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DESIGNING A COMPETITIVE MODEL FOR FARS PROVINCE GOVERNMENTAL HOSPITALS

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ABSTRACT

Utilizing market set ups in hospital services requires the government to notice the market structural conditions and competition between providers. The impact of competition apply depends on several factors. This study aims to design a pattern in which Iran governmental hospitals somehow compete in providing treatment services with the aid of structural equations. This applied study has been conducted with descriptive – analytical method. The research tool is scholar made questionnaire of competitiveness in governmental hospitals whose reliability was acquired by specialists and its dimensions validity was obtained using Cronbach alpha test as 0.83. The statistical society includes all experts of healthcare management domain that 30 persons were selected as statistical sample and the study tool was distributed among them. Analyzing the statistical data was performed by SPSS 23 software and single sample T-test, KMO and Bartlet were used. the findings of this study by single sample T showed that in P< 0.05 level, competitiveness , services efficiency and supplying financial resources was confirmed for explaining competitiveness structural equations, but process method was rejected. About determining competition pattern with the aid of structural equations, the results of KMO and Bartlet tests showed that hospital services cost proportionate to competition market and the patient freedom in selecting physician has

been identified as the first factor, the hospital entrance to competition market and the patient freedom in hospital selection as the second factor and the hospitals policy making by the university as third factor in governmental hospitals competiveness. Omission of additional organizations, omission of unnecessary hospitalizations and omission of unnecessary services have been identified as the first factor, continuous evaluation of treatment sectors, improving services quality and physicians single occupation as the second factor in efficiency of governmental hospitals services. Methods of the hospital financial supply through governmental subside, methods of hospital financial supply through lateral services were identified as the first factor and methods of hospital financial supply through state or province budget, methods of hospital financial supply through insurances, methods of hospital financial supply through tax and methods of hospital financial supply through institutes financial aids as the second factor in supplying financial resources of governmental hospitals. Personnel payment method based on fee, method of personnel payment based on tariffs and method of personnel payment based on salary system were identified as the first factor in payment method and method of personnel payment based on salary system as the second factor in payment method of governmental hospitals.

KEYWORDS: competitiveness, treatment services, governmental hospitals, services efficiency, financial resources supply and payment methods.

INTRODUCTION

Competition rule as the most important instrument of competitive policy includes a series of regulations which are legislated for improving the organizations performance. The preface of the rule is anti-trust regulations which were codified in some countries like US. Creating healthy competition is one of the best ways for reinforcing ethics and work force health that as its result the organization work success will increase. If the organization itself is behind these programs, it indicates that the company very much emphasizes promoting its staff and work force health.(Hosseini & Shafie, 2007)

A country's competitiveness is defined based on the degree it could provide services and commodities under free and suitable market conditions and achieve standards of international markets and simultaneously improves that country public real income and life quality for a long term period (Gayner, 1993). In a globalized economy, competitiveness means the possibility to acquire a suitable and sustainable situation in international markets in an era when globalization is widely increasing, competitiveness is treated an important issue among

policy makers of various levels (the country, industry and company) in different regions of the world (Massimo, 1992). Healthy competition in the organizations health plan is an essential approach not only for keeping work force healthy but for increasing work efficiency. The organization health plan is what originates from the company work force. This is the employers' duty to preserve the organization health and to have a positive approach. This plan will be along with great success and will promote the organization human resources. Their general health will be reinforced and then, its employees will continue their work with maximum effort (Sadr, 1999).

In globalization era, competitiveness is assigned an important issue among famous policy makers and a means for reaching desirable economic growth and sustainable development. On this basis, the institutes have sought new resources of competitiveness resources for their survival and progress and their success requires identifying factors determining competitiveness so that in this way a model for promoting their competitive potency to be designed. Competitiveness is among important issues which have been emphasized during recent years in management and marketing literature and in this regard, different outlooks comparing competitiveness determining factors have been provided (Khodadad, 2009). Then, searching new ways for competition in competitive markets forms main juice of marketing and this is for this reason that acquiring competitive advantage is main issue of institutes (Hosseieni & Panahi, 2007).

Competiveness as a multi-dimensional notion is evaluated using variables like the organization associability with business environment changes, competitiveness advantages and performance indicators (Aghazadeh & Asfidani, 2008). In this meaning that each company could best assimilate available resources including capital, work force and technology and provide some customer- friendly products and suitable services for the market, it will enjoy more success in competitive space (Abbasi et.al, 2011).

One of important functions of competitiveness states impacts which could be created in the organization structures and provide the ground for dynamicity, growth and balanced development of the organization and lead to mobility and growth of service era. Of course, there are several administrative, political, social, cultural and legal problems in movement affront of the organizations for reaching the determined objectives and competiveness realization that by universality and clarification of competitiveness process means of consuming these problems is provided (Maesoomi, 2004).

Finding a suitable competitive model between Fars province hospitals could be effective in hospitals comprehensive progress, therefore, this study is performed with the aim of designing a competitive model for Fars province governmental hospitals with structural equations method to examine weaknesses and strengths of this section and by providing this study results to the university authorities, help them in obviating weaknesses and reinforcing strengths and finally providing suitable services for the patients.

Methodology

The present study is of applied type and has been performed by descriptive- analytical and cross-sectional method. This study general aim is designing a model by which Fars governmental hospitals could easily compete in providing services to provide customers satisfaction with providing desirable services. The study statistical society includes experts of healthcare services management of universities who have some compilations in this field and also people who have been among key personnel of Iran ministry of health and medical training and have complete familiarity with competition issue that based on the following formula and based on previous studies 30 persons were selected as statistical sample.

$$n = \frac{\left(z_{1-\alpha/2} + z_{1-\beta}\right)^2 (s_1^2 + s_2^2)}{(\mu_1 - \mu_2)^2}$$

Data collecting tool is scholar made questionnaire of competitiveness in governmental hospitals which has 23 questions that includes 4 dimensions of competition, services efficiency, supplying financial resources and payment method. The research reliability was acquired by experts of healthcare services management and its validity was obtained by Cronbach alpha for competition, services efficiency, supplying financial resources and payment method 0.83, 0.79, 0.84 and 0.87 respectively. For data analysis, SPSS 23 software was used and KMO and Bartlet tests were utilized.

RESULTS

The results of single sample T-test about competition market status in governmental hospitals showed that there was a significant relation in p<0.05 level and the average 3.05 was obtained (table1).

Table 1: Competition market status with the aid of single sample T-test.

	t	df	median	significance level
competition market status	30.93	29	3.05	0.00

Factor analysis showed that variables of hospital services cost proportionate to competition market and the patient freedom in selecting the physician was identified as the first factor, governmental hospitals entrance to competition market and the patient freedom in selecting hospital as second factor and hospitals policy making by universities of medical sciences as third factor in governmental hospitals entrance to competition market (table2).

Table 2: Factor analysis of competition market status with the aid of KMO and Bartlet test.

variable	first factor	second factor	third factor
governmental hospitals entrance to competition market	0.443	0.655	0.174
hospitals policy making by universities of medical sciences	0.294	0.225	0.776
hospital services cost proportionate to competition market	0.879	-0.127	0.181
the patients freedom in selecting physician	0.658	0.275	-0.277
the patients freedom in selecting the hospital	-0.105	0.908	-0.041

The results single sample T-test about treatment services efficiency in Fars province governmental hospitals showed that there was a significant relation in $p < 0.05$ level. (table3)'

Table 3: Single sample T test about efficiency of services efficiency in governmental hospitals.

	t	df	median	significance level
services efficiency status	2.14	29	2.8	0.041

Factor analysis showed that variables of additional organizations omission, unnecessary beds omission and omission of unnecessary services was identified as services efficiency and continuous evaluation of treatment section, improving services quality and physician single occupation as second factor in treatment services efficiency (table4).

Table 4: Factor analysis of services efficiency status with the aid of KMO and Bartlet test.

variable	first factor	second factor
omission of additional organizations	0.503	0.428
omission of unnecessary beds	0.877	0.046
omission of unnecessary services	0.877	0.146
continuous evaluation of treatment sections	0.598	0.611
service quality improvement	0.161	0.685
physician single occupation	0.027	0.892

The results of single sample T-test about financial resources status in Fars province governmental hospitals showed that there was a significant relation in p<0.05 level (table5).

Table 5: Single sample T-test about supplying financial resources in governmental hospitals.

	t	df	median	significance level
status of financial resources supply	2.84	29	2.9	0.008

Factor analysis showed that variables of hospital financial supply methods through governmental subside, methods of hospital financial supply through lateral services was identified as first factor and methods of hospital financial supply through state or province budget, methods of hospital financial supply through insurances, methods of hospital financial supply through tax and methods of hospital financial supply through financial supports of foundations and non-governmental institutes as second factor in supplying financial sources of governmental hospitals.

Table 6: Factor analysis of financial resources supply status with the aid of KMO and Bartlet test.

variable	first factor	second factor
methods of hospital financial supply through state or province budget	0.014	0.69
methods of hospital financial supply through insurances	0.023	0.665
methods of hospital financial supply through governmental subside	0.902	0.224
methods of hospital financial supply through lateral services	0.779	0.346
methods of hospital financial supply through tax	0.358	0.549
methods of hospital financial supply through financial supports of foundations and non-governmental institutes	-0.835	0.215

The results of single sample T-test about payment method status in Fars province governmental hospitals showed that there was no significant relation in $p < 0.05$ level (table7).

Table 7: Single sample T-test about payment method in governmental hospitals.

	t	df	median	significance level
status of payment method	-0.17	29	2.6	0.093

Factor analysis showed that variables of method of payment to personnel based on performance, method of payment to personnel based on fee, method of payment to personnel based on tariffs and method of payment to personnel based on salary system is identified as first factor and method of payment to personnel based on salary system as the second factor in payment method.

Table 8: Factor analysis of payment methods status with the aid of KMO and Bartlet test.

variable	first factor	second factor
method of paying to personnel based on salary system	-0.445	0.672
method of paying to personnel based on performance	0.730	0.111
method of paying to personnel based on fee	0.801	0.213
method of paying to personnel based on tariffs	0.768	0.351
method of paying to personnel based on salary system	0.774	0.409

DISCUSSION AND CONCLUSION

Practically, globalization is to enter the competitive world, competition in international level which has some prerequisites such as necessary capabilities and abilities. Therefore, planning for global thinking and institutes activity so that they could act and work out of national range are among main managers measurements in future years. This study provides managers the variables they need for planning (Aghazadeh and Esfandani, 2007).

Holing Worth and Bovver and Light believe that price competition causes increasing of efficiency and reduction of costs in many governmental eras. In performed surveys in this study, it has been shown that service providers should compete for increasing of efficiency and reduction of costs (Zovanzinger, 2015). Alice believes that service providers who are paid based on provident payment, when face a combination of various illnesses based on illness intensity, select those patients who have diseases with less severity (Alice, 1997). The findings of this study suggest some motivational rewards for those healthcare centers that act

based on high performance and treatment type and volume. Holmes and Scholar have stated that US hospitals still constitute dominant part of this country treatment services system framework (Jasarovich, 2010). A hospital is a place where the most acute healthcare issues are solved and where both governmental and private payers spent the greatest money (Massimo, 1992). The findings of this study are corroborant of this issue. Hospitals in most countries allocate the highest costs in healthcare sector to themselves. Mudpack in a study showed that specialized hospitals could be profitable than general hospitals. Specialized hospitals in this study in 2002 had average profit margin of 13% for all payers (Najafbeigi, 2006).

The present study, too, reaches this result that in competition matter in providing hospital services, service providers for achieving more profit should be propelled towards single specialization hospitals.

For their efficiency, hospitals should designate their human resources to a method which has the highest efficiency for providing care services. The most trained and skillful experts spend a great time on issues which are easily performable by other competent service providers who have been less trained. This is generally costly and for those experts who have high competence, performing simpler jobs causes their dissatisfaction (Asefzadeh, 2011). The present study believes that the above problem could be solved through designating human resources and using flexible collective agreement and observance of performance domain rules in hospitals, since inflexible rules relating to act domain and work extent increases healthcare costs and this is discordant with the principle of cost reduction in competition.

A competition during which successful providers become proliferous and those providers who have less success will face problem. One of the best mechanisms for improving motivation for providing hospital services with high efficiency is competition. Competition could lead to faster promotion of technologic progresses, reduction of costs, better performance methods and omission of losses (Selbik, 2003).

In this study, it is specified that competition among hospitals and medical centers for preserving sustainability and attraction of financial resources and acquiring validity causes motivation creation, scientific and technologic progresses, reduction of additional costs, better performance, increasing of services quality and omission of losses.

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