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Analysis of the Structure of Public Hospitals Administration in Iran: A Qualitative Study

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Abstract

Background: Public hospitals account for approximately 80% of the health system resources while producing only 20% of the public sector's output.
Objectives: This study aimed to analyze the current administration structure (strengths, weaknesses, solutions, and proposed models) of Iranian public hospitals.
Methods: This study is qualitative research with a phenomenological approach. The required data were collected using semi-structured interviews with 58 national experts in the field of hospital management who were selected based on the purposive sampling method. Data were analyzed using the conventional content analysis method.
Results: Nine main themes and 34 sub-themes were identified in the weaknesses. The strengths contained four main themes and 16 sub-themes. The proposed solutions had five main themes and 22 sub-themes, and the proposed models from the experts' points of view were composed of four main themes and six sub-themes. The important weaknesses were low commitment and motivation, poor financial management and budgeting, and centralized decision-making and management. The strengths included strong infrastructure, extensive service delivery, government support, and positive social functions. The most important proposed solutions were complying with the requirements of structural reform, development of related assessment indicators, public-private partnership, payment system reform, delegation, manpower management, hospital organizational structure, and reform of the tariff system. Finally, the model of the Board of Trustees, while maintaining government ownership but observing the legal requirements of this structure, was the main suggestion of experts on reforming the structure of the administration of public hospitals in Iran.
Conclusions: According to the expert's opinions, the current structure of Iranian public hospitals has many problems. Managers and policymakers can make the necessary corrections based on the solutions and models proposed in this study.

Keywords: Hospital, Administration, Structure, Strengths, Weaknesses, Strategy, Model

1. Background

Over the past decades, a large number of low- and middle-income countries (LMICs) have built their health systems upon government funding. Public hospitals, which are considered as the predominant part of the health systems, spend most of their allocated funds in the form of annual budgets (1). Issues such as technical and professional inefficiency, incomplete coverage of low-income groups, and consequently, poor response to the recipients of service are among the most significant functional weaknesses of public hospitals (2). Moreover, according to the World Health Organization (WHO) report of 1999, public hospitals account for approximately 80% of the health system resources while producing only 20% of the public sector's output (3).

Globally, the growth of public hospitals is declining, and the government management of hospitals in a few resources is recommended because they are equated with a waste of resources and inefficiency (4). In contrast, the worldwide number of non-governmental hospitals is increasing due to their response to the changing needs of the health system, believing that the best way to run a hospital in the current unstable conditions is to apply organic structures instead of bureaucratic ones. It is due to their bureaucratic structure that public hospitals will be unable to survive in the present intricate and changing conditions (5).

Another reason for the inefficiency of public hospitals is their high debt, which accounts for almost 40% of their total assets (6-8). On the other hand, the motivation of physicians, paramedics, nurses, and other medical staff to

work in public hospitals is lower on account of the lack of motivational attractions such as money, working conditions, etc., and their presence in public hospitals is only directly related to the accessible technology, drugs, and sophisticated equipment (8). Insufficient funding of public hospitals imposes an additional financial burden on patients and leads to their dissatisfaction. Evidence shows that the most important reason for inadequate funding is the insufficient motivation of physicians and hospitals to reduce or control hospital costs (9-11). Inadequate funding for hospitals to reform the management of public hospitals in developing countries has led to the failure of hospital reforms (12). In public hospitals, reduced service quality may increase mortality rates, and consequently, patient dissatisfaction is noticeable (13).

Based upon the report of the Iranian Hospital Statistics and Information System (IHSIS) in 2017, out of 981 active hospitals in Iran, 614 (68.5% of hospital beds) were covered by the supervision of the Ministry of Health and Medical Education (MOHME), 89 (9.5% of hospital beds) were affiliated with Non-governmental Organizations (NGOs), and 75 (6% of hospital beds) were sponsored by other governmental organizations. Also, 166 hospitals (13% of hospital beds) belonged to the private sector, while the remaining 37 hospitals (3% of hospital beds) were run through charity

Over the past several decades, owing to a large number of public hospitals in Iran, several structural reforms, including a new system of hospital management (1974), an exhaustive plan to reform the managerial and economic structure of the country (2004), Board of Trustees of Hospitals (2011), and autonomous hospitals (2018), aimed to increase the motivation of physicians and medical staff, and increase the financial capacity and the authority of hospitals to manage their affairs as much as possible although with their strengths and weaknesses, achievements and breakdowns. However, MOHME has made no comprehensive decision on the way of running governmental hospitals.

2. Objectives

This qualitative study, based on interviews with experts across Iran, aimed to analyze the current structure of the management of public hospitals to identify the weaknesses, strengths, challenges, and proposed solutions to improve their structure.

3. Methods

This study is qualitative research with a phenomenological approach based on the experiences of experts, managers, and employees of MOHME and insurance organizations to evaluate qualitatively the performance of the current structure (strengths, weaknesses, solutions, and proposed models) in public hospitals affiliated with the MOHME in Iran. This study was conducted in the East Azerbaijan province of Iran in 2020 with the participation of experts throughout the country. In conducting and reporting the results of this study, the consolidated criteria for reporting qualitative studies (COREQ) guides were followed.

3.1. Participants and Sampling

Owing to the issue of collecting the required information from hospitals managed by different administrative structures (academic and non-academic with public nature), the environment of this study varied. Those structures included organizations and stakeholders in the structure of hospital management (MOHME, insurance organizations), related research centers, and other stakeholders and organizations such as stakeholders and experts in public hospitals, including University Hospitals, Social Security Organization (SSO), and the public hospitals. The participants were selected based on their levels of experience and knowledge of the structure of hospital management, especially in public hospitals. Inclusion criteria for the participants were as follows: (1) Managers, staff, and heads of public university hospitals, insurance organizations, and policymakers in the position of the MOHME with more than five years of executive experience. (2) Graduates in the field of health services management, as well as health economics, ranked associate professors or higher working in one of the centers affiliated with the MOHME. (3) Outstanding and knowledgeable individuals in the field of reforming the structure or improving the performance of public hospitals. (4) Capable participants who were interested in taking part in the study.

The selection of the participants was performed using a purpose-based sampling method in which participants with the most information, who could properly provide information to researchers, were selected (15-17), and the procedure was continued until information saturation was achieved (the point where researchers felt that new information could no longer be obtained with the inclusion of new participants). In the present study, depending on the results of the analysis of the interviews, information saturation in interviews was largely obtained after the 50th person was interviewed, but to ensure the complete saturation of the findings, the interviews were continued up to the 58th person. Furthermore, after the study began and over the interviews, theoretical sampling methods were also used to identify the individuals who could provide rich and useful information to researchers; therefore, we tried to include those who had the necessary diversity in terms of age, employment status, work experience, degree, and job position to generate diverse data.

3.2. Data Collection

To collect data, we used semi-structured interviews in Persian, and interviews were conducted by two members (M. N. and S. A) of the research team in a suitable location for the participants. Moreover, during the interviews, guiding questions were designed using an initial literature review and the opinions of experts in this field (Appendix 1). The length of each interview varied between 60 and 100 minutes (except for the fourth interview, which was 30 minutes due to a busy schedule). The place and time of the interviews were coordinated based on the preferences and convenience of the participants. The researchers tried to provide the participants with a comfortable room by previous arrangements. According to the recommendations, two expert researchers were hired as interviewers and note-takers. Meetings and interviews were conducted by an experienced interviewer, who led the discussions and ensured that the topics were covered well during the discussions. The interviewer or facilitator also played an incentive role, encouraging the interviewees to participate in discussions and comments. The second researcher, as a note-taker, made the comments correctly, mentioning the person's code and taking into account non-verbal cues such as facial expressions and body movements. Individuals' statements were recorded using a tape recorder after their consent was acquired, and they also used the note-taking method to collect information. The recorded interviews were listened to several times by the researchers and transcribed on Word Software immediately after each interview.

3.3. Data Analysis Methods

To analyze data, Conventional Content Analysis was used, which is a method for identifying, analyzing, and reporting patterns (themes) within the text. It is widely used in qualitative data analysis when the theories in the field of research are limited (18-20). Data coding was done separately by two members of the research team (M.N and S.A). Furthermore, the coding results were obtained in a joint meeting between the two coders; then they were agreed upon and merged. Disputes were referred to a more experienced and knowledgeable third party (JST); consequently, the steps of data analysis and coding were as follows: Familiarity with the data text (reading the implemented texts several times, i.e. data immersion), identification and extraction of primary codes (identification and extraction of data were more related to the original codes), and identification themes (inserting extracted primary codes into related categories and themes, reviewing and completing identified themes, naming and defining themes, re-coding and renaming some categories and themes, and ensuring code reliability).

3.4. Rigor and Accuracy of Findings

To raise the consistency and accuracy of the study results, four criteria proposed by Guba and Lincoln were used (21).

Credibility and confirmation of ability: For this case, long-time involvement and review by colleagues and experts' opinions were used. Respondent validity was also used so that after holding the meetings and summarizing their opinions, a summary of their statements from the notes was made during the meetings. Then, they were told to correct and eliminate the wrong and vague cases.

Dependability: In this case, two participants were used for coding.

Transferability: In this case, the opinions of experts, as well as purpose-based sampling, were used.

In addition to the cases mentioned in this study, the methods of integration in research and transparency were used.

3.5. Ethical Issues

To observe the ethical considerations in this study, informed consent was obtained from the participants, with the right to cancel and leave the study at any time they wished. Moreover, the objectives of the study were first explained to the participants. This study was corroborated by the Vice-chancellor for Research of Tabriz University of Medical Sciences with the code of ethics IR.TBZMED.REC.1398, 495.

4. Result

The characteristics of the 58 participants in this study are shown in Appendix 2.

4.1. Weaknesses in the Structure of the Administration of Iranian Public Hospitals

Based on the analysis of the participants' views about the weaknesses of the structure of the administration of Iranian public hospitals, nine main themes with 34 sub-themes were finally extracted (detailed information is given in Table 1). The most important weaknesses that the participants stated included weakness in organizational structure (with six sub-themes), poor financial management and budgeting (with five sub-themes), weaknesses in the laws and regulations (with five sub-themes), financial issues (with four sub-themes), low transparency and lack of adequate supervision (with three sub-themes), centralized decision-making and management (with three sub-themes), political factors (with three sub-themes), poor managerial skills (with three sub-themes), and low patient

and staff involvement (with two sub-themes). Most participants believed that the organizational structure of Iranian public hospitals had weaknesses such as mismatch between the structure and the current state of the hospital and market conditions leading to a point where hospitals cannot respond to vulnerable hospital needs.

During the interviews, participant number 6 stated that "...The current structure of the hospital administration is affiliated with the university ..."

Some of the participants expressed that there is no independent structure in Iranian public hospitals as a means for the structure to be highly closed so that hospital managers cannot have organized human manpower based on hospital priorities, hospital strategies, and market conditions to overcome probable obstacles.

Participant number 4 mentioned that "... The structure of these hospitals because they are closed, is highly dependent on the university ...".

Most of them believed that Iranian public hospitals are not flexible for hospital managers to have full authority to change the structure in the hospital.

Participant number 31 and 10 said that "... Somehow this lazy structure cannot simply respond to the needs of society..."

Some mentioned that this structure reduced society's responsibility and accountability because this naturally has a monopoly of services, and there is no contestation in hospitals.

Participant number 9 said that "... Competition has no meaning and all people go to hospitals regardless of the quality of services provided to hospitals ...".

Most alleged that all of the manpower in this setting has low commitment and motivation because hospital managers do not have any authority to motivate employees towards organizational goals.

Participant number 8 said that ".... Organizational affiliation in public hospitals has not been put into practice literally...".

Participants' opinions about inadequate financial management and budgeting included five sub-themes such as lack of revenue and cost management, traditional and linear budgeting, lack of resource management, high overhead costs, and lack of financial authority among senior hospital managers.

Many pointed out the traditional and line-based budgeting in hospitals and believed that if this problem is solved, we can claim that the main obstacle in financial management and budgeting has been removed in Iranian public hospital management.

Participant number 11 mentioned that "... The budget allocation system in these hospitals is wrong, and because it is wrong, we inject resources into hospitals through wrong methods ...".

Some of them stated that in this structure, because of the nature of the government, the most important topics in financial issues that were emphasized by participants included the following: Unfair payment to service providers"... Inequity in payment to medical and non-medical staff and consequent lack of motivation of staff ..." (P 40), hospital mandatory payment disregarding hospital conditions "... Payments are discussed based on the notification system and not on a case-by-case basis ..." (P 46), Fee for Services (FFS) "... The method of purchasing services from providers in our centers is labor-intensive ..." (P 50), and service tariff problems in hospitals "... Tariffs for reasonable services are not comprehensive and complete ..." (P 42), "... Cost coverage according to the service tariff indicates that not all costs are covered by the operation of the hospital ..." (P 33). It is expressed that performing a corrective intervention payment system and addressing problems related to service tariffs in Iranian public hospitals is essential.

All of the participants corroborated that public hospitals in Iran have low transparency, especially in the process of choosing managers and professional development plans "...The manager does not have the same conditions for getting a job as a hospital director? ..." (P 47). Some said that this structure has lack of monitoring, unaccountability, and performance indicator for top-level hospital mangers "... In the department of senior managers of hospitals, there is no monitoring to assess their performance..." (P 28). "... We have no information in terms of administrative and employment process, discrimination, and justice ..." (P 2).

The main issue was that all of the participants believed that decision-making and management in Iranian public hospitals are very concentrated and managers do not have any authority over management; in other words, they should have permission from the top-level for all processes in hospital management.

Participant number 1 mentioned that "... Ultimately, hospitals do not allow managers to focus too much on decision-making and execution ....". Participant number 8 said that "... We do not have many discussions, the MOHME is in charge of health, we do not agree with many decisions of the Ministry ....". Participant number 7 stated that "... There is a mismatch between authority and responsibility ...".

Also, participants mentioned that the core intervention to remove this problem is decentralization.

Political factors from participants' views that affect public hospital management in Iran were categorized in three domains as lack of management expertise, the influence of political considerations, and overlap of stewardship, financing, and service delivery functions.

Nearly all of them stated that the role of political fac-

tors on hospital management is inevitable. During the interviews, participant number 16 said that "... Political changes have led to executive changes ...". And the majority of them believed that hospital managers in Iranian public hospitals do not possess hospital management knowledge and most of them manage by trial and error. Participant number 24 stated that "... Managers trod paths unfamiliar to them...". However, according to most of the participants' opinions in this study, Iran has capable graduates in hospital management, who can be useful if there are used as hospital managers. Another issue that is underscored is an overlap of stewardship, financing, and service delivery functions. Most of them mentioned that these functions must be separated to reduce the negative political issues on hospital management. For example, participant number 52 said that "... Supervision and accreditation are done by the same institution that provides the service ...".

Poor managerial skills is another subject that participants in this study mentioned, which means that nearly all hospital managers are physicians who do not have any managerial skills such as strategic planning, leadership, communication, long-term attitude, maintenance, and management of medical facilities and equipment, manpower management, etc. Participant number 3 stated that "... In this type of structure of hospitals, we have no defensive strategy at all in our strategic plan ..." (P 3).

Some asserted that the distribution of manpower in general and specialized fields is not adequate, and MOHME as the main policymaker should have a comprehensive plan to solve this problem. Participant number 14 mentioned that "... We have a shortage and density of forces in some places....".

The last weakness that was regarded by the participants is low patient and staff involvement in Iranian public hospitals; it means that most of them agreed that this theme has been ignored in Iranian public hospitals, and all hospitals should have their plan to improve the patient and staff involvement in the hospital. Participant number 38 said that "... I cannot say that the people in the administration of the hospitals are involved in this structure ...". Participant number 41 stated that "... Hospital staff have no role in the management of our hospital ..." (P 41). Most participants referred to this as a forgotten principle in hospitals.

4.2. The Strengths of the Structure of Iranian Public Hospitals

Ultimately, four main themes (proper management at the executive level of the organizational pyramid, strong infrastructure, government support, and the provision of extensive services and positive social functions) with 16 sub-themes were identified as strengths (See Table 1 for more information). The first strength of this structure from participants' points of view is proper management at the executive level of the organizational pyramid, which means that there is a sufficient expert body of manpower at the executive level, and most participants believed that, unlike senior managers, there are assessment indicators for middle and executive managers. In this way, participant number 18 mentioned that "... Expert body control is much better and more successful than the management body control ...". Participant number 3 stated that "... Most of these indicators are strict ones available at the undergraduate level ...".

The second one is strong infrastructure and government support that is categorized in the areas of medical equipment, manpower, development, and design of centralized performance appraisal indicators, development of patient admission protocols in special wards, standard physical space, and government financial support. Participants numbers 13, 19, 24, and 42 pointed out the following:

"... excellent and advanced medical equipment ..." (P 13)

"... enough manpower ..." (P 19)

"... In our work environment, the development of performance indicators has produced an excellent result ..." (P 24)

"... There are strengths in the source of government support ..." (P 42).

Participants unanimously agreed that Iranian public hospitals do not have recourse shortage, but the main problem is resource management. Participants stated that the third one is providing extensive services such as the high volume of services, admission of patients whom the private sector is reluctant to admit, and hospital referral system.

Participant number 20 mentioned that "... The public sector accepts patients whom the private sector is reluctant to admit because of its cost-effectiveness ..." (P 20). Participant number 34 stated that "... Since we have a referral system for providing services in this structure, but it responds to an acceptable level ..." (P 34).

Most of them mentioned that public hospitals in Iran have played an important role in providing such medical services to patients; as an instance, most of the emergency services are offered not by private but by public hospitals. Participant number 39 said that "... the number of patients admitted to this structure is higher than that in others sectors ..." (P 39).

The last strength that the participants mentioned as the fourth is a positive social function where public hospitals can play a huge role. Most of the participants believed that factors like supporting vulnerable groups (elderly people, pregnant women, patients with financial problems, etc.), reducing induced demand, extending horizontal equity, increasing the positive response of social functions in the hospital, and lowering the cost of receiving services can be expressed in this section. During the in-

terviews, participants numbers 40, 42, 46, 51, and 31 mentioned that "... The strength of this structure is a government control and the provision of services to the poor and needy ..." (P 40). "... Perhaps induced demand has occurred less in government systems ..." (P 42). "..... Offer the same services to all people ..." (P 46). "... This structure responds positively to social functions ..." (P 51). "... The low cost of receiving services for patients is workable ..." (P 31).

4.3. Proposed Solutions to the Structure of the Administration of Iranian Public Hospitals

The strategies identified by the interviewees were classified into five main themes and 22 sub-themes (More details are listed in Table 1).

As the first solution, almost all of the participants mentioned items as requirements for corrective intervention, including: Developing valid and reliable indicators for hospital heads "... We ought to have an index for selecting, retaining, and dismissing hospital managers ..." (P 19); Creating revenue and expense centers "... Establish revenue-costs centers in each sector that can be calculated weekly..." (P 55); Activating hospital committees "... It is important that hospital committees be as active as hospital indicators ..." (P 44); Ease governmental ownership "... I believe in maintaining public ownership and using a combination of methods to manage ..." (P 18); Just in time support and logistic purchases "... Hospital purchases in the field of logistics and support (consumption) just in time and distribution at the hospital by the stores of the contracting party ..." (P 58); Extending a multidisciplinary team approach "... First, be a team and be managed as a team ..." (P 14); Monitoring programs through audits "... Be sure to use internal and external audit programs for six or twelve months ..." (P 22); And using scientific and evidence-based assessment and control methods "... The assessment and control system is a technical matter; it does not require an interview, and there are various methods that should be decided and implemented ..." (P 37). On the other hand, they emphasized that these are essential to perform a reform in Iranian public hospitals.

The second solution stated by the participants concerned payment systems in hospitals. These systems in Iranian public hospitals do not seem to be proper enough and may cause employees' apathy. Participants tell us that such a solution can be effective to the hospital payment system and can reform the tariff system "... Create a revolution in the hospital tariff system close to the actual service tariff or a combination of related sets ..." (P 31); Use of financial control levers "... In other words, hospital administration should be private, but a series of controls or control levers should be taken out of the state of the enterprise ..." (P 26); A performance-based payment system "... Budget management should depend on the performance of the hospital, that is, everyone should have a share in the hospital as much as their activity and performance ..." (P 29); And the use of Diagnosis Related Groups (DRGs) systems. Nearly all of them believed that the tariff system in Iranian public hospitals has a problem and they are not reliable; for better results, hospitals need to move to DRGs. Participant number 37 stated that "..... We use the relative service tariff system, but in other countries, they use the DRGs system .....".

The third solution that was emphasized by the participants included the more involvement of people and NGOs in the management of hospitals by Public-Private Partnership (PPP) (BOT contract, Outsourcing services), increase in people's participation, and use of patient rights advocacy teams. Some of them told us that they could not use the potential of the private sector at common service delivery such as laundry, nutrition, etc. For example, participant number 6 mentioned that "... In my opinion, it can be appropriate if outsourced services are done with excellent supervision ...". Most of them stated that the establishment of patient rights advocacy teams plays a vital role to increase patient involvement in Iranian public hospitals. Participant number 14 stated that "... Organizing and forming an NGO whose sole purpose is to support the rights of patients and to have a representative of this non-governmental organization in the composition of the board of trustees of the hospital ...". Also, participant number 10 expressed that "... Public participation in the management of public hospitals can be used to participate in the selection of health system managers such as in the United Kingdom, which is done by voting at the city level ...".

The fourth solution stated by participants was a delegation of authority to Iranian public hospitals. Most participants considered such issues as the delegation of more authority to hospitals; for example, participant number 37 mentioned that "... The nine dimensions of the Parker-Harding model should be given to hospitals ... "; Adequate supervision "... The board of trustees and the company can be held accountable, it can even be privatized, provided that adequate oversight responds ..." (P 35); And manpower management necessary to increase the delegation of authority to hospitals "... The maintenance of human resources should depend on his/her performance in the organization, not permanently..." (P 41). Nearly all participants had a consensus that the delegation of authority is not in a good condition and the necessary authority should be given to the managers of the hospitals in this case. Some of them believed that hospital managers do not have any authority over human resource management.

In the end, the fifth solution mentioned by participants was doing corrective interventions in the organizational structure of the hospitals such as the core of the hospital board "... As a general principle, the providers, recip-

ients, and buyers of services of these three main groups should be present in the management component of the hospital ..." (P 42); Organizational chart modification "... The organization of the hospital should be reformed. My point is that the board of directors of the hospital can also comment on the organization..." (P 54); Transparency of horizontal and vertical communications "... The administrative hierarchy also needs to be transparent ..." (P 55); And the composition of the Board of Trustees "... The composition of the board of directors should also be a combination of people, including management experts, senior managers, trustees, and representatives of the people by collective wisdom ..." (P 56). According to most of the participants, hospital boards and a multidisciplinary team could be an effective hospital management system.

4.4. Proposed Models for the Administrative Structure of the Iranian Public Hospitals

Out of 58 participants, 17 participants believed that according to the prevailing view of the Iranian health system, hospitals are managed based on governmental administrative structure, but providing diagnostic and treatment services in hospitals based upon a non-governmental administrative structure can be effective in Iran. Some of the quotes from these people are as follows. For instance, participant number 28 mentioned that "... The government has a series of guardianship duties, and health is something other than government duties ...". Participant number 41 stated that "... Privatization does not make sense at all ...". Also, participant number 8 said that "... Hospitals are supposed to be under the control of the network system, but its weakness is that, in practice, this has not happened ...".

Besides, 31 participants believed that owing to the implementation of the board of trustees of hospitals in Iran and due to the existence of various executive experiences, the delegation of authority to public hospitals in the form of the board of trustees model, of course, can be proposed, considering all legal and administrative requirements. Participant number 34 mentioned that "... A board of trustees in the hospital that gives hospital managers the necessary authority and responsibility and is accountable can certainly be helpful ...". Eight interviewees, however, believed in setting up the base on the corporate model. Participant number 58 mentioned that "... The hospital was funded by buyers' stocks; people can help by buying shares in case the government does not have the necessary capital to build the hospital ...". Two experts proposed the charity model hospital "... Some services can even be run on a charitable basis ..." (P 3, P 16) (Table 1).

5. Discussion

Based upon the participants' opinions in this study, the most important weaknesses of Iranian public hospitals were low staff commitment and motivation, poor financial management and budgeting, centralized decision-making and management, and poor human resource management. Besides, 22 solutions were proposed in five areas to eliminate the identified weaknesses, which can lead to the development of related assessment indicators in various areas, such as compliance with requirements, public-private partnership, payment system, public participation methods, delegation, manpower management, the organizational structure of the hospital, and the reform of the tariff system. Proper management at the lower levels of the organizational pyramid, robust infrastructure, extensive service delivery, government support, and positive social functions were the most important strengths of public hospitals in Iran in this study.

The implementation of the board of trustees model in Iranian public hospitals authorities and legal requirements were delegated to hospital managers, in this model, hospitals can run by the government stewardship, diagnostic and treatment services were provided in hospitals through non-governmental ways.

Some significant weaknesses of public hospitals from the participants' perspectives included inefficient payment systems, insufficient budget and financial resources, lack of necessary authority, lack of rules and regulations, the low commitment of managers and staff, and complicated, time-consuming decision-making processes. Low transparency, high running costs, poor management stability, excessive government interference, abuse of power, and creating inappropriate incentives for service providers indicated the results being tested by this study were consistent. Increases in induced demand were presented as a weakness in the evidence examined. However, one of the present study's strengths was that it included expert opinions of the government structure, which contradicted the results of similar studies (11-13, 22-33).

Other negative consequences of this structure can include hospital performance indicators that suggest poor performance, such as bed occupancy rates, busy day beds, patient dissatisfaction, low efficiency, low responsiveness, and low-quality services provided to patients who participated in studies. It was noted that the results of the studies were consistent with the results of our study (9, 13).

Published studies suggested addressing the weaknesses of the public structure of hospitals, reforming the structure of hospital management, designing and implementing a comprehensive and efficient evaluation system, delegating authority, and establishing necessary and sufficient rules and regulations. The results of this study, except

in designing a comprehensive and efficient evaluation system, were inconsistent with the findings of the studies, but in this study, experts announced that the development of performance evaluation indicators for monitoring public hospitals was not found in the studies (9, 13, 25, 30). Zhao and Zhang, in their qualitative study conducted through interviews with experts to address the problems of public hospitals, the result of this study showed that delegate authorities to hospitals, decentralization, development of performance indicators could improved public hospital. the results of this study were similar to the results of our study (9).

In the present study, the interviewees believed that due to the lack of legal, cultural, and political infrastructure of the country, they did not recommend the ownership of Iranian hospitals by the board of trustees and believed in maintaining government ownership and managing hospitals by the board of trustees. The necessary authority and support from the chancellors of the university and the MOHME for structural reforms had been established. While Erwin et al. (34) conducted a systematic review and concluded that due to the single structure of health care and the ever-changing and complex environment in which health care organizations (hospitals) operate, the use of corporate (hospital board) structure can lead to increased efficiency and performance of hospitals in the United States. Verzulli et al. (23), in their study, concluded that the increase in the delegation to governmental organizations did not find any significant functional difference in public hospitals. This study was contrary to the views of experts. Jones et al., in their study, examining the relationship between the characteristics of the board of trustees of 15 hospitals and ameliorating the quality of services provided, concluded that the board of trustees can perform a crucial role in improving the quality of services provided. Our findings are also consistent with this (24). De Geyndt's study examined various methods of self-government in the management of hospitals in 11 developing countries of the world and concluded that the removal of two main obstacles, which include empowering human resources and finance, could lead to an increase in the performance of public hospitals, which was also consistent with the results of our study (12). Abdullah and Shaw, in their study, concluded that in delegating authority to public hospitals, a set of guidelines should be used as a sustainable framework for government hospitals; this finding, indeed, was consistent with the results of our study (35). Govindaraj and Chawla that examined the experiences of hospital self-government in developing countries, concluded that hospital reform in the form of self-government can lead to decentralization, appropriate delegation, and improvement of performance indicators and management to be effective in public hospitals, and the results of the above-mentioned study were consistent with the results of this study (28).

However, based on the researchers' information and the results of the literature review, few studies at this level from the perspective of experts and key stakeholders have examined various dimensions of public hospitals. However, the present study had several limitations, one of the most important of which was conducting a few interviews in absentia due to the prevalence of the COVID-19 pandemic. Also, not many experts in this field were willing to cooperate with researchers due to their busy schedules.

5.1. Conclusions

According to experts, the current structure of Iranian public hospitals has many shortcomings. The management of public hospitals, while maintaining state ownership, in the form of the Parker-Harding board of trustees' model, was considered by the interviewees in this study; furthermore, due to the complicated and constantly changing conditions of the hospital management, the managers should use the method of collective micro-participation in the form of a multidisciplinary team and patient participation in the decisions of the hospital board of trustees to increase satisfaction and ameliorate the quality of services provided in the hospital. Managers in coordination with policymakers can also make the necessary corrections based on the solutions and models proposed in this study.

5.2. Limitations and Strengths of the Study

In this study, researchers comprehensively analyzed the structure of public hospitals in Iran from the perspective of various experts and provided extensive and practical information for decision-makers and policy-makers. However, the present study had some limitations. One of the main limitations was the widespread prevalence of COVID-19, which prevented some hospital managers and experts from participating in the present study due to their busy schedules and adherence to health protocols.

Supplementary Material

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

Footnotes

Authors' Contribution: Study concept and design: Js. T. and S. A.; Analysis and interpretation of data: M. N. and A. E.; Drafting of the manuscript: M. N.; Critical revision of the

manuscript for important intellectual content: JS. T., S. A., and A. E.; Statistical analysis: M.N.

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Table 1. Analysis of the Structure of Public Hospitals Administration in Iran

Main Theme	Sub-theme
Weaknesses	
Low transparency and lack of adequate supervision	Lack of transparency in terms of obtaining a job and the path to career advancement
	Lack of monitoring the accountability and performance of managers
	Lack of proper information about professional events
Centralized decision making and management	Centralized decision-making and management system and low decision-making speed
	Lack of participation of hospitals in adopting macro-policies
	Improper delegation
Weaknesses in-laws and regulations	Insufficient attention in drafting laws and regulations
	The bureaucracy of hospital administrative processes
	Separation of hospitals from the primary health care system
	Legal problems of partnership with the private sector
	Lack of integration in upstream documents
Political factors	Lack of management expertise
	Influence of political considerations
	Overlap of stewardship, financing, and service delivery functions
Financial Issues	Unfair payment to service providers
	How to pay mandatory notification
	How to buy service providers or FFS
	Service tariff problems
Low patient and staff involvement	Lacked role of public participation in the management of the hospital
	Low participation of process owners in policymaking and drafting laws and regulations
Poor financial management and budgeting	Lack of revenue management and hospital costs
	Traditional and linear budgeting
	Lack of resource management
	High overhead costs
	Lack of financial authority in senior hospital managers
Weakness in organizational structure	The mismatch between the structure and the current state of the hospital and market conditions
	No independent structure
	Lack of agility of the current structure
	Reduced responsibility and accountability to society (low social responsibility)
	Lack of competition and monopoly of services in public hospitals
	Low commitment and motivation
Poor managerial skills	Inadequate distribution of manpower in general and specialized fields
	Lack of strategic and long-term attitude
	Lack of maintenance management of medical facilities and equipment
Strengths	
Proper management at the executive level of the organizational pyramid	The strict control of the expert body
	Existence of indicators at the expert level
Strong infrastructure and Government support	Medical Equipment
	Manpower
	Developing and designing centralized performance appraisal indicators
	Development of patient admission protocols in special wards
	Standard physical space
	Government financial support
Providing extensive services	The high volume of services
	Admission of patients whom the private sector is reluctant to admit

	Hospital referral system
Positive social functions	Supporting vulnerable groups
	Reducing induced demand
	Horizontal equity
	Increase (positive response) of social functions in the hospital
	Low cost of receiving services
Proposed solutions	
Requirements	Developing valid and reliable indicators for hospital heads
	Creating revenue and expense centers
	Activating hospital committees
	Governmental ownership
	Just in time support and logistics purchases
	Multidisciplinary team approach
	Monitoring programs through audits
	Use of scientific and evidence-based assessment and control methods
Payment system	Reform of the tariff system
	Use of financial control levers
	Performance-based payment system
	Use of DRGs system
More involving of people and non-governmental organizations in the management of hospitals	Public-private partnership (BOT contract, Outsourcing services)
	Increasing people's participation
	Use of patient rights advocacy teams
Delegation of authority	Delegating more authority to hospitals
	Adequate supervision
	Manpower management
Organizational structure of the hospital	The core of the hospital board
	Organizational chart modification
	Transparency of horizontal and vertical communications
	Composition of the Board of Trustees
Proposed models	
Governmental ownership; Providing services by non-governmental scientific methods	Preservation of governmental ownership
	Absolute lack of privatization
	Providing services in the form of a primary health care system
Using the board of trustees model by observing the requirements of this model	Use of the board of trustees model
Use of the charity model	Using the hospital management model by the charity
Using the corporate model	Using the corporate model of hospital management