction*

The participants in the study expressed dissatisfaction with the multitasking plan, which had resulted to miss the special title consistent with the graduation lines and being called as the general title of the "Health-care provider," and significant increase in the workload due to the variety and multiplicity of duties.

"Polyvalent (multi-tasking) is condemned to fail; it is totally wrong to call an academic educated as a health care provider."

#### *Sense of blame among care provider*

The participants in the study had a feeling of guilt and regret due to inability to use their expertise and knowledge in providing services to the clients, the reduced quality of services provided to the clients, trampling the rights of patients due to the prolonged waiting time, visit of different patients in same time, and nonprovision of a private space for the patient.

"But the clients are in need so much that our conscience is not satisfied not to give them specialized midwifery services."

"A tuberculosis patient and patient with pediculosis was wandering and coughing in the same room that baby and the pregnant mother received care."

#### *Poor service coverage*

Equality and not justice in the distribution of services, failure to achieve universal coverage, and difficulty in client accessing to health centers were among the reasons stated by the participants in the study to justify the inappropriateness of the coverage of health services.

#### *Equality and not justice in the distribution of services*

One of the objections stated by participants regarding the HSR was the same distribution of health services in

all areas of the city and the lack of a difference between the wealthy regions and the poor areas in this regard. The participants pointed out that people with a good socioeconomic status are more willing to use the private sector services. Therefore, the health facilities provided in these areas are not regarded and used, and thus, the waste of resources and capital somehow will occur.

"Affluent people come to both the health centers and private sector. The poor are unable to go to the private sector. The resources are used at a place where people do not need, but in the poor areas, there are sick people with more problems."

#### *Failure to achieve universal coverage*

The study participants believed that the universal health coverage has not been achieved in the HSR since due to the lack of male care providers and the men's busy time, the health records are formed for a small number of them. On the other hand, due to poor advertising, many citizens are not aware of the services provided for all age groups or they have not understood the importance of the health services. Therefore, they have not act for the formation of a health record.

"Given the fact that the bases do not have male health-care providers and generally the number of male health-care providers is low, this leads to low men's health coverage."

#### *Problems with access to the health centers*

In the maps prepared to determine the area covered by the health centers, the clients' access distance to these centers is not considered. Thus, the people are not guided to the nearest centers. This raises dissatisfaction and reduces the number of clients.

"The areas covered by each centers have been assigned improperly without attention to experts' recommendations. This has caused the public dissatisfaction and a reduction in the expected coverage. For example, a clinic in Enghelab Street is responsible for covering people in Azar (Taleghani) Street.

#### *The incomplete health-care packages*

Lack of a physician in the health bases, lack of pharmacy, lack of pharmacy, lack of paraclinical services, lack of health-care services at levels 2 and 3, defects in the referral and follow up of the patient, and the lack of social services were among defects mentioned by the participants.

#### *Lack of physician in the health bases*

The study participants pointed out that the lack of physicians in the health bases has caused problems for the care providers and the clients since they have to refer the clients to the health centers for a doctor visit.

"The lack of a doctor at the health bases is annoying at some sites."

#### *Lack of pharmacy*

The lack of pharmacies and the lack of distribution of drugs at the health centers and bases have impeded the completion of the disease treatment, and consequently, leads to the incomplete health improvement process.

"While the physician visits are free, but the tests, ultrasounds, drugs,... are expensive that cause the patients, especially the destitute, don't follow the treatment process."

#### *Lack of paraclinical services*

Lack of paraclinical services in the health-care packages was another defects that affected the process of assessment, diagnosis, follow-up, and treatment of the diseases. Since many of the clients referring to the health centers belong to the poor socioeconomic class of the community, in case of the need for paraclinical diagnoses, they cannot afford the related high costs. As a result, they are discouraged from doing so, and their treatment process will be disturbed.

"For example, many elderly and middle-aged people have stated that we know that we have to do the tests. There should be a laboratory that offers us free services, otherwise, being reminded will not solve any problem."

#### *Lack of health services at levels 2 and 3*

The study participants emphasized that until the connection between health system and treatment system is fully implemented and the health promotion chain will not be completed by providing free treatment, providing primary health-care services alone will not be enough and will not play a significant role in improving the health status.

"No support by the treatment from the health-care services. For example, if we make the record for the elderly, while all of these elderly people need treatment services such as tests, hearing aids, teeth health, etc., but no service is received because of the costs, in fact, our services will end in asking a few questions with no efficiency."

#### *Defects in the referral and follow-up of the patient*

Another disadvantage of this reform is the disruption in the referral and then the follow-up of the patients at the level 2 and 3 of the health services since the link between health-care services and treatment services has not yet been well organized and defined. On the other hand, this connection is not covered by the SIB system. Thus, after referring the patients to levels 2 and 3, no adequate and transparent feedbacks will be received and the patients may not be referred to the health centers again.

"These services cannot be made at level 2 and in the hospitals. Therefore, despite the provision of good

services at level 1, there is no way to follow-up and receive feedback from level 2."

#### *Lack of social services*

Considering the need of some clients for support and social services and the lack of an executive solution in this regard, the vacancy of such services was very tangible for the health providers.

"The unclear status of social service."

#### **The shortage of resources**

The study participants referred in their interviews to the shortage of workforce, finance, facilities, and physical space as a part of structural challenges in the path of the HSR in the health domain.

#### *Shortage of manpower*

In case of the human resources, the shortage of doctors, dentists, and care providers, particularly male care providers, were emphasized by the participants more than other cases.

"Due to a large number of people covered, more workforce is also needed to provide services, which has not sufficiently been fulfilled."

#### *Shortage of finance*

The lack of funds and finances has limited the payments, recruiting the required human resources, and providing physical space and facilities. The uncertainty about how to provide resources to continue implementing the reform in the future was also one of the concerns for the participants in the study.

"Credits and lack of finance. are one of the major ultraorganizational challenges."

#### *Shortage of facilities and physical space*

The study participants emphasized the inadequacy of the health physical spaces due to the rental nature and conversion of residential buildings to health centers, small size, and the lack of space in many of these buildings, the simultaneous visit of several clients by a few care providers located in one room, and as a result, disrespect to the patient's privacy, the weariness of buildings, the imposition of heavy charges for renting buildings, as well as the shortage of equipment.

"We have only 2 family rooms that 5 care providers are in one of them. The other one, which is hardly 6 m<sup>2</sup>, is both the vaccination room and the midwifery room."

## **Discussion**

Based on the views and experiences of the study participants, including technical and operational

managers and health-care providers affiliated with the health deputy of the Qom University of Medical Sciences and clients, the structural challenges of HSR in the health domain in order of importance and priority were problems due to the SIB system, defects in the instructions, the disruptions caused by multi-tasking, poor service coverage, incomplete health-care packages, and the shortage of resources. In the following, we discussed these challenges.

From the viewpoint of the participants in the study, the most important structural challenges of the HSR were the problems due to the SIB system as follows: disturbance in the students' education process, disruption of face-to-face communication with the clients, unfamiliarity of the SIB designers with clinical work, lack of connection to level 2 services, time-consuming process of data recording, dependence on technology, and defects and errors in the questions. In the Delphi section, in terms of the priority, these challenges gained the score 3 and the disturbance in the students' education process earned a score of 1. In terms of possible resolving, lack of connection to level 2 services and the defects and errors in the questions gained the score 3, and other challenges obtained the score 2. In the same vein, Vosoogh Moghaddam *et al.* mentioned the following as challenges facing the health system in Iran: the weakness of the law-related electronic health records; lack of coherent national strategy for the development of electronic health records; conflicts and disagreements between various government agencies in monitoring electronic health programs; the weakness in the technical, informational, security, and technological infrastructures in the field of electronic health; the lack of accurate investment to support the electronic health policies and programs; the lack of infrastructure required in these sectors; and lack of human resources, skills, and capabilities needed to develop electronic health.<sup>[1]</sup> The participants emphasized the need to modify the SIB system based on the users' comments.

One of the other major challenges in this reform from the perspective of participants was unclear, inconsistent, and unstable guidelines, which have impeded the provision of health services and resulted in the confusion among the care providers. In the Delphi section, these three challenges obtained the score of 3–2 in terms of priority and the score 3 in terms of possible resolving. Vosoogh Moghaddam *et al.* also concluded in their study that the lack of agreed guidelines for policy-making and planning of health policies and procedures and the lack of attention of policy-makers to the periodic oversight of policies and planning are some of the challenges in the HSR.<sup>[1]</sup> Ghanbari mentioned planning as the most important prerequisite for the implementation of the HSR and emphasized the importance of the need for macro and regional planning to achieve the

best pragmatic outcomes.<sup>[13]</sup> The solutions suggested by care providers to address this challenge included the increased relationship between staff managers and policy-makers with the environment and the care providers, acceptance of criticism, and the commitment from managers and policy-makers to correction.

The participants in this study were dissatisfied with the multitasking and believed that the multitasking causes distrust and dissatisfaction of the clients, interdisciplinary animosity and hostility, lack of job identity, job dissatisfaction, and sense of blame among care provider. In the Delphi section, these challenges scored 2 points in terms of priority, except for increased job dissatisfaction that earned a higher score of 3. In terms of possible resolving, these challenges also earned a score of 2. Considering that other studies have not addressed the multitasking issue, but due to the challenges facing the Iranian health system, the low job satisfaction, the weakness of the motivational system in improving the employees' performance, low wages and unbalanced incomes compared to similar groups, and unequal payments at different levels can be attributed to the result of this factor.<sup>[1]</sup> It is worth noting that satisfaction with the health system leads to the continual of the service delivery, and in contrast, the dissatisfaction reduces the effectiveness of the health-care system.<sup>[14]</sup> Whereas, real progress in the community health is based on preventive care and it is very difficult to face the challenges of the health system without the development of health systems assessment.<sup>[14]</sup> The participants in the present study expressed dissatisfaction with the existing conditions and emphasized the provision of specialized services based on the knowledge and the description of the tasks of each discipline.

Other challenge presented in this study was inadequate health service coverage due to equality and not justice in the distribution of services, failure to achieve universal coverage, and difficulty in client accessing to health centers. In the Delphi section, these challenges scored 2 points in terms of priority. In terms of possible resolving solutions, equality and not justice in the distribution of services and failure to achieve universal coverage obtained score 3 and other challenges scored 2 points. Since justice in health and access to high-quality health care enhances the public health and promotes the social participation, then, a high quality and consistent with the community needs health care services have to be provided efficiently and justly.<sup>[15]</sup> On the other hand, promoting intersectoral cooperation in the health domain and the emphasis on the structural and social determinants plays an important role in reducing the health inequalities because the social status and individual needs are considered during distributing the health services.<sup>[15]</sup> In this regard, the study participants



emphasized the distribution of services according to the needs of the people, paying attention to the voluntary provision of health services, the provision of services based on the population density and the economic situation of the regions, and the allocation of the project to the periphery and margins of the city.

Lack of a physician in the health bases, lack of pharmacy, lack of pharmacy, lack of paraclinical services, lack of health-care services at levels 2 and 3, defects in the referral and follow-up of the patient, and the lack of social services were criterion of deficiency in health-care packages mentioned by the study participants. Due to the clients' dissatisfaction, the care providers stressed on the need to add services such as laboratory tests, pharmacies, specialists visits, and dentists. However, in the Delphi section, these challenges scored 1–2 points in terms of priority since technical and operational managers believed that the treatment services are not supposed to be provided in the health domain, but the incompetency in the referral and follow-up of the patient earned a higher score of 3. From the view of resolving possibility, these challenges scored 1–2 points. Consistent with the results of this study, Ghanbari stated that returnees to health-care centers are demanding specialize medicine with a minimum charge and adequate structures in this regards have not been provided in HSR.<sup>[13]</sup>

The participants referred in their interviews to the shortage of workforce, finance, facilities, and physical space as a part of the structural challenges in the path of the HSR in the health domain. The health managers did not agree with these three challenges. Therefore, in the Delphi section, these gained the scores of 1 and 2 in terms of priority and resolving possibility respectively. Likewise, Moghadam reported lack of adequate physical facilities, lack of physical space management, and nonprofessional and nonstandard physical structures as challenges of the HSR.<sup>[1]</sup> Based on these findings, the planning and managing the existing resources is essential to provide necessary financial and human requires and physical space. Emami Razavi suggests that the strengthening of the infrastructure through effective training of human resources and the use of nongovernmental resources to develop the framework for providing services, transfer people's duties to themselves, and encourage people participation in prevention and treatment can reduce the government's costs.<sup>[16]</sup> Moghadam believes that due to deficiency of human resources in the HSR and existence of excess and unemployed graduates in different fields,<sup>[1]</sup> the proper employment of graduates can greatly help to overcome these problems.

The HSR in the health domain firstly implemented in the metropolis of Qom as a pilot project. According to

our survey, we could not find an article in relation to the challenges of the HSR in the health domain. The strengths of this research included the following: conducting a qualitative study with the participation of the technical and operational managers and health-care providers affiliated with the health deputy of the Qom University of Medical Sciences and clients, extracting the challenges as outputs of this qualitative study, designing Delphi based on the findings of the qualitative section, and performing the Delphi technique with the participation of including technical and operational managers affiliated with the health deputy of the Qom University of Medical Sciences. The lack of access to some of the experts and key person can be considered as one of the most important limitations of the present study.

## Conclusion

According to the findings of this study, we hoped that by modifying the guidelines, correcting coverage of services, correcting the SIB system deficiencies, providing the requires resources, completing the service packages, and providing specialty care services instead multitasking care services, the HSR in the health domain can be improved and increase its success. By helping to identify the structural challenges in the health field, the results of this research can be first and small step in providing an appropriate framework for monitoring and evaluating the HSR in the health domain and act as a good platform for the policy-makers and planners of the HSR.

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## Conflicts of interest

There are no conflicts of interest.

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