

MANAGERIAL CHALLENGES OF TEACHING HOSPITAL, A REVIEW OF THE EXISTING LITERATURE

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ABSTRACT

BACKGROUND

Teaching hospitals have three goals including curing, education and research. Providing education along with health care services expands the mission and accountability of these goals and results in more challenges for managerial team of teaching hospitals in comparison with non-teaching hospitals. Therefore, this research aims to review the existing literature regarding the challenges that teaching hospital managers are facing with focus on different dimensions related to their functions.

MATERIALS AND METHODS

A comprehensive review was performed by searching the existing literature. We used different search strategies including electronic databases, reference checking and experts contact. The key words were combinations of the terms teaching hospitals or university hospitals and managerial/management problems and challenges. 56 studies were included according to predefined inclusion and exclusion criteria.

RESULTS

A range of managerial problems have been addressed in the existing literature. The most followed is planning among the problems of managerial dimensions (34%), and then coordination (25%), control and evaluation (16%), leadership (12%), organizing and organizational structure (10%), and ultimately creativity, innovation and change dimension (3%).

CONCLUSION

Also, the mentioned problems in teaching hospitals have different priority but for a complete and correct management to receive all three goals of a teaching hospital, managers should pay attention to all of these dimensions simultaneously. Better identification of these problems facilitates solving these managerial challenges more efficiently.

KEY WORDS

Managerial Challenges, Teaching or Academic Hospitals, Review Study.

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BACKGROUND

Health sector is considered as one of the most important service sectors.⁽¹⁾ In this regard, hospitals are one of the most important institutions in providing health services, ⁽²⁾ have a special role in the efficiency of the health system.⁽³⁾ They, as the main pillar of each country's health system, are divided into two groups of teaching and nonteaching hospitals.⁽⁴⁾ Teaching hospitals cover an important part of education and research in the field of health, and lead to the empowerment and educating of specialists in different disciplines.^(5,6) They, in most countries, are either affiliated with the medical school in terms of organizational structure or part of a national or

regional health system.⁽⁷⁾ Today, hospitals use huge amounts of human, physical, financial, and equipment resources to provide, maintain, and promote the health of the community.⁽²⁾ Given that teaching hospitals have three simultaneous roles including, educating different health professionals, providing health care, and research that make the managing of teaching hospital more important and difficult to balance among these three functions such as providing quality and safety of health care services.^(8, 9) Furthermore, the poor performance of teaching hospitals in the incidence of medical errors is often related to presence of medical students and educational nature of the teaching hospitals⁽¹⁰⁾ and some patient complaints from mismanagement.⁽¹¹⁾ Also teaching hospitals in almost all developing countries receive a large amount of financial resources they are still looking for more resources.⁽¹²⁾ The capacity of teaching hospital managers is an important issue and most of the directors and physicians may experience difficulties in balancing between managerial and academic roles.⁽¹³⁾ Teaching hospitals need more comprehensive documentation and evidence-based decision making due to legal sensitivities, student education, and more supervision (In terms of responsiveness and evaluation).⁽¹⁴⁾

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Considering the simultaneous and multi-functional role of teaching hospitals, the efficacy of these hospitals is a major challenge for decision-makers in the health sector. The findings of related studies in different countries confirm that hospitals face different challenges in achieving their missions since some of them are self-regulated on one hand, and are responsible for providing health care to indigent people on the other hand. Accordingly, it seems necessary to take advantage of efficient management to overcome such complex issues, threatening the survival of teaching hospitals.^[13,14] The results of some studies comparing teaching hospitals with non-teaching hospitals in developed countries showed that only 10% of the hospitals could effectively provide health care services tailored to patients.^[15] There are some problems such as the lack of therapeutic and educational spaces, which sometimes result in problems concerning provision of health care services.^[16,17] According to the predefined content, there are a wide range of hospital challenges. Many of these problems are related to the management functions and structure. Meanwhile, hospital management follows the basic principles of management like any other organization. The managerial team in teaching hospitals has 5 functions including planning, organizing, coordinating, leading, and controlling. In each of these major managerial duties of teaching hospitals, there are challenges such as weaknesses in internal and external coordination, the assignment of responsibilities, and the responsiveness of individuals, stakeholders, organizations and hotel ling quality.^[18,19] Also, there were many previous studies which each of them partially mentioned to teaching hospitals challenges but there were no a holistic and review study that provide all teaching hospitals challenges together and with managerial functions approach. The novelty of present study is that it identified managerial challenges in teaching through review the existing literature and classified the challenges tasks according to 5 hospital management tasks that were not published before and also provided another category of management task as number6 with their challenges. Secondly, due to multi functions of teaching hospitals that make their managing more difficult, this study was attempted to provide a basis study for policymaking and planners in this area to learn of them and enhance the efficiency of managing teaching hospitals.

MATERIALS AND METHODS

In order to identify studies on the managerial challenges of teaching hospitals in different countries, we applied a comprehensive traditional review study of the existing articles and documents.

Data Source

The related contents were extracted, and their results were categorized and analysed by subject. The data were collected

through electronic databases, reference checking and experts contact. Electronic databases, including Web of Science, Emerald, PubMed, and Scopus were searched. To collect studies performed in Iran, Irandoc, Magiran, SID, and other available documents were searched.

Our Search Strategies

The Search strategy was used included (Teaching Hospital and Challenges) or University Hospitals or "Academic Medical Centres") and (Management or "Manage* Challenge's") or (Problems*): ("Teaching Hospitals" or " University Hospitals") and ("Manage* challenges")

Studies Selection Process and Criteria's

In order to identify studies on the managerial challenges of teaching hospitals in different countries, we applied a comprehensive review of the existing articles and documents. The authors evaluated the most relevant studies through reviewing the title and abstract of them. Finally, relevant documents were then read in full text. Included articles were those related with the subject of hospital challenges of teaching hospitals. Excluded articles were those published prior to 2006, We used Studies that were conducted over the past ten years between 2006-2018 (to find both new and old documents) and published in English or Persian. We exclude those that were not related to our research question. Moreover, the articles were excluded if their full text was not available.

Data Analysis

To analyse data on the purpose, study design, country, and managerial challenges, descriptive statistics were applied. However, data on findings of studies about managerial challenges of teaching hospitals were analysed using content analysis.

RESULTS

Results based on functions of management were extracted. The search results that equivalents associated with teaching hospitals include "Academic Medical Centers", "University Hospitals", and "University Medical Centers"; and with management include "Hospital Chief Executive" and "Officers". In general, we found 77648 articles, then by applying time bounding, existing full articles and language bounding we had 1850 ones, after comprehensive search, all articles were viewed by title, the abstract and the full text and finally 56 studies were selected with respect to inclusion and exclusion criteria. Quality assessment of the articles was independently performed by 2 reviewers. The process of selecting studies was as follows (Figure 1).

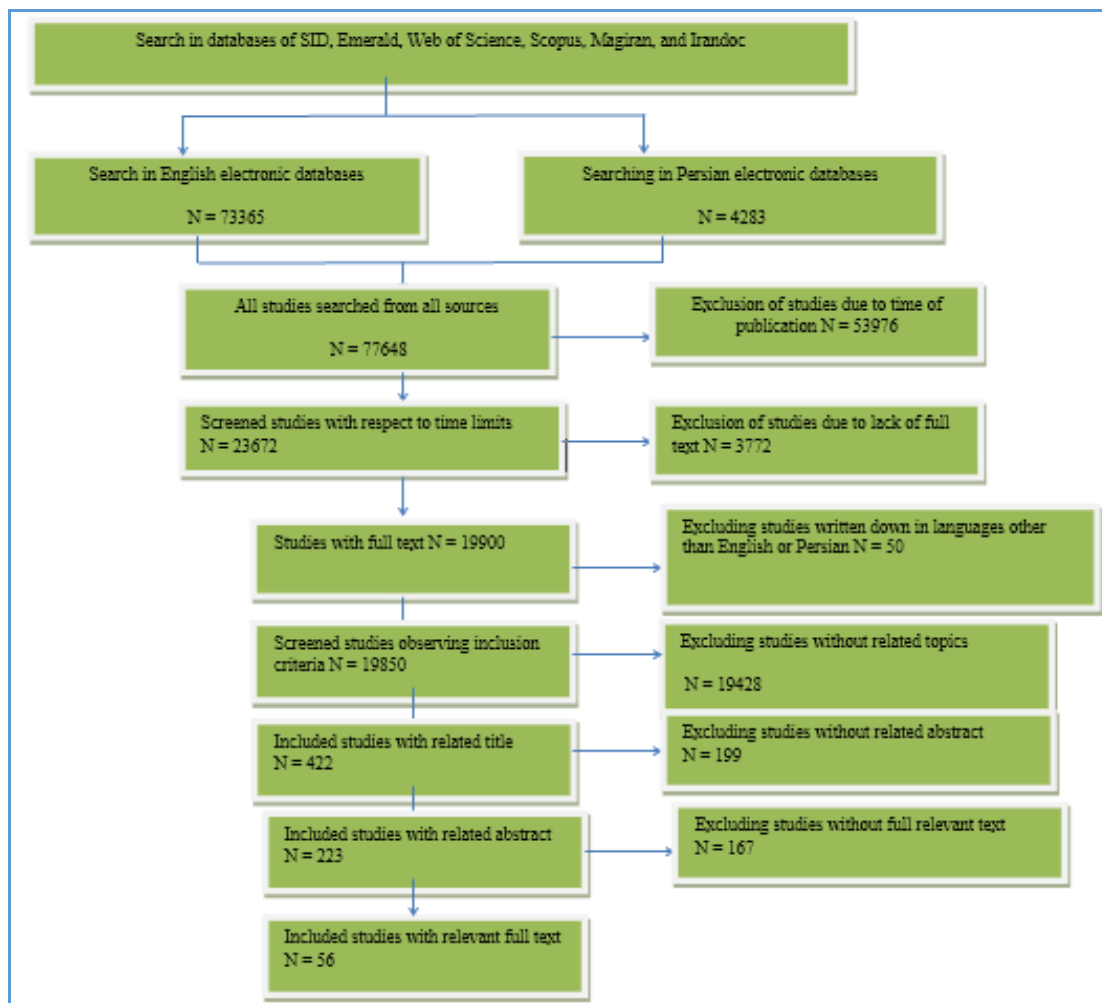


Figure 1. The process of selecting articles for a comprehensive overview.

Descriptive analysing of findings shows that the highest frequency concerning the type of the documents was allocated to articles and research reports (88%), followed by books and thesis with (12%) frequency. In other words, 86% of the searched documents were in form of a paper (including original research papers, review article, etc.), 2% were in the form of official reports, and 12% were thesis. Regarding the time of publication, 42% were published from 2006 to 2011

and 58% from 2012 to 2017. With respect to design of the selected studies, 37.5% were quantitative, 33.92% were qualitative, and 28.57% used mixed method. The key findings and subject analysing of findings on the problems of managerial dimensions are presented in Table 1. Table 2 illustrates the percentage of observed managerial problems.

Managerial Dimensions	Key Findings (Challenges of Managerial Dimensions)
1. Planning	Teaching Hospitals have weak strategic and operational planning to provide student facilities and equipment in hospitals, insufficient budget and resources including human workforces and equipment, low appropriate conditions for clinical education, scheduling the presence of doctors and unbalanced planning in three goals of a teaching hospital
2. Organization	Managers in Teaching Hospitals face lack of authority in internal organization and organizing medical staff. They have no structure in Some duties such as researching. Manager's authority is not balanced according to their responsibilities.
3. Coordination	There are low coordination between university student's number and their facilities to educate including professor numbers, classrooms and residency places. Also, they have week external coordination with other organizations. Internal coordination and communication is week too. Coordination between educational, research and therapeutic tasks/duties is not sufficient.
4. Leadership	Leadership is also another managerial dimension which is not appropriate to the organization's maturity, there is low guidance for university students, there is not enough supervision and leadership accordingly rewards mechanism for staffs to reach the triple goals.
5. Evaluating	Teaching Hospitals have Problems in Controlling purposes and mission, internal and external control, Evaluation and control according to objectives and with consideration of triple goals. There are low continuous monitoring and evaluating.
6. Other dimensions (creativity, innovation, and change)	There are problems in innovation and change in line with triple objectives; inflexibility in management and leadership, there is no creativity and innovation in work places.

Table 1. Key findings revealed by the selected studies and dividing challenges in managerial dimensions (12-70)

Managerial Dimensions	Frequency	Percentage	Priority
Planning	41	34%	1
Organizing	12	10%	5
Coordination	31	25%	2
Leadership	15	12%	4
Control (evaluating)	20	16%	3
Other dimensions (creativity, innovation, and change)	3	3%	6
Total	122	100%	-

Table 2. Frequency distribution of managerial problems (in different dimensions) of teaching hospitals

Findings of the research show that most of the management problems raised in the teaching hospitals, that is about 34% of them, are related to the planning dimension. These planning problems are divided into different dimensions: 5 cases are related to lack of funding and budget to promote teaching hospitals, 4 problems are about proper curriculum planning by the faculty members regardless of hospital facilities, 7 problems are attributed to students, managers, and staffs' curriculum weakness, 5 cases are due to lack of sufficient facilities and equipment to provide services in all three areas.

The most important next problem in the management dimension is coordination with a frequency of 25%. Coordination includes weak internal and external relationships and other issues, which are as follows in the order of importance: 7 cases of weak communications with high organizations such as universities and medical faculties, 6 inadequate internal communications and interactions, 8 poor external coordination and communications with equal organizations, 5 problematic issues among educational and therapeutic goals, and 2 cases regarding lack of coordination between academic and clinical roles of faculty members.

The next managerial problem is the control and evaluation dimension, which accounts for 16% of the problems and includes defects in external and internal evaluation, inappropriate assessment with goals, lack of adequate parallel control of triple goals in the training hospitals, and 6 cases of inadequate clinical observation, monitoring, control, and evaluation of faculty members on the manner of education. Further, the impossibility of evaluating the multiple roles of faculty members, 2 cases of lack of adequate supervision on education and treatment.

The problem with the fourth priority is leadership and guidance in training hospitals with a score of 12%, which includes the problems of non-flexibility in the way of leading different groups, that is directing imperative and magisterial, and guidance is non-cooperative. In addition, other problems include lack of adequate leadership and guidance of faculty members on students and educational groups, lack of clinical leadership, and also lack of leadership role among managers, failure to meet the triple goals in hospitals.

The problem with the fifth priority is related to organizing and organizational structure with 10% frequency. Such problems consist of failure to delegate sufficient authority from high organizations, lack of proper structure in the field of research and education and focused organizational structure in decision makings, inappropriate service delivery, or non-assignments that lead to waste of resources and high labor.

Finally, the last problem is related to another dimension that is added here; the creativity, innovation, and change dimension, with a score of 3%, which was not among the mentioned five dimensions. It includes impossibility of change in the management of teaching hospitals and the impossibility of providing creativity in the triple goals of education, research, and treatment that are essential for improving the quality of services and lead to continuous improvement and development.

DISCUSSION

Although we have found these priority problems, these may not be the most important ones and in fact they show the most visible challenges such as budgeting, low facilities and so on that are in planning category but we cannot see the coordination challenges directly. Hospital management needs new, flexible, and creative methods in a constantly changing dynamic environment and policy makers and future managers should pay special care and attention to this matter.

About planning dimension, in findings of other studies, Mohseni⁽⁴³⁾ and Souba⁽⁶²⁾ stated that there was a weakness among strategic planning, organizing, leadership of executive directors, and finally the performance of teaching hospitals. The weaknesses in each part of the function can affect other parts and impose a negative impact on overall performance of the hospital. Given the current status of accountability in hospitals' performance and its importance, strengthening the dimensions of weaknesses and addressing deficiencies in performance should be a priority for managers.

In the control dimension, findings of other studies states that there are concerning in the evaluation systems in teaching hospitals, Taslimi et al., showed that designing a performance appraisal system is essential, especially in teaching hospitals that are established with several purposes and tasks.⁽⁴⁴⁾ The findings of a study by Aljuaid et al. (2015) also indicated that due to the close relation between the medical schools and the medical care centers and necessity of their integration, a dominant and independent organization is required in to study the health services and tries to make more progress. Furthermore, a comprehensive system is needed for continuous quality assessment of the academic hospitals' achievement of goals within the university.⁽⁵⁶⁾

Tess et al. (2015) conducted concluded that integration of the quality and safety missions among medical graduates and teaching hospitals is a necessary step.⁽²⁷⁾ This is consistent with the results reported by Hackman et al. (2014), regarding the problems associated with the attendance of students in teaching hospitals, Generally, the results showed that the medical residents' job rotations in medical hospitals reduce the medical efficiency by increasing the efficiency in resources.⁽⁵⁸⁾ The results reported by Kane⁽⁶⁷⁾ represented less productivity in teaching hospitals, which is consistent with the above mentioned results.

The studies by Valizadeh et al. (2007) and Oscovy et al. (2015), on educational planning showed that the clinical environment is not implemented properly for nursing students. Although the hospital is educational, educational facilities are not prepared and planned for training these students. So, it is necessary for the custodians in educational-treatment centers to anticipate these preparations to facilitate the clinical environment for the education of

students.⁽⁴²⁾ For this reason, medical schools and health care centers should have close contact and be integrated. Through methodologies such as coding programs together and with strategic collaboration, these problems will be resolved in the near future.⁽⁴⁹⁾

But the studies in this regard are controversial. In the research conducted at Harvard University by John Ayanian the results indicated that the best hospitals from the viewpoints of physicians and academic figures are teaching hospitals, since they include high quality treatment, treatment of rare and complicated diseases, and provision of special services, advanced technology, and guidance of biological research.⁽⁶⁸⁾ Other specific duties of the teaching hospitals are healthcare training, inventions in medicine and nursing, and curing of the poor especially in public hospitals.⁽⁶²⁾ The mentioned study illustrates positive points of the teaching hospitals and its findings are consistent with those of Mirmoghtadai and colleagues in 2014. They announced that integration of medical education with health and treatment fields leads to positive development of expert human resources and the improvement of health indicators.⁽⁷⁰⁾

CONCLUSION

Generally, the overall results of the existing studies regarding the challenges and problems of teaching hospitals indicate that despite many advances made in the last ten years, concerns still exist about the teaching hospitals. Considering the results, priority should be given to planning, coordination, control, leadership, organizing, creativity, and innovation. Better identification of these problems facilitates in removing these challenges and improves the performance and productivity of managerial functions in all aspects of education, research, and treatment in teaching hospitals.

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