The Impact of Total Quality Management on Patient Satisfaction: A Field Study in the Health Centers of the Syrians in Gaziantep

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Abstract

Total Quality Management (TQM) is a major concern in business organizations and especially in the healthcare sector. The TQM philosophy focuses on the customer and focuses on how can the organization meets the customer's needs and wants, as well as the need to integrate activities within the organization. TQM focuses on continuous improvement of all aspects of the organization and on highlighting the excellence of all employees in the organization, with all management principles to manage jobs with few errors and low costs from start to finish. The aim of this research in the health sector is about patient's satisfaction in the health sector represented by these TQM' indicators (top management commitment, benchmarking, customer satisfaction, employee's satisfaction, continuous improvement). This included the impact of total quality management factors on patients' satisfaction.

Keywords: Health Sector, Customer Satisfaction, Continuous Improvement, Total Quality Management, Patient Satisfaction.

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Introduction:

The purpose of total quality management is to satisfy the customer by determining the needs of the customer and providing a complete product or service according to this need, and also to make continuous efforts to improve the quality. Based on this, the most important feature of TQM is to provide quality products and services by sharing with all employees. TQM's success depends on its adoption by all employees and its determination from top-level employees to the lowest level (Zeyrekli Yaş, 2009: 8-9).

Quality, in a way, explains the welfare level of the society. Quality is also called as purification from errors by minimizing errors. Quality represents excellence. Quality, which plays a key role in competition, has a privileged importance due to the intense labor / labor force in service businesses, the importance of the human element as the main factor, and the possibility of change in mountain service performance at any time. The competitiveness of service companies is a product of efforts to excellence in our globalizing world. Quality studies are of great importance in terms of determining the targets to be based on and bringing concreteness to the studies (Seyran, 2004).

1. Total Quality Management Concept and Scope:

When we examine the Total Quality Management separately as a word, the meaning of the words emerges as follows (Özgör, 2008: 14).

- **1.1. Total:** Indicates that this management style covers all activities and people within the business. The expression that best emphasizes the term "total" is "the employees satisfaction". Another expression that is meant by the word "total" is to create the concept of quality collectively in the enterprise.
- **1.2. Quality:** In words, in dictionaries, it is associated with the property of something good or bad. It can be defined as being superior or complete in any way. The classic definition of the word quality is "compliance with standards". Nowadays, quality; It is stated as "compliance with what customers want".
- **1.3. Management:** It is accepted by everyone that quality should be managed today. It is accepted that it is a fact that concerns and affects all employees in the business and should be applied to the whole business. Quality should be constantly examined, as it has the ability to respond to needs. It is the management that will ensure this development. Management's contribution in this process is possible not only by managing or ordering, but also by training employees.

2. Principles of Total Quality Management:

In order for the Total Quality Management to be applied successfully and to achieve its goals, the basic principles that it relies on must be learned and adopted well by all employees. Thinking and addressing these principles separately; Failure of institutions to apply some of these principles and ignore others results in failure of the institution. For this reason, all principles should be considered, adopted, addressed and applied as a whole.

2.1. Top Management Commitment:

The success of Total Quality Management is possible with the top management commitment. The more determined the upper management, the leadership in this matter will motivate the employees positively. The leader is the person who has the ability to influence, mobilize and guide the employees towards the determined goals. The manager is the person who strives to achieve the specified goals, plans the works, ensures the implementation and supervises. They have a responsibility based on reward and punishment (Eroğlu, 2003: 127).

Deming stated that the person who plays the most important role in ensuring quality and developing the method is the leader. The purpose of the leaders is to try to maximize the performance of the employees (Genç, 2006: 45).

2.2. Benchmarking:

CAMP is the first author of the benchmarking. The benchmarking method was used by industrial companies (Zirox) in the late 1970s to develop their products, in the early 1980s, this method was used by service markets to measure with their best departments. After the internal benchmarking process, service organizations compared external to determine the level of external performance and gain leadership in the markets. Fong et al. Found that the benchmarking benchmarking was the meeting of three concepts (Fong et al.,

2001, 308-318)

- **2.2.1. Benchmarking:** It is the method of measuring the strategies and performance of the organization that works with the best organizations in the industry, both inside and outside the sector, which is the first step to achieve the desired developments.
- **2.2.2. Benchlearning:** Identify and adopt best practices through benchmarking efforts to improve performance and is the second step to improvement.
- **2.2.3. Benchaction:** Is the actual implementation of the process to achieve the desired level of improvement.

2.3. Customer Satisfaction:

The main goal in Total Quality Management is to keep customer satisfaction at the highest level and to meet the needs of customers. The concept of customer orientation is to provide services in line with the demands of customers. Before the product or service reaches the customer, all conditions should be reviewed and possible errors should be avoided. In today's increasingly competitive environment, the aim of all businesses is to work in a customer-oriented manner and to carry out various studies to attract customers to themselves. For this reason, awareness of gaining the customer arises and it is aimed to present the product or service in the best way (Yurtman, 2010: 20).

2.4. Employees Satisfaction:

The efforts of top management in Total Quality Management are essential but not sufficient for success. Management should ensure transparency to help all employees adopt a total quality approach. Ensuring the full participation of employees is very important in terms of using the creativity and priority of the person on certain issues. Employees who have the opportunity to discuss their thoughts and ideas in a healthy communication environment and participate in decisions will be able to add quality to the quality of the work done using their creativity (**Günbatan, 2006: 37**).

The most effective way to ensure employee participation is empowerment. Authorization is one of the cornerstones of the quality culture. The level of authority is very important in increasing the sense of responsibility and ownership of the business and developing the sense of trust of the employees in management. As this level increases, the level of satisfaction increases. This increased level of satisfaction increases customer satisfaction, which is the biggest goal of quality (**Pakdil**, **2004: 174**).

2.5. Continuous Improvment:

Kaizen is the core philosophy of the Japanese administration and is a continuous improvement approach that covers all aspects of the business. In this framework, Kaizen is also one of the main pillars of Total Quality Management (**Günbatan, 2006: 36**).

In order for the continuous development principle of Total Quality Management to be applied successfully, the level of development at all levels of the business must be well established. In Total Quality Management, which is a form of management that targets continuous development, plans and targets for development should be determined, areas that require improvement by identifying the existing and potential problems of the enterprise should be identified, practices for development should be evaluated, and the basis for encouragement and rewarding methods that support the development should be established (Özgör, 2008 53).

Kaizen is also a problem solving method. Problems must be solved once they are identified. Kaizen's approach to problems is "welcome problems". In addition, the fact that accusing people does not solve the problems should be taken into account (Özgör, 2008: 47). Today, the PUKO cycle found by Shewart and later developed by Deming is used in continuous development applications. This cycle consists of Plan - Apply - Check - Take Precaution phases for improvement (İnce, 2007: 66).

3. Patient Satisfaction Concept And Scope:

Patient satisfaction is an important part of quality service. Determining the satisfaction levels of the patients is important in terms of increasing the service quality and providing more qualified service in line with the expectations of the patients (Söylemez, 2009: 110). Another important issue affecting the evaluations of the patients in the hospital services is the nutrition service (Kardeş, 1995: 242), and it has been found that the patients affect the general satisfaction of the nutrition services and are generally not satisfied with this service. The physical and environmental characteristics of health institutions are an important factor affecting patient satisfaction. Physical and environmental conditions, lighting, heat, cleaning, ventilation, noise, easy location, parking, waiting rooms, exterior appearance etc. It includes features (Kavuncubaşı, 2000: 301).

Many different quality definitions have been made in the service sector. The common feature of all these definitions is that it is based on consumer satisfaction. The goal is to provide the highest customer satisfaction with the highest efficiency (Tarım, 2009). Customer satisfaction, which is one of the main outcomes of health institutions, can generally be defined as "meeting the demands and expectations of customers or providing services above these requests and expectations" (Çerekçi, 1998). The last factor affecting patient satisfaction is the price of the service provided (Kavuncubaşı, 2000: 301-302).

Customer Satisfaction = F (Expectation, Perception).

3.1. Perception

Perception emerges as a result of customers' personal evaluation of the service they receive. Perceived service quality is the general evaluation of the service quality by customers (Ulusoy, 2002). According to Odabaşı (2003), service quality focuses on service elements. As a result, it can easily be claimed that the perceived service quality is a dimension of customer satisfaction. It says that patient satisfaction is a function of perceived quality and expected quality (**Tukel, 2004: 206**).

3.2. Expectation

Expectations can be defined as the wishes or needs of customers, which must be presented to customers by the service provider. Expectations are the possibilities that are defined by the customers, whether the events in the service purchase will be positive or negative. Expectations are important because quality is judgments against some standards. When customers evaluate the quality of a service, they judge according to some internal standards they have set. These internal standards used by customers in quality assessment are defined as expectations in the literature (**Tanriverdi and Erdem, 2010: 81-82**).

4. Research

The aim of the research is to examine the effect between total quality management (top management commitment, benchmarking, customer satisfaction, employees satisfaction, continuous improvement) and patient satisfaction. This research, "What effect does a customer have in the health

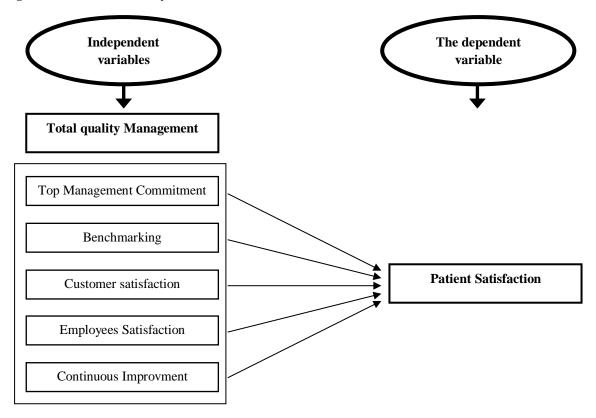
centers in Gaziantep between total quality management and patient satisfaction?" focuses on the question. A series of hypotheses are tested to answer this question. The questions of the research are:

- Q1: What effect does top management have between top management commitment and patient satisfaction?
- Q2: What effect does it have between benchmarking and patient satisfaction?
- Q3: What effect does it have between customer satisfaction and patient satisfaction?
- Q4: What effect does it have between the employees satisfaction and patient satisfaction?
- Q5: What effect does it have between continuous improvement and patient satisfaction?

5. Model Of The Research

The research investigates the effect between total quality management (leadership of top management, benchmarking, customer Satisfaction, employees satisfaction, continuous improvement) and patient satisfaction. The model in Figure 1 is recommended.

Figure 1. Model of the Study



6. Hypotheses

It has been tested on data collected by Syrian citizens who benefit from the health centers in Gaziantep, and it was applied face to face and using the electronic survey method to patients who were examined and waiting to be in the 8 health centers from August 5 to August 20, 2019. The hypotheses are:

- H1: There is a statistically significant effect between top management commitment and patient satisfaction.
- H2: It has a statistically significant effect between benchmarking and patient satisfaction.
- H3: It has a statistically significant effect between customer satisfaction and patient satisfaction.
- H4: It has a statistically significant effect between employees satisfaction and patient satisfaction.

H5: It has a statistically significant effect between continuous improvement and patient satisfaction.

Result

7. Reliability Analysis

A total of 88 questionnaires were applied for the research. The surveys are distributed to Syrian citizens who benefit from health centers. The research data are shown in the tables below.

Table 1. Gaziantep Immigrants Centers

Name of the health centers (Migrants Centers)	Female	Male	Total	%
Burak Immigrants Center	4	4	8	9.09%
Textil City Immigrants Center	2	4	6	6.82%
Bulbulzadeh Immigrants Center	4	0	4	4.55%
Gazi City Immigrants Center	4	0	4	%4.55
Kaya Uno Immigrants Center	14	4	18	%20.45
Solar Immigrants Center	2	2	4	%4.55
Ertuğrul Gazi Immigrants Center	8	0	8	%9.09
Kolejtepe Immigrants Center	29	7	36	%40.90
Total	67	21	88	%100

Table 2. Gender

Female	67	%76.14%
Male	21	%23.86%
Total	88	%100%

Table 3. Age

<=20 age	4	%4.55
20 - 30	38	%43.18
31 – 40	26	%29.55
41 – 50	18	%20.45
51 – 60	2	%2.27
>60	0	%0
Total	88	%100

In order to evaluate the service quality of the health centers (migrants centers) in Gaziantep by the patients, the figure 2 below can show.

35
30
25
20
16
15
10
Not satisfying at all Less satisfying Partially satisfying Satisfying Very satisfying

Figure 2. Evaluation of the Health Centers (Immigrants Centers)

As a result of the analysis conducted by applying the mentioned methods, the total reliability of the 18 questions obtained through the new variables created based on the differences was found to be 0.906 (Cronbach's Alpha). For all variables (Cronbach's Alpha), it is shown in Table 4.

Tüm Değişkenler		(Cronbach's Alpha)
Independent variables	Top management commitment	0.740
	Benchmarking	0.625
	Customer satisfaction	0.684
	Employees satisfaction	0.903
	Continuous Improvment	0.791
	Total quality Management	0.878
The dependent variable	Patient Satisfaction	0.780
Total		0.906

To test the hypotheses, the regression coefficient between the independent variables (total quality management) and the dependent variable (patient satisfaction) has been calculated, test the validity of the model using the F test, then make sure the moral effect of these independent variables on the dependent variables using the T test, and finally, regression model equation has been put.

Table 5. Regression Relationships Between Independent Variables and Dependent Variables

Variables	Regression	T – Testi		F – Testi	F – Testi	
	Coefficient	Value	Significant	Value	Significant	
Constant. B	1.309	8.514	0.000		0.000	0.783
Top management commitment	0.174	1.926	0.044			
Benchmarking	0.33	0.552	0.583	25.947		
Customer satisfaction	0.245	2.987	0.004	23.947		
Employees satisfaction	0.056	1.800	0.076			
Continuous Improvment	0.116	1.584	0.117			

In the table above, clearly shows us these:

1.The F value (25.947) is moral because its meaningful level (0.000) is less (0.05). The benefit of this argument means to guess the dependent variable.

- 2. The correlation coefficient (0.783) means that total quality management and patient satisfaction are positive and strong.
- 3. Total quality management has two dimensions in direct proportion affecting patient satisfaction (top management commitment, customer satisfaction) but (benchmarking, employees satisfaction, continuous improvement) does not affect patient satisfaction.
- 4. The following equation shows the regression relationship between independent variables and dependent variable:

Patient Satisfaction = 1.309 + 0.174 (Top management commitment) + 0.245 (Customer Satisfaction)

8. Findings

As a result of the factor analysis applied for patient satisfaction, a factor emerged. As a result of the hypotheses tested to examine the effect of Syrian citizens benefiting from the health centers in Gaziantep between total quality management and patient satisfaction, according to the patients:

- 8.1. As patient satisfaction increases in the dimensions of total quality management (top management commitment, customer satisfaction), the level of satisfaction increases (H1, H3).
- 8.2. Total quality management (benchmarking, employees satisfaction, continuous improvement) does not have a direct effect between the size and patient satisfaction (H2, H4, H5). The result of the research is shown in Figure 2.

Total Quality Management

Top Management Commitment

Benchmarking

Customer Satisfaction

Employees Satisfaction

Continuous Improvment

Patient Satisfaction

Effect

Not Effect

Not Effect

- **9.1.** Syrian citizens benefiting from the health centers in Gaziantep are the need to carry out periodic surveys to determine the level of implementation of the total quality management dimensions and to avoid the default, if any, the result evaluation process will be followed to increase the satisfaction of the patients.
- **9.2.** Syrian citizens benefiting from the health centers in Gaziantep are the need to apply the total quality management dimensions, which is one of the most important competitive issues in the field of health center work with the decisions made by applying the total quality management dimensions.

9.3. Deriving training programs to improve health total quality management provided by service providers helps them understand and assist patients as they are in direct contact with the patient; This increases patient satisfaction and thus reaches the hospital's goals.

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