A COMPARISON OF MANAGEMENT PROCESSES IN EDUCATIONAL HOSPITALS LOCATED IN ISFAHAN, IRAN

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Abstract: *Hospitals are service organizations and act as the main health and treatment institutes in the society. To achieve organizational goals, hospitals need to implement a proper management system. The present study tries to compare management processes in educational hospitals located in Isfahan, Iran between 2009 and 2012.*

Study population of this descriptive-survey research was comprised of all nursing managers in the educational –treatment clinics affiliated with Isfahan Medical Science University. Sample (n = 165) was selected through census sampling. A standard questionnaire based on Stoner's model (1995) was used for data gathering. Validity of the questionnaire was tested using face and content validity and reliability of the questionnaire was checked by Cronbach's alpha (α = 0.85). For data analyzing, descriptive statistics and inferential statistics such as independent t-test ANOVA, MUANOVA and LSD were used in SPSS (ver.18).

In 2009, the t-value for all the managerial processes were less than error level (0.05) in 2012 and; therefore, the four managerial processes were lower than the mean level. Comparison of managerial processes in the educational hospitals located in Isfahan based on demographical variables showed that obtained F for 2012 was significant (P≤0.05). Furthermore, means of programming, leadership, and control processes of the participant hospitals, based on education degree, were different.

Proper management is the key to meet the organizational goals and surveying managerial processes can be a large step to improve efficiency and effectiveness of the organization.

Keywords: programming; organizing; leadership; supervision and control; educational hospital
JEL Classification: I1; I2

Introduction

We deal with several organizations in the society every day. The main philosophy of existence of an organization is in that only through teamwork and cooperation that we may achieve our goals in this competitive world (Irannegad Parizi and Sasangohar, 2006). Although, management has long been an important issue for many, its importance has been doubled following development of communication technologies, which have changed our world into a complicated system or a global

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organism (Robins and Dvid, 2007). Rapid changes of our age are beyond control unless we operationalize well organized process and management to meet organizational goals (Sadr and Salarianzadeh, 2003). Management is the process through which we organize and harmonize individual and group activities to reach a shared goal (Robins and Dvid, 2007). Management, in a more comprehensive and accurate word, is a process to achieve maximum results out of minimum efforts; so that maximum welfare and satisfaction with the job are also experienced by both employees and employers and the customer on the other hand enjoys quality products and services (Irannegad Parizi and Sasangohar, 2006). Through management process, the manager tries to determine organizational goal and plans for realizing the goal, recruits the employees, and makes the arrangements. Afterward, the manager leads, controls, and supervises the employee (Mosadeghrad, 2004) and taking into account the dynamic, unstable, and unpredictable environment, keeps revising the plans and goals (Wilhelm, 2005). Since 19th century, management has been generally defined within the framework of four key tasks that managers are assumed to carry out (programming, organizing, leadership, and control). Despite variety of criticisms that this framework has provoked, it is still widely accepted (Stoner *et al.*, 2010). Importance and necessity of management, despite many who argue that employees can carry out managerial tasks in absence of managers, is in that there is no single case of an organization found by historical and sociologists that has survived without managerial hierarchy. Manager is the vital element of an organization and their tasks regardless of the level is to create, preserve, and run an environment in which the members are able to work in group and toward realization of determined goals (Dargahi, 1999). Importance of management is not evident only in industries, but its importance can be felt in other sectors including health and treatment. It is not deniable that industries are one step ahead of other sectors in utilizing modern technologies for better utilization of limited resources; still it does not mean that managers of health organizations (hospitals) have neglected the role of technology (Mosadeghrad, 2004). Successful operation of health sector depends on fundamental political, economic, scientific, and technical bases of the country, which are generally called as health and treatment infrastructures (Asefzadeh, 2003). The infrastructures are subject to many rapid changes. Given high costs of establishing and running specific organizations in these sectors, achieving objectives of health sector needs specific knowledge and skills and proper attitudes. All these depend on a comprehensive management system (Ebadi and Ansari, 1999).

A critical and strategic organization in health sector is the hospital that plays the central role in supplying health, treatment, training, and research services. Establishment and running hospitals is a costly process. These organizations preserve public's health through coordinated measures with

another set of factors (Asefzadeh, 2003). Hospitals need to supply wide range of health services to the society; the services are growing in extent and variation along with scientific and technological development. Supplying complicated health services entails participation of several expert groups and provision of these services in an effective and reliable way needs implementation of an effective and reliable management system (Sedqiani, 1998). Needless to say the patients and their families expect satisfactory quality services to come out of the enormous investments made in hospitals. Furthermore, necessities and principles that must be observed by hospitals such as justice in providing the services, the patient and employees' satisfaction, efficient utilization of resources and so on call for implementation of a comprehensive and systematic management system. Therefore, managing an organization is complicated and taking into account enormous financial inputs, this task cannot be handed over to non-expert groups.

1. Literature review

Goldstein (2006) conducted a study titled "Surveying management and leadership in running hospitals" in the USA and concluded that a strong management team enables the organization to utilize its capabilities within the basic and fundamental limitations of the market. Where the management team and the controlling board have a deep commitment to adopt novel strategies, the organization is surely led toward creating changes (Goldstein, 2006). Commitment to change may eventuate in improvement of financial performance and higher correlation. Most efficient management teams use common benchmarks to spot weaknesses and strength of their organization. Achievements of hospitals and their clinical popularity are highly dependent to medical teams. Successful management board can demonstrate its successful performance through stable and reliable financial performance or several years of steady financial improvement. In a study titled "small hospitals and measuring strategy and performance" in the USA, Lied (2001) recommended methods to demonstrate responsiveness, measurement, and improvement of service quality in hospitals. Hospitals are required to be more and more responsive regarding their services. The point is that small hospitals do not have enough financial resources to meet performance standards (Lied, 2001). Welch and Kleiner (1995) carried out a study titled "new development in American hospitals management" and showed that increasing cost of health care services has influenced the elderly health insurance repayment so that medical care is provided to specific groups. This trend, however, has cut revenue and increased competition among the hospitals and consequently, cost reduction, strategies, marketing, HR management are revised purposefully (Welch and Kleiner, 1995). Role of efficient

management in realization of organizational goals is undeniable; thereby management processes examination can be a major step in improvement of efficiency of hospitals. The present paper is aimed at surveying and comparing management processes in Isfahan-based educational hospitals from managers' viewpoint in 2009 and 2012.

2. Methods

Descriptive - survey method was used to survey the processes of management based on viewpoint of managers of educational and medical centers affiliated with Isfahan University of Medical Science. Study population in 2009 and 2012 were 36 and 72 individuals respectively who were working in three managerial levels (top, middle, operation) in educational and medical centers including Alzahra, Kashani, Feiz, Nour, Aliasghar, Shahid Beheshti, Farabi, Chamran, Imam Mosa Kazem, Seyed Alshohada, Amin, Modaras, Iesa Bin Maryam, and Imam Hossein hospitals. Because the study population was small, all of them were selected through census method. The participants included heads and managers of hospitals, nursing supervisors, educational supervisors, ranking supervisors, clinical governance, heads of general affairs, and heads of human resources. To collect the data, a standard questionnaire based on Stoner's mode (1995) of which validity was ascertained through content and face validity, and reliability was ascertained using Cronbach alpha ($\alpha = 0.85$) was used. Data analysis was carried out in SPSS18 using descriptive and inferential statistics (percent, frequency distribution, one variable t-test, multi-variant variance analysis, LSD test).

3. Results

The results showed that 29.4% and 70.6% of the sample group were from 2009 and 2012 respectively; 10% of the respondents were unmarried and 90% were married; men and women constituted 51.1% and 48.9% of the sample group respectively; average age of the participants of 2009 was 44 and that of 2012 was 43.88; average work experience of the participants of 2009 was 20.21 and that of 2012 was 20.0; and 3.9% of the participants had high school diploma, 2% had associates' degree, 62.7% had bachelors' degree, and 31.4% had post graduate educations. Moreover, 84.1% of the respondents had passed management course; 26.7% worked in general hospitals, 46.7% in specialized hospital, and 26.7% in top specialized hospitals. Highest average point of the responses (4.26) by the participants of 2009 was for "concerns about economic justification of operation at programming stage" and lowest average point (3.46) was for "programming to improve occupational

development"; as to participant of 2012, highest and lowest points were for "concerns about resource and facilities assessment at programming stage" (4.05), and "programming to solve employees' problems" (3.40%) respectively.

Table 1 - Comparing management processes in educational hospitals in Isfahan, Iran, 2009 and 2012

Management process	Year	Ave.	SD	t	P
Programming	2009	3.17	0.601	5.66	0.001
	2012	2.64	0.717	5.92	
Organizing	2009	3.27	0.601	4.23	0.000
	2012	2.61	0.593	6.89	
Leadership	2009	2.37	0.646	3.87	0.202
	2012	1.97	0.614	5.58	
Supervision and control	2009	2.40	0.715	4.23	0.102
	2012	2.78	0.709	6.19	

Source: own compilation

T-value of "programming and organizing" in Isfahan-based hospitals in 2009 was higher than critical value at error level (0.05); thereby, programming and organizing points are higher than average level. On the other hand, t-value of "leadership" and "supervision and control" was less than critical value at error level of 0.05. Thus, leadership and supervision and control were lower than average level. Moreover, t-value of all the four processes of management (programming, organizing, leadership, supervision and control) was less than critical value at error level (0.05). Therefore, value of all four processes of management were less than mean level. Furthermore, comparison of management processes in educational hospitals, Isfahan, Iran in 2009 and 2012 showed that observed F was significant ($P \leq 0.05$). Thus, mean point of programming and organizing processes of 2009 was higher than that of 2012.

Moreover, comparison of management processes in educational hospitals of Isfahan city from demographical viewpoint in 2009 showed that observed F was not significant ($P \leq 0.05$); which means there was no significant differences between mean points of management processes from demographical viewpoint. Additionally, based on demographical variables, comparison of management processes of educational hospitals of Isfahan city in 2012 showed that observed F was significant ($P \leq 0.05$) – i.e. there was significant difference based on education degree. In this way,

based on education degree, there was difference between programming, leadership, and control in 2012.

Table 2 - Comparison of man point of management processes based on education degree in 2012

Management process	Education degree	Mean different	Sig.
Programming	Associates' degree – post graduate	-1.13	0.012
	Bachelors' degree- post graduate	-0.637	0.014
Leadership	Associates' degree – post graduate	-0.879	0.024
	Bachelors' degree- post graduate	-0.529	0.019
Control	Associates' degree – post graduate	-1.21	0.007
	Bachelors' degree- post graduate	-0.529	0.019

Source: own compilation

LSD test results (Table 2) indicate that difference of mean points of programming, leadership, and control based on education level was significant ($P \leq 0.05$), so that obtained points by holders of bachelor and associates' degree regarding programming, leadership, and control were less than that of holders of post graduate degrees.

Conclusion

Health is the centerpiece of permanent social, economic, cultural, and political development of human societies. It is a critical element in variety of infrastructures of the society. Hospitals are one of the organizations that plays paramount role in health and treatment sector. By supplying specialized health services, hospitals fill in a key role in treatment of patients and obtaining their satisfaction. Realizing these needs strong and stable management system. A competent manager to run the organization must be master of technique and knowledge in their field.

The findings showed that t-value of programming and organizing processes of the study population in 2009 was higher than the critical value at error level 0.05; which means points of programming and organizing processes were higher than mean point. On the other hand, t-value of leadership and control and supervision in 2009 was less than the critical value at error level 0.05; which means point of leadership, programming, and supervision were less than mean point. Moreover, t-value of all management processes (programming, organizing, leadership, control and supervision) in 2012 was less than critical value at error level 0.05. Therefore, in 2012, all four

processes of management were less than mean level. Goldstein (2006) surveyed management and leadership in Hospital Affairs Department, the USA and showed that strong management team enables the organization to realize all potential and unique capabilities within limitations and opportunities of the market. Managers who strongly believe in changes and creating new strategy will lead the organization toward change and improvement of financial performance. The most efficient management teams used routine assessments to detect their weaknesses and strength. Doubtlessly, the medical team has notable effect in clinical reputation of the hospital so that by gaining high credentials, they prepare the ground for further successes. Strong management teams display their good performance by stunning financial performance or steady growing performance trend (Goldstein, 2006).

Additionally, comparison of management processes in the hospitals under study based on demographical variables in 2009 showed that F value was not significant ($P \leq 0.05$). Thereby, no significant difference was observed by mean point of management processes based on demographic variables. On the other hand, the same comparison for data set of 2012 showed that F value was significant ($P \leq 0.05$). Thus, there was significant difference between mean points of management processes based on education degree – i.e. programming leadership, and control were different in 2012 based on education degree.

In a study titled "small hospitals and measuring strategy and performance" in the USA, Lied (2001) recommended methods to demonstrate responsiveness, measurement, and improvement of service quality in hospitals since hospitals are required to be more and more responsive regarding their services. The point is that small hospitals do not have enough financial resources to meet performance standards (Lied, 2001). Welch and Kleiner (1995) carried out a study titled "new development in American hospitals management" and showed that increasing cost of health care services has influenced the elderly health insurance repayment so that medical cares are provided to specific groups. This trend, however, has cut revenue and increased competition among the hospitals and consequently, cost reduction, strategies, marketing, HR management are revised purposefully (Welch and Kleiner, 1995). Hospitals are complicated organization hosting variety of fields of expertise and interactions within this heterogeneous complex bring in many challenges in the way of the managers of hospitals and experts of behavioral sciences.

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