

## Design and Development of the Strategy to Improve Patient Satisfaction in a Hospital setting

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**Abstract.** Attempts made in order to improve management tools of performance showing the importance of customer satisfaction in determining the organizations' success in profitability and business. The main objective of this study was to develop appropriate strategies to improve patient satisfaction in one of the hospital in Tehran.

The research was a descriptive-practical one. Data was collected through a brainstorming session, two questionnaires designed based on internal and external evaluation matrices standard framework and quantitative strategic programming matrix, and finally some changes were made. Having collected the data, vision and mission of the hospital were developed; then SWOT matrix of the hospital was formed and due to the hospital being placed in competitive position (ST), five strategies were considered necessary to improve the satisfaction of the hospital's patients.

What was considered the most was appointing a strategy in order to attract specialists and efficient forces with a score of 5.56 and the least considered referred to the strategy of promoting the empowerment of newly-hired staff with a score of 2.96. The population of this study is comprised of experts and senior managers at one of the hospital in tehran hospital in Tehran working in 2012 (N=16). Due to the limited number of population, sampling was not done. Tools of collecting data included brainstorming session and two questionnaires.

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**Keywords:** Patient Satisfaction, Strategy, Hospital, SWOT Matrix.

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## 1. Introduction

Existing intensive competitions in various fields has made the conservation of communities and organizations turbulent and in need of special skills. Permanent representation, the increase in goods and new services is the result of these competitions and represents a continuous effort for this survival.

Producing and supplying new services with unique characteristics requires organizations with modern thoughts and strategies; organizations which range speed and intensity of their internal development with market requirements, seem to be capable of realizing all these requirements with complete smartness and supplying them on time.

Today merely capturing a broad market cannot guarantee the survival of an organization, but to ensure customer satisfaction is more preferable [7].

Organizations responsible for health in different countries, have been always looking for possible ways to achieve a healthy and highly-qualified life for all human beings and reducing the gap between “average quality of services” and “the highest possible quality” through improving the quality of their services. UK Health System is considered as a pioneer of this strategy. This system has been engaged in an implicit idea of quality for over forty years based on the philosophy of having well-trained staff, appropriate environment and equipment would equal providing high-standard services. As time passed, advent of quality audit strategies such as medical and clinical provided the system with a more systematic approach. Should be considered factor in this regard, is that clinical governance would not be verifiable by merely doing “what seems right”, but also Organizations responsible for health and boosting the quality of medical services require strategies themselves. This strategy should be based on evaluating the patients’ requirements and viewpoints, legal requirements, staff capabilities, unfulfilled educational needs and realistic comparison of current performance with the best medical standards [6].

A patient satisfaction is closely dependent on level of their expectations. And if the provided services exceed the patient’s expectation, the satisfaction level will definitely increase. If the expectation of services is higher than the real level of provided services, dissatisfaction will happen [5].

A satisfied patient is the best advertisement for a hospital; a satisfied patient is the key to success for a hospital. From a management perspective, satisfaction of a patient from diagnosis with treatment and rehabilitation care is important for several reasons [8].

- (1) Patient satisfaction is one of the most important tools to measure the effectiveness of a hospital.
  1. Satisfied patients follow the treatment process better than dissatisfied ones.
  2. Satisfied patients communicate better with medical service providers.
  3. Patient satisfaction is one of the most important marketing tools in advertising.
  4. By identifying sources of dissatisfaction among patients, organizations can discover weaknesses and take action to fix them.

In today’s complex world, in which health centers on one hand are facing severe continuous changes that require to be provided with new patterns and services and intense competition with their rivals, on the other hand, paying attention to patient satisfaction and optimum management of which has taken on crucial importance. The current study has been carried out with the objective of designing and developing effective strategies to improve the patients’ satisfaction in one of the hospital in Tehran.

The research questions are as follow:

**The Main question:**

what are the effective strategies to improve the patients' satisfaction?

**The Secondary Questions:**

- (1) What mission and vision the hospital chooses for the future direction and tendency?
- (2) What are the hospital strengths, weaknesses, opportunities and threats?

## 2. Method

In classification based on objectives and collecting data, this study in order is considered as descriptive and practical; it has also benefitted from standards of comparative studies in designing the strategies. The population of this study is comprised of experts and senior managers at one of the hospital in Tehran working in 2012 (N=16).

Due to the limited number of population, sampling was not done. Tools of collecting data included brainstorming session and two questionnaires. The first questionnaire consisted of two demographic and specialized parts. Demographic part included gender, education, work records, and employment status, and in specialized part, rating and coefficient score of the strengths, weaknesses, opportunities and threats, agreed at the brainstorming session, were taken into consideration. The second questionnaire, too, was composed of two demographic and specialized parts. Demographic part included the items listed in the first questionnaire, and the specialized part included two tables to determine the coefficient of strategies' attraction as compared with internal and external strategic factors. In order to validate the content of both questionnaires, the judgment of experts was demanded; i.e. they were given some experimental questionnaires and were asked to express their opinions of the content, structure, appearance, and how to write questionnaires.

After validity confirmation, Cronbach's alpha coefficient was used to determine the reliability of the questionnaire. Cronbach's alpha coefficient of the questionnaire was 0.88.

In brainstorming sessions, firstly the design of the vision and mission of the hospital was considered, and the strengths and weaknesses, opportunities and threats of hospital in patient satisfaction were evaluated with respect to the internal and external environment of the hospital.

Then, in order to draw the internal factor evaluation (IFE)<sup>1</sup> matrix and external factor evaluation (EFE)<sup>2</sup> matrix, first questionnaire was distributed; in the first questionnaire, coefficient of importance to evaluate the strengths, weaknesses, opportunities and threats was considered from 0 to 100 for convenience which were divided by 100 after the data collection to reach the standard amount of 0 to 10. For ratings, grade 3 or 4 was considered for strengths and weaknesses and grade 1 or 2 for the opportunities and threats.

Then, in order to determine the strategies of improving patient satisfaction, researchers have firstly focused on reviewing the relevant texts and identifying the strategies of boosting patient satisfaction. Afterwards, SWOT<sup>3</sup> matrix was drawn to evaluate the strategies. In order to evaluate the appropriate strategies of the hospital, the hospital position was determined by internal and external evaluation

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<sup>1</sup> *Internal Factor Evaluation (IFE) Matrix*

<sup>2</sup> *External Factor Evaluation (EFE) Matrix*

<sup>3</sup> *SWOT is the acronym for English words : Strength, Weakness, Opportunity and Threat*

matrices.

Then, the second questionnaire was handed out to determine the coefficient of strategies' attraction as compared with internal and external strategic factors.

In the second questionnaire, four levels from 1 to 4 were considered for the coefficient of strategies' attraction; and the quantitative strategic programming matrix (QSPM) was drawn using the data obtained from the second questionnaire and strategies of hospital satisfaction were prioritized. The executive model of designing the strategies of improving patient satisfaction is mentioned in the following.

### **3. Findings**

In the total population of 16 involved in the process, 37.5% were men and 62.5% women, 43.8% of which held bachelor degree, 37.5% held master degrees, 6.2% held PhD and 12.5% were specialized doctors. Also, 6.2% of them had 5 to 10 years, 56.2% had 11 to 20 years and 37.5% had 21 to 30 years of working experience.

Before designing the strategies, the vision and the mission of one of the hospital in Tehran would be introduced as follows:

#### **4. Vision of one of the Hospital in Tehran**

Relying on God's grace and our valuable human resources, we are determined to be known as:

1. The prior training, research and treatment center in the Middle East;
2. The leading hospital in the region in applying the world's modern technologies in patients' treatment;
3. The top hospital in the region in presenting care services with the highest quality and the lowest costs to all patients, especially the honored families of the martyrs and veterans.

#### **5. The Mission of one of the Hospital in Tehran**

1. To provide health-care services for all people especially the honored families of the martyrs and veterans, in accord with ruling virtues over the society and with the objective of increasing customer satisfaction through continuous improvement of quality of health services and elevation of clinical performance and patient safety
2. To ensure the preservation and promotion of people's health by providing the most desirable health-care, educational and research services at the society level by medical and paramedical staff along with the training of students in different medical professions;
3. To provide training services based on quality for students and learners of medical sciences by benefitting from world's modern technologies and facilities;
4. To present clinical researches and studies to other health-care centers by organizing seminars and conferences;
5. To provide satisfaction of this hospital's staff, as valuable human resources, and internal customers and also to provide satisfaction of patients, society, government, other hospitals and universities of medical sciences, as external customers have always been given into due consideration by the hospital.

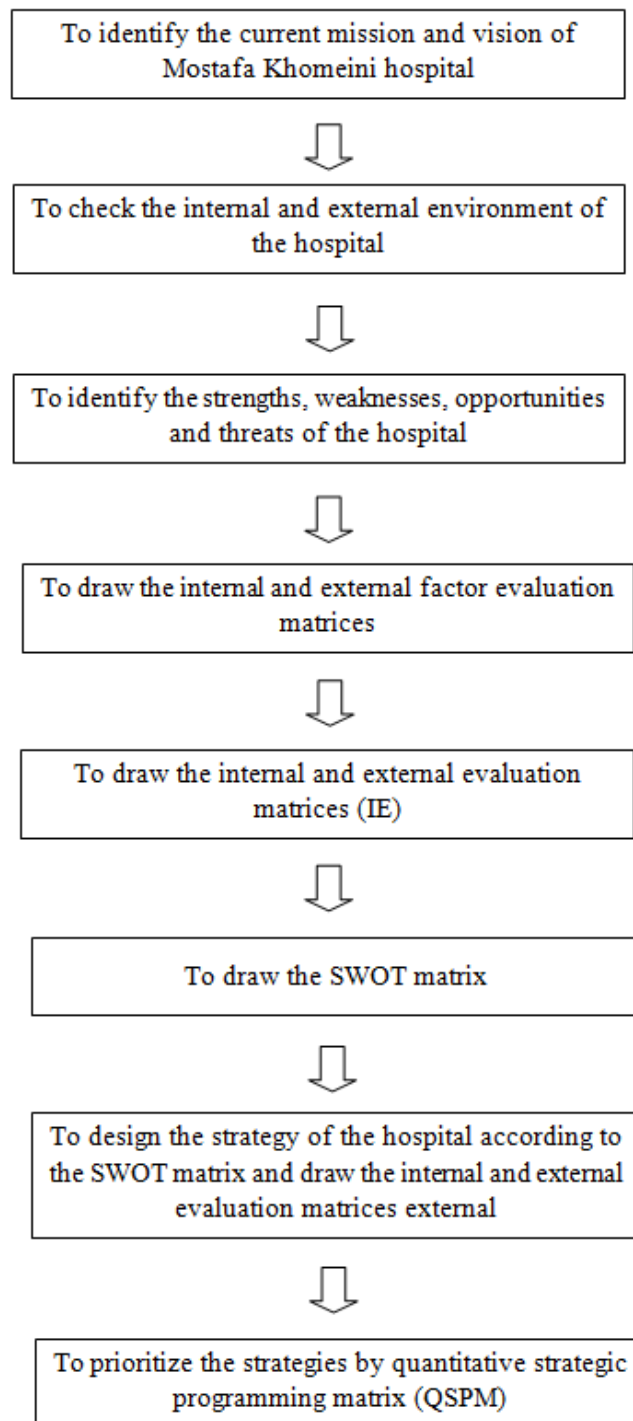


Figure 1. Executive model of designing the strategy of one of the hospital of Tehran.

## 6. Input Stage (evaluation of internal and external environments)

Environmental evaluation includes the study of internal and external environments. Evaluation of external environment consists the study of task and social environment. Environmental evaluation is, the supervision, evaluation and dissemination of information pertaining to internal and external environments of an organization among key employees. Environmental factors play an important role in success

or failure of an organization. Managers should make appropriate policies between the organization and the environment; all organizations have internal and external environments.

Internal environments are inside the organization and two factors of strengths and weaknesses are their components which are usually in continuous and long-term control of senior managers. This environment includes main owners of the organization, board of directors, staff, physical environment and culture of the organization. External environments are outside the organization and their components are two factors of opportunities and external threats which are out of continuous control of the organization's senior manager. This environment comprises working and general environments. General environment includes non-specific factors around the organizations which influence organization's activities and consist of five parts which are economic, technological, social, political and international; the impacts of such factors are crucial and gradual (Amini et.al. 2010).

#### **A. Opportunities and Threats**

What opportunities and threats mean, is the political (P), economic (E), social (S), technological (T), legal (L), governmental (G), competitive (C) events and circumstances which can largely benefit or harm from the organizations in the future. Opportunities and threats are largely out of the control of an organization [5].

Any organization must develop some strategies to take advantage of external opportunities and to avoid or reduce the effects of the threats. Therefore, identification, monitoring and evaluation of external threats and opportunities can guarantee success of any organization (Senge ,1998).

A list of the most important opportunities and threats which have been examined due to the importance working scope for the above-mentioned hospital are presented in Table 1.

#### **Strengths and Weaknesses**

These factors can be controlled by the organization and the organizations try to choose such strategies which will improve their strengths and remove their weaknesses. Strengths are those factors which were considered as advantages for the organization compared to the organization's past, or the average of industry, or as compared with the competitors; however, Weaknesses are those factors in which the organization is not capable enough, while the competitors are (Rashidi,1999). A list of the most important strengths and weaknesses of above-mentioned hospital are presented in Table 2 with their scores.

### **7. External Factor Evaluation Matrix**

In evaluation external factors, ten important opportunities and ten threats are presented which influence the hospital. The scores achieved by the factors are given in the following table.

Given that the final score in this matrix equals 2.42 which is less than 2.5, this final score indicates that threats of one of the hospital in Tehran outnumber the opportunities of this center, and the center does not make use of strategies by means of which opportunities can be benefitted from and threats can be reduced.

### **8. Internal Factor Evaluation Matrix**

In evaluation of internal factors, ten internal strengths and ten major weaknesses are considered.

Table 1. External Strategic Factor Evaluation Matrix of one of the hospital in Tehran

Item	Opportunities	Coefficient	Rate	Score
O 1	Sensitivity and focus of the officials and members of the parliament to area of health	0.1	4	0.4
O 2	Growth of educational level in society and increase the people's sensitivity and participation in attending health-care programs	0.02	3	0.06
O 3	Graduates' increase in number in medical and paramedical sector of the country	0.02	3	0.06
O 4	Tendency of the prominent specialized and experienced specialists to work in Tehran	0.04	4	0.16
O 5	Development of supplemental insurance and people's reluctance to public hospitals	0.05	3	0.15
O 6	Spread of using the internet in the society	0.03	4	0.12
O 7	To provide conditions to recruit new staff required by treatment centers by an official permission taken from the Ministry of Health	0.03	4	0.12
O 8	Possibility to access advanced clinical and para clinical services in the vicinity of the hospital	0.08	3	0.24
O 9	Availability of modern technologies and equipment in the field of medical and pharmaceutical sciences	0.08	3	0.24
O 10	Financial support of the martyrs' and veterans' foundation from the hospital	0.04	4	0.16
<b>Threats</b>				
T 1	Rival hospitals being equipped with advanced clinical and para clinical services	0.04	2	0.08
T 2	Rival hospitals' extensive advertisement and the equipped sites regarding their activities, new equipment and follow-up of the patients	0.03	2	0.06
T 3	Drop in per capita health and care budget of the country	0.05	1	0.05
T 4	Drop in quality level of education at universities of medical sciences	0.05	1	0.05
T 5	High rate of inflation and low rate of people's income	0.05	2	0.1
T 6	Tendency of physicians and paramedical professionals to work in private hospitals	0.08	1	0.08
T 7	Rival hospitals being located in proper geographical situation	0.03	2	0.06
T 8	Economic, medical and pharmaceuticals equipment sanctions	0.05	1	0.05
T 9	Emigration of experienced and efficient doctors and para medical professionals	0.1	1	0.1
T 10	To have facilities and welfare services (parking lots, seating places for companions, etc.) for relatives of patients in adjacent health-care centers	0.03	2	0.06
<b>Total</b>		1		2.42

Given that the final score in internal factor evaluation matrix (strengths and weaknesses) equals 2.66 which is higher than 2.5, indicates that management is strong with respect to internal factors.

## 9. Providing SWOT Matrix

SWOT matrix is one the important tools, by which managers make a comparison between data pertaining to internal and external factors and can present a variety of possible strategies by using it.

In SWOT method, a 4 in 4 matrix is used to analyze the available factors. Each of the effective factors of system is put in each cell of the matrix which will be analyzed in connection with one another. In each of these cases, strengths and weaknesses, opportunities available for the use of organization and threatening factors (limitations), in internal and external dimensions, are considered as inter-organizational and intra-organizational. Regarding the achieved factors, four categories of strategy are derived from the matrices which are as follows:

- A. SO Strategy: By applying these strategies, the organization seeks to make optimum use of strengths for maximum utilization of the opportunities.

Table 2. Internal Strategic Factor Evaluation Matrix of one of the hospital in Tehran

Item	Strengths	Coefficient	Rate	Score
S 1	To offer free facilities and services to honored families of the martyrs and veterans	0.06	4	0.24
S 2	Contract with all insurance organizations	0.05	3	0.15
S 3	To have experienced and devoted doctors and staff	0.09	4	0.36
S 4	Low treatment tariffs as compared with some neighboring hospitals	0.04	4	0.16
S 5	To consider the Patients' Bill of Rights in most of the hospital management decisions	0.06	3	0.18
S 6	To have special wards	0.05	4	0.2
S 7	Suitability of infectious and non-infectious waste disposal system of the hospital	0.03	3	0.09
S 8	Achieving rank A of evaluation in recent ten years	0.04	4	0.16
S 9	Presence of experienced full-time medical faculty members in the hospital	0.06	4	0.24
S 10	To have appropriate clinical and paraclinical facilities	0.06	3	0.18
<b>Weaknesses</b>				
W 1	Inadequate facilities and lack of staff incentives	0.09	1	0.09
W 2	Difference between various employment categories	0.03	2	0.06
W 3	Weakness in adequate physical infrastructure of the hospital in accord with needs of the day	0.03	2	0.06
W 4	Staff dissatisfaction with payments and salaries	0.05	1	0.05
W 5	Unsuitable facilities for the patients' companions	0.05	1	0.05
W 6	Shortage of human resources and imbalance between the number of patients and the staff	0.06	2	0.12
W 7	Inappropriate system to encourage and motivate the staff	0.05	2	0.1
W 8	Lack of an advanced pharmacy and laboratory for treatment and checking some diseases	0.04	2	0.08
W 9	Inadequate training and in-service re-training for the staff	0.03	1	0.03
W 10	Shortage of new facilities and using worn-out equipment in process of patients' treatment	0.03	2	0.06
<b>Total</b>		1		2.66

- B. ST Strategy: By applying these strategies, the organization attempts to neutralize environmental threats with respect to its strengths.
- C. WO Strategy: By applying these strategies, the organization seeks to reduce the weaknesses and make the most use of environmental opportunities.
- D. WT Strategy: By applying these strategies, the organization attempts to fight weaknesses and threats, e.g. merging, dissolving, etc., as much as possible.

The four strategies mentioned in SWOT are presented in Table 3.



Table 3. SWOT Matrix in the Hospital

<p><b>Internal Factors</b></p>	<p>Strengths (S):</p> <ol style="list-style-type: none"> <li>1. free offered facilities to honored families of the martyrs and veterans</li> <li>2. Contract with insurance organizations</li> <li>3. experienced and devoted doctors and staff</li> <li>4. Low treatment tariffs compared to neighboring hospitals</li> <li>5. Considering the Patients' Bill of Rights in management decisions</li> <li>6. special wards</li> <li>7. Suitability of infectious and non-infectious waste disposal system</li> <li>8. rank A of evaluation in recent ten years</li> <li>9. experienced full-time faculty members</li> <li>10. appropriate clinical and para clinical facilities</li> </ol>	<p>Weaknesses (W):</p> <ol style="list-style-type: none"> <li>1- Inadequate facilities and lack of incentives for staff</li> <li>2- Different employment categories</li> <li>3- inadequate physical infrastructure in accord with needs of the day</li> <li>4- Staff dissatisfaction with payments</li> <li>5- Unsuitable facilities for the patients' companions</li> <li>6- Shortage of human resources and imbalance between the number of patients and the staff</li> <li>7- Inappropriate encouragement system</li> <li>8- Lack of advanced pharmacy and laboratory</li> <li>9- Inadequate staff training and in-service re-training</li> <li>10- Shortage of new facilities and using worn-out equipment</li> </ol>
<p><b>External Factors</b></p> <p><b>Opportunities (O):</b></p> <ol style="list-style-type: none"> <li>1- Sensitivity of officials in the area of health</li> <li>2- educational level sensitivity growth in society and more participation in health-care programs</li> <li>3- increased Graduates in medical and paramedical sectors</li> <li>4- Experienced specialist tendency to work in Tehran</li> <li>5- Development of supplemental insurance and people's reluctance to public hospitals</li> <li>6- Spread of using internet in the society</li> <li>7- providing conditions to recruit new staff by an official permission from the Ministry of Health</li> <li>8-Possibility to access advanced clinical and para clinical services in the vicinity of hospital</li> <li>9-Availability of modern medical and pharmaceutical technologies and equipment</li> <li>10-Financial support of the martyrs's and veterans' foundation</li> </ol>	<p><b>Strategies based on Strengths and Opportunities (SO):</b></p> <ol style="list-style-type: none"> <li>1- Greater focus on clinical and para clinical services, and providing efficient ones</li> <li>2- improving services quality and establishing mobile services to honored families of the martyrs and veterans</li> <li>3- investment in modern equipment and technologies in medical and pharmaceutical sciences</li> <li>4- motivating faculty and non-faculty members to increase the scientific and research activities</li> <li>5- society participation in health-care planning</li> </ol>	<p><b>Strategies based on Weaknesses and Opportunities (WO):</b></p> <ol style="list-style-type: none"> <li>1- special attention to management welfare improve</li> <li>2- emphasis on execution of meritocracy system at all levels</li> <li>3- establishing continuous staff monitoring and evaluation systems</li> <li>4- Cooperative agreement with centers benefiting up-to-date knowledge and technology in medical and pharmaceutical sciences</li> <li>5- fund attraction to reconstruct the building and providing equipment from the Foundation of Martyrs and Veterans</li> <li>6- staff improvement in knowledge and skills by ICT</li> <li>7- hiring required human resources by the authorization of the Ministry of Health</li> <li>8- attracting and retaining more efficient medical professionals</li> </ol>
<p><b>Threats (T):</b></p> <ol style="list-style-type: none"> <li>1- Rival hospitals being equipped with advanced clinical and para clinical services</li> <li>2- Rival hospitals' extensive advertisement and developed web sites regarding their services</li> <li>3- Drop in per capita health and care budget of the country</li> <li>4- Drop in quality level of education at universities of medical sciences</li> <li>5- inflation high rate and people's income low rate</li> </ol>	<p><b>Strategies based on Strengths and Threats (ST):</b></p> <ol style="list-style-type: none"> <li>1- focus on distinguished services compared to the competitors</li> <li>2- establishing a research and development center to communicate with other advanced and equipped centers</li> <li>3- institutionalizing quality management and the services standardizing</li> <li>4- attracting efficient forces and specialists</li> <li>5- empowerment of freshmen and newly-employed staff</li> </ol>	<p><b>Strategies based on Weaknesses and Threats (WT):</b></p> <ol style="list-style-type: none"> <li>1- gradual transferred certain hospital shares to employees based on performance system</li> <li>2- Out sourcing of some services to private entities</li> <li>3- prepar policies of reducing hospital waste resource</li> </ol>

Continued on next page

- 6- Tendency of physicians and paramedical professionals to work in private hospitals
- 7- Rival hospitals located in proper geographical situation
- 8- Economic, medical and pharmaceuticals equipment sanctions
- 9- Emigration of experienced doctors, paramedical and professionals to abroad
- 10- facilities and welfare services (parking lots, seating places for companions, etc.)

With respect to four categories of strategies located in SWOT matrices and considering the scores of internal and external evaluation matrices in accord with Figure 2, we can specify the area where one of the hospital in Tehran is located in internal and external (IE) evaluation matrices; then we will choose a category of strategies for the evaluation of selection in quantitative strategic programming matrix which are related to the specified area in the four categories of internal and external matrices. The setting of one of the hospital in Tehran in internal and external matrices is located in competitive strategic area.

Total number of internal factor evaluation (IEF) matrix

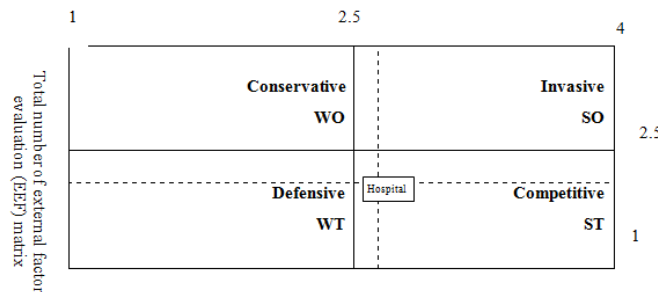


Figure 2. Internal and external matrices of the Hospital.

According to the results of internal and external matrices indicating one of the hospital in Tehran should apply competitive strategies in the scope of designing strategies in order to identify and design the strategies of this area (ST) to determine the attraction and prioritization of these strategies, quantitative strategic programming matrix was used. In order to determine the attraction score, the second questionnaire was handed out to the 16 members of the population, then the average of attraction scores was calculated and the selected strategies were prioritized according to the results achieved by QSPM matrix, which are presented in table 4.

Table 4. Prioritized strategies according to QSPM matrix

Prioritization	Strategy	Score
1	To attract specialists and efficient forces	5.56
2	To develop and institutionalize quality management and to standardize the hospital services	5.31
3	To focus on differentiated services compared to the competitors	5.19
4	To establish R& D center to communicate with other advanced and equipped centers to respond rapidly	4.82
5	To promote the empowerment of newly-hired staff	2.96

## 10. Discussion and Conclusion

The participants in this research at one of the hospitals in Tehran have considered five strategies necessary to improve patient satisfaction, which include: making an effort to attract specialists and efficient forces; developing and institutionalizing quality management and standardizing the hospital services; focusing on differentiated services as compared with the competitors; establishing a research and development center to communicate with other advanced and equipped centers to be able to respond to rapid changes of technology; and promoting the empowerment of newly-hired staff respectively based on priority.

Research findings on the strategies of attempting to attract specialists and efficient forces indicated the key strategy to improve patient satisfaction. Nowadays, the value of human resources and creative thoughtful people is no secret to anyone; all these progress and developments which have resulted in the nation's economic development and prosperity, all and all are indebted to valuable resources and efficient human resources. Managers in modern organizations try to make the most use of efficient, up-to-date and skilled human resources; meanwhile, they are aware that human resources, as the major factor of human resource development, offer their time, energy and power to the organization only when they feel good about management, organization, and the future of their career, consider the manager as their supporter, and be sure of their career safety; besides, to motivate specialists and treatment efficient staff is one of the leading problems; hence, managers and the head of the hospital should give due consideration to this strategy considering the number of private hospitals across the metropolitans and providing suitable facilities for these human resources. Wong and Beglaryan (Wong et.al. 2008) also, consider applying human resource management strategy as the most important one to improve patient safety in clinical level which is close connection with patient satisfaction. The World Health Organization also emphasizes on using human resource management strategy in its regional report (Organization Regional Office for the Eastern Mediterranean, 2001) in order to avoid medical errors and improve patient safety and, consequently, increase patient satisfaction. Nasiri Pour et al. have also reported the human resource management strategy to be the most important one (Nasiri Pour et.al. 2010) Amini et al, too, have talked about the strategy of attempting to attract specialists as one of the strategies necessary to improve quality and efficiency (Amini et.al. 2010).

The findings of the present study pertaining to development strategy and institutionalization of quality management and standardization of hospital services suggested that implementing this strategy after using attraction strategy to apply specialists and efficient forces, has a substantial share in improving patient satisfaction. The findings of present study are in line with the findings of researches of Nasiri Pour and Jadidi (NasiriPouret.al. 2008) who believe standardization is focused on providing patient safety and improving patient care.

In the studied hospital, findings pertaining to strategy of focusing on differentiated services as compared with the competitors indicated that, in this hospital, improving the process of focusing on differentiated services as compared with the competitors is of high necessity. Focusing and relying on higher services than the competitors is the organization's growth level and development. To rely upon these services leads the hospital to reinforce its economical, to raise its major status amongst the competitors and to increase its credibility in society. The findings of present study are in line with the findings of Nasiri Pour (Nasiri Pour,2010).

Regarding the findings of this research pertaining to strategy of establishing a research and development center to communicate with other advanced and equipped

centers to be able to respond to rapid changes of technology to improve patient satisfaction, it can be pointed out that the growing trend of technology, increasing competition and also different needs of customers have made the companies to establish some units working in the field of innovation and offering new and innovative ideas (Mousavi et al. 2003). Hospital's senior managers should realize to monitor and improve the priorities in framework of supporting the technology which should be provided considering the hospital resources in order to improve the quality. Pexton (Pexton, 2004) recommended applying this strategy too.

Health-care providers are the major sources of connection between patients, their families and visitors. That is why it is necessary for one to have been trained at the onset of their employment and also during their profession, so that they can perform efficiently in resuscitative care measures. Wong and Beglaryan (Wong, 2004) also emphasized on applying the strategy of continuous training and explanations given to the service provider upon their employment.

one of the hospital in Tehran can improve the quality of clinical services by applying strategies of patient satisfaction, particularly in the area of human resource management and taking such preventive measures as holding initial and periodic competency tests and empowering service providers.

There is no restriction to generalize the results to other hospitals in the country; however, as long as not the systematic condition of all hospital is similar to the studied hospital, it is possible that the type of applied strategies change in other hospitals. Therefore, great care should be taken in generalizing the findings to other hospitals.

Given the above instances and the necessity of improving patient satisfaction, following suggestions are offered:

- (1) To provide conditions necessary for professional development for all people;
- (2) To offer adequate authority to the staff, so that they would take more responsibility in performing their tasks;
- (3) To encourage the staff to participate in making decisions and designing the objectives and plans;
- (4) To enhance the quality of professional life;
- (5) To attend accreditation and quality management courses by managers;
- (6) To educate operational staff of the organization on quality and standards;
- (7) To assay or benchmark with other successful units in R&D;
- (8) To educate managers and experts of the hospital in the field of R&D;
- (9) To try to hire specialists and able persons; oral and written tests are necessary for the selection.
- (10) To attend training courses at the onset of employment.

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### References

- [1] Amini, M. T., Samavatian, A. To Design Strategies by SWAT Method, Case Study of Fara Peyvand Co, *Journal of Management Development Process*. **7** 4 (2010) 62-89.
- [2] Amini, M. T., et al. To Design and Develop strategies for North Drilling Co. *Scientific-research journal of management and human resources in oil industry*. **12** (2010) 113-128.

- [3] David, F. R. Strategic Management. Trans. Dr. Ali Parsaeian and Dr. Sayed Mohammad A'rabi. Tehran: Office of Cultural Researches, (1999).
- [4] Dikici R. General recurrences in finite p-groups. *Applied Mathematics and Computation*, **158**, 2004, 445-458.
- [5] Goldstein M. S., The Development of an Instrument to Measure Satisfaction with Physical Therapy. *Journal of Physical Therapy*. **80** (2000) 853-863.
- [6] Karimi E., Kh. N., Ataei M, Hadizadeh F. An Introduction to Clinical Governance and Clinical Excellence. Esfahan: University of Medical Publication Science, (2007).
- [7] Kavousi, S. M. R., Saqaei, A. Methods of measuring Customer Satisfaction. Sabzan, (2005).
- [8] Mosaddeq Rad, A. M. Textbook of Organization and Expert Management of Hospital. Dibagaran Tehran, (2003).
- [9] Mousavi, S., Abrishami, S. M. To Establish an R&D Center in the Field of Quality Management Systems, Case Study of AzinKhodro Co. The forth seminar of R&D centers and industrial and mining development. (2003).
- [10] Nasiri Pour A. A., Jadidi R. Model of Medical Equipment Management for Iranian Hospitals. *Journal of Arak University of Medical Sciences*. **11** (2008) 97-108.
- [11] Nasiri Pour, A. A., et al. To Design and Develop Strategies and Preventative Measures against Occurrence of Medical Errors in Public Hospitals in Tehran. *Journal of Health Management*. **44** (2010) 21-32.
- [12] Pexton, C. Strategies for Improving Patient Safety in the Hospital. *iSixSigma*. (2004) (<[www.isixsigma.com](http://www.isixsigma.com)>).
- [13] Rashidi, A. Analytical Approach to Strategic Planning, Assessing External Environment, *Method*. **59** (1999).
- [14] Senge, P. M. The Fifth Command. Trans. Hafez Kamal Hedayat and Mohammad Roshan. Tehran: Industrial Management.
- [15] Wong, J., Beglaryan H. Strategies for Hospitals to Improve Patient Safety: A Review of the Research. The Change Foundation. (2004) (<[www.changefoundation.com](http://www.changefoundation.com)>).
- [16] World Health Organization Regional Office for the Eastern Mediterranean. Report on the inter country consultation for developing a regional strategy for patient safety. Kuwait City. (2001) 27-30.