Hospital Managers' Perception of Recent Health Care Reform in Teaching Hospitals of Qazvin, Iran

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Abstract

Background: The main purpose of any government from a healthcare reform is to improve the service quality and raised public satisfaction.

Objectives: As the important role of managerial human resources in any organizational changes, this paper tried to examine the point of view of this group about the recent reform in governmental hospitals of Qazvin.

Patients and Methods: This cross-sectional study was conducted in January 2015. The statistical population consisted of 50 executive managers of Qazvin teaching hospitals. The data gathering instrument was a research-made questionnaire with approved reliability and validity ($\alpha = 0.84$). Data analyse was performed in SPSS version 20 using descriptive and analytic statistics (analysis of variance (ANOVA), Pearson correlation test and one sample t-test).

Results: A total of 43.2% of managers believed that this reform was a good restrictor for malpractices in healthcare and 31.8% believed that it will not be so useful to improve the society health status. The average score of resource preparation, insurance companies coordination, changing the routine workflows, and finally achieving the goals, had a meaningful difference ($P < 0.05$) and the average score of these fields were upper than average.

Conclusions: The findings showed that based on the managers' point of view, the reform plan was able to achieve its primary goals; however, it could not meet their exceptions in improving the society health status. Therefore, it is necessary to design some interventions for changing this perception.

Keywords: Healthcare Reform, Managers, Teaching Hospitals

1. Background

Health systems are responsible of improving people's health and protecting them from financial costs of diseases (1, 2). In each country, health requirements are changing because of an obligation from the health system to respond appropriately. The growth of medical costs due to the aging population, the high levels of chronic diseases, disability, the advancement of medical technology (3, 4), and diagnostic health systems have to accept the changes (5).

The growing cost of health is one of the most concerns of managers and decision makers in health systems (6-8). The development of the new technology, the cost of health, the high expectation of health systems, and the progress of chronic illnesses among people are the most reasons for the growing costs of health (9-11). The promotion of health system is an important strategy in decreasing the rate of death in a community (12).

Iran's health system like other health systems faces with growing costs. Although the total index of the costs has increased 30 times in the past 20 years in our country, the health system index of the cost growth has got 71 times (13). One of the main aims of policy makers and programmers in the health field in every country is to assure financial security for people against illnesses that lead to back-breaking costs and poverty (14). Although in recent years the health system could reach a striking progress in peoples' health levels and raise the related indexes (15), it is yet one of the biggest concerns of policy makers to establish justice in health services (16).

Today, the importance of health as one of the biggest concerns has caused researchers to study the health care system orderly all over the world. The reform of health system has been the focus of attention of policy making in developed and developing countries science 1970 (14) and it has turned into a dominant international plan (17).

Reform in a health system is defined as a positive change that implies a continuous meaningful changing process to improve justice and health effectiveness (18).

In Iran, the ratification of change in health system programs and financing these programs have been formed after years of practical commitment into raising people's health by imparting the fifth development program. The goal of the health system is raising the qualities of services and healthcare, having rightful access to services, especially in under-developed areas, decreasing the health changes, and at the end developing the attraction of physicians. These policies were imparted to all medical universities and health centers by the ministry of health at 05/05/2014 (19, 20) According to the 11th government document, in Iran, health center is considered a priority to get more budgets from subsidy. The government has tried to give opportunity to poor people to use inexpensive health services. This plan is one of the most comprehensive government plans in the health realm and consists of eight practical packages such as decreasing the rate of costs in medical hospitals, developing natural delivery instead of surgery among women, increasing the quality of hospitals, the presence of physicians in related hospitals, supporting the physicians to maintain them in poor areas, conserving and supporting the hard diseases, and raising the quality of visiting services such as organizinig referral system in related hospitals. The implementation of the health sector evolution leads to justice in accessing healthcare services (19). All the hospitals related to the Ministry of Health are under this plan. Related hospitals have to obtain all the diagnostic and treatment services, medicines and instruments, and supplies for doctors and patients in the chain of servicing in limited credits.

In this plan, all Iranians can use the base insurance; villagers and cities under 20000 populations and other people who refer to the hospital by the reference system are under this reference plan as well; they only pay 5% of the cost of the service. Private hospitals in cities that lack public hospitals are also included in this plan and insurance companies of Iran have to cover all the people who refer to these hospitals.

2. Objectives

According to the implementation of this plan in teaching hospitals of Qazvin, in this study, the managers' viewpoints about various aspects of the recent healthcare reform and its performance were assessed to identify the potential challenges.

3. Patients and Methods

This was a cross-sectional study performed in January 2015. Data was collected from the patients referred to teaching hospitals of Qazvin, Iran (five hospitals). The statistical population consisted of 50 executive managers of Qazvin teaching hospitals. The data was gathered using the designed questionnaire by the research team which utilizes the researches and opinions of experts in this field. The 35 questions contained eight dimensions and five answers with scores from one to five, representing very low, low, average, much, and very much, respectively. Questions 1 to 12 were related to the organization from top officials and high-handed ones, questions 13 to 17 were about resources, both human and financial, questions 18 to 20 regarded insurance, questions 21 to 28 were about the goals of the reform, questions 29 to 32 were regarding changes in business processes, questions 33 to preventing violations, question 34 to increase the level of public health, and question 35 was devoted to hope. The questionnaire included demographic characteristics such as age, gender, education and work experience and the second part was dedicated to questions. Face and content validity of the questionnaire was confirmed by professors and experts in the field and reliability was evaluated with Cronbach's alpha higher than 0.7 (α = 0.84). Eventually, data was entered into SPSS version 20 and analyzed using descriptive statistics (frequency, frequency percentage, mean and SD), Kolmogorov-Smirnov test, one-way analysis of variance (ANOVA), Pearson's correlation test, and one sample t-test.

4. Results

Statistical analyses were performed on 44 questionnaires which were returned. The average age of managers was 42.75 ± 6.16 years old and the average job experience of managers was 19.5 ± 6.75 years. Seven people (16%) had job experience lower than 10 years, 15 (34%) had job experience of 11-20 years and 22 people (43%) had job experience of 21-30 years. Of the 44 participants, 30 (68.2%) were female and 14 (31.8%) were male; 37 managers (84%) had bachelor and 7 (16%) had master degrees.

The managers' viewpoints about the achievement of the reform objectives showed that 43.2% of managers believed that this reform was good for restricting the malpractices in healthcare and 56.8% believed that it was not so useful for changes in the number of caesarean sections (Table 1).

Based on independent t-test and ANOVA, the average score of the healthcare reform plan from the perspective of managers in any of the demographic variables did not show a significant difference (P > 0.05) (Table 2).

One-sample t-test showed that the mean score of managers' perceptions of recent healthcare reform efficacy had a significant difference with the theoretical average (mean = 3) and the performance of the health system reform plan from the perspective of managers in all the aspects were higher than average, only in the level of public health raise it was less than average, the constant 3 (To test the hypothesis of population mean is used. Likert scale (5) Average of 3 is considered.) (Table 3).

Based on Pearson's correlation test, there was a direct significant relationship among achievement of the goals of plan whit the society health level increase, direct significant relationship among achievement of the goals

of plan with changes in working processes and a direct significant relationship among changes in working processes with hopes of continuing the plan; there was also direct significant relationship between organization of authorities and employees and cooperation with insurance companies.

Moreover, the results showed that significant relationship existed in organization of authorities and employees, changes in working processes and both financial and human resources with achievement the goals of plan, which was associated with the prevention of contraventions. The results showed that there was significant relationship in organization of authorities and employees, changes in working processes, goals of plan and prevention of contraventions with the society health level increase (Table 4).

Table 1. Percentage of Achieving the Goals of the Recent Healthcare Reform According to the Viewpoints of Managers in Governmental Hospitals of Qazvin[a]

Items	Very High	High	Medium	Low	Very Low
Increase of the equity in patient's pay	1 (2.3)	3 (6.8)	24 (54.5)	11 (25)	5 (11.4)
Improving health services utilization	2 (4.5)	8 (18.2)	18 (40/9)	13 (29.5)	3 (6.8)
Decreasing out-of-pocket payments	4 (9.1)	6 (13.6)	8 (18.2)	5 (34.1)	11 (25)
Improving access to healthcare workers	2 (4.5)	3 (6.8)	13 (29.5)	19 (43.2)	7 (15.9)
Reducing the number of caesarean operation	1 (2.3)	3 (6.8)	1 (2.3)	14 (31.8)	25 (56.8)
Increasing patients' satisfaction	3 (6.8)	7 (15.9)	13 (29.5)	16 (36.4)	5 (11.4)
Promotion of hospitality services in hospitals	1 (2.3)	3 (6.8)	23 (52.3)	11 (25)	6 (13.6)
Improving the service quality of physicians' visits	2 (4.5)	1 (2.3)	9 (20.5)	19 (43.2)	13 (29.5)
Increasing corruption in clinical and administrative staff	2 (4.5)	19 (43.2)	14 (31.8)	8 (18.2)	1 (2.3)
Improving the overall level of community health	1 (2.3)	7 (15.9)	14 (31.8)	14 (31.8)	8 (6.8)
Hopes to continuation of the recent healthcare reform	3 (6.8)	16 (36.4)	16 (36.4)	3 (6.8)	6 (13.6)

[a]Data are presented as frequency (%).

Table 2. Comparison of the Average of Managers' Viewpoints Among Demographic Characteristics

Variables Grouping	Mean ± SD	Statistics Test Result	P Value
Gender		T = 0.119	0.905
Male	3.49 ± 0.28		
Female	3.48 ± 0.36		
Educational status		T = 1.861	0.070
Bachelor degree	3.53 ± 0.34		
Master degree	3.28 ± 0.22		
Age, y		F = 0.696	0.504
25 - 35	3.49 ± 0.35		
36 - 45	3.44 ± 0.35		
46 - 55	3.57 ± 0.31		
Work experience, y		F = 0.715	0.549
1 - 10	3.59 ± 0.41		
11 - 20	3.40 ± 0.35		
21 - 21	3.53 ± 0.30		

Abbreviations: F, statistics which we use to accept or reject the null hypothesis; T, t-test shows significant differences between variables.

Table 3. Average of the Recent Healthcare Reform in Hospitals According to Viewpoints of Managers

Items	Mean	T	df	P Value (2-Tailed)	Mean Difference ± Standard Deviation
Organization of authorities and employees	3.65	13.12	43	0.000	0.645 ± 0.33
Financial and human resources	3.49	6.82	43	0.000	0.490 ± 0.47
Cooperation with insurance companies	3.25	2.25	43	0.029	0.234 ± 0.70
Goals of plan	3.58	6.72	43	0.000	0.576 ± 0.57
Changes in working processes	3.39	4.21	43	0.000	0.386 ± 0.61
Prevention of contraventions	3.295	2.167	43	0.036	0.295 ± .90424
Society's health level increase	2.522	-3.029	43	0.004	-0.477 ± 1.04522
Hopes of continuing the plan	3.16	0.943	43	0.351	0.159 ± 1.11945
Total	3.53	9.67	43	0.000	0.487 ± 0.32

Abbreviation: T, Student's t.

Table 4. The Correlation Matrix Between Components of Recent Healthcare Reform and Viewpoints of Managers

Dimensions	1	2	3	4	5	6	7	8
Organization of authorities and employees	1							
Financial and human resources	0.124	1						
Cooperation with insurance companies	0.517[a]	0.004	1					
Achievement of the goals of plan	0.396[a]	0.312[b]	0.234	1				
Changes in working processes	0.197	0.116	0.129	0.479[a]	1			
Prevention of contraventions	0.054	0.163	-0.064	0.367[b]	0.422[a]	1		
Society's health level increase	0.396[a]	0.182	0.277	0.459[a]	0.425[a]	0.325[b]	1	
Hopes of continuing the plan	0.190	-0.080	0.201	0.414[a]	0.411[a]	0.159	0.464[a]	1

[a]Correlation is significant at the 0.01 level.
[b]Correlation is significant at the 0.05 level.

5. Discussion

Health system reforms are considered as purposeful, positive and continuous changing processes for progressing efficiency, justice and effectiveness of the health system. With regard to the results, from the viewpoints of executive administrations, the performance rate of the revolution plan generally was upper than the intermediate level.

According to the research findings, for achieving the reform goals, 56.8% of administrations believed that the function of this plan was very poor in decreasing the number of caesarean sections and this result is similar to the survey of Yarmohamadian and his colleagues (21). Whereas Afshari and his colleagues by conducting a study in Esfahan, Iran reported that the reduction of caesarean section rate was 12.5% in hospitals of this city after the execution of reform (22). In a similar study, 10% reduction in the caesarean rate was reported (23). It seems that different statistical populations and different questionnaires caused differences in results of this study with the abovementioned studies.

In this study, according to the viewpoints of only 15.9%

of administrations, this plan could increase the rate of patients' satisfaction from hospital benefits. Ashrafi in his research in Iran which assessed this plan from the viewpoints of executive administrations introduced the increase of waiting time as a cause for reduction of patients' satisfaction (24). Another study showed patients' ideas after the implementation of the evolution plan, which is not in accordance with the viewpoints of administrations in Qazvin hospitals (25). Nix said that with the creation of reform in America and Obamacare's Pay-For-Performance Programs, satisfaction and quality increased (26).

Li in a study titled "examination of society satisfaction from health services", after executing the health plan in 2012, concluded that after the reformations were implemented, patient's satisfaction increased; the highest satisfaction was related to clinic services (3.79 out of 5) and the least was related to medication services (3.62 out of 5) (27). In another research, Lin declared that after the reformation implementation, patients and inpatients' satisfaction rates increased, the most of which was related to medical services (28).

Harris in his research showed a significant relationship between the performance of the health system after its upgrade and reform (29). McPake et al. in their research after the reform showed some evidence of increased activity and productivity and sustained quality. The qualitative data suggested that hospital workers noticed considerable changes including greater responsiveness to patients, but they also felt a heavier administrative burden (30).

The findings showed that 43.2% of the administration staff believed that this plan was not very effective in promoting the quality of visit. A study by Ghanji and his colleagues corresponds to this result, but the reported increase of hospitality services is not in accordance with this research (31).

More than half of the administration staff of this research stated that the function of the evolution plan in decreasing payment rate was poor and very poor, whereas Tabatabaie in his own research reported 1.8% reduction in patients' payment rates after evolution in cash payment (32). Afshari in his own research reported 37% reduction in patients' payment rates; it seems that the administration staffs of these two researches were more logical than those of this research (22).

In this research, less than 10% of administrations agreed that patients' payments were fair and this fact corresponds to Ashrafi's study (24). They believed that inappropriate distribution of insurance credibility and lack of attention to justice between poor and rich people were causes for this unfairness.

The correlation among different dimensions of this study was indicative of close relation between organization of authorities and employs and insurance organizations cooperation; it means that better organization causes better cooperation.

The results showed that 43.2% of administrations believed that the implementation of health evolution plan led to decrease of the corruptions and infractions in teaching hospitals of Qazvin.

According to the result, there was also a meaningful relation among organization of authorities and employees, goals of plan, changes in working processes, prevention of contraventions, and the society health level increase. In other words, appropriate functioning of every dimension finally results in society health level growth. Therefore, based on the standpoint of 31.8% of administrations, this project indicated that the revolution plan functioned poorly in upgrading the society health level.

Considering the results of this research and similar researches, it can be told that hospitals and health care renderer organizations for more accurate examination of this plan should continuously observe their functions to be able to detect challenges and problems and by providing feedback eliminate defects and try to achieve health system goals. In some cases and dimensions, this plan could not attain its goals, although it was assessed as a good plan. Hence, more accurate examination and more

objective evaluation is necessary and we must know that only administrations' viewpoints is not enough for making reasonable decisions. Therefore, it is suggested to examine the function of this plan with related indexes. In addition, the plan of recent healthcare reform should be designed by involving stockholders. This study can be useful to help health managers and health policy makers for decision making and assessing the plan.

Footnote

Authors' Contribution: Mohammad Zakaria Kiaei and Reza Moradi guide researchers. Anis Taheri colleted data. Mahdieh Sadat Ahmadzadeh analysis data. Edris Hasanpoor designed and wrote study. Mahan Mohammadi interpreted jointly by researchers. All authors contributed equally in writing the manuscript. All authors reviewed writers at all stages of collection and analysis helped equally.

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