

# **IS THE ORGANIZATIONAL LEADERSHIP COMMITTMENT PRINCIPLE THE MOST SIGNIFICANT TQM PRINCIPLE ON HOSPITAL EFFECTIVENESS?**

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## **Abstract**

Total Quality management (TQM) has many principles, and the objective of this study was to determine highest TQM principle which has the greater impact on overall hospital effectiveness as perceived by healthcare professionals working in accredited governmental hospitals in Jordan.

A study survey instrument, designed to measure the impact of applying TQM principles on overall hospital effectiveness, then to find out the greater TQM principle which influence more the overall hospital effectiveness, Study questionnaire was administered to the healthcare professionals in the five governmental accredited hospitals in Jordan, The data collection where 1290 questionnaires. The response rate was 83.6% of the total questionnaires distributed. TQM principles were: Leadership commitment to quality, Customer focus, Continuous improvement, Teamwork, Employee involvement, and education and training.

Multiple regression analysis using Beta Coefficient conducted, the result shows that the greater TQM principle which affects the overall hospital effectiveness organization leadership commitment to quality and the least was education and training.

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**Keywords:** Total quality management, organization leadership commitment to quality, Accreditation, Jordan

## Introduction

No exact definition has been agreed upon concerning the concepts of quality, quality management, and total quality management (TQM), and usually they are debated (Rijnders and Boer, 2004; Sila and Ebrahimpour, 2003). Other researchers also argued that no universal agreement on the exact constructs, or elements, of a total quality management program (Anderson, Rungtusanatham, and Schroeder, 1994; Grandzol and Gershon, 1998; Prajogo and Brown, 2004).

Several studies across the literature have put emphasis that TQM involves several domains including top management commitment, process orientation, customer focus, supplier relationships, employee engagement, metrics, and the use of problem solving methods (Dale et al., 2001; Mani, Murugan, and Rajendran, 2003; Martinez-Lorente et al., 2000; Yong and Wilkinson, 1999).

Various studies discussed that each construct of quality is important to satisfy overall quality management achievement (Anderson Fornell and Lehmann, 1994; Anderson, Rungtusanatham, and Schroeder, 1994; Douglas and Fredendall, 2004; Grandzol and Gershon, 1998; Rust, Zahorik, and Keiningham, 1995; Tersine and Hummingbird, 1995).

The present study focused on the following domains of TQM: leadership/top management commitment, customer focus, teamwork, continuous improvement, employee involvement, and education and training (Salaheldin, 2009; Arumugam and Mojtahedzadeh, 2011; Malik and Khan, 2011; Zehir et al., 2012).

According to the study of Deborah (2010), health Care managers impact hospital performance to create stability within the organizational structure, to develop, implement, and sustain an environment of growth and competitive advantage. Moreover Shipton et al (2008), stated that "Organizational leaders shape effective quality performance outcomes by determining a vision and developing a commitment by health care individuals and teams which influences positive performance on quality activities set by the health care organization".

There is a common agreement that a successful TQM implementation is leading to improve organization performance success (Hendricks and Singhal, 2001; Hansson and Eriksson, 2002; Brah et al., 2002; and Kaynak, 2003). The success implementation of TQM in manufacturing has encouraged health care leaders to study whether it can be implemented in the healthcare sector. The TQM activities lead to high quality health care services, for example it leads to improve patient satisfaction, and increased productivity and profitability, improved health care organization performance (Alexander et al., 2006).

## **Study objective**

The objective of the present study was to determine highest TQM principle which has the greater impact on overall hospital effectiveness as perceived by healthcare professionals working in accredited governmental hospitals in Jordan.

## **Methods and subjects**

### **Study design and setting**

A cross sectional study design was selected to collect data from participants.

### **Study Population and Sample**

The study population represented all health care professionals working in the five HCAC accredited governmental hospitals who were working for more than three years in the same hospital. Study sample included 1079 employees.

### **Study Instrument**

A structured questionnaire was used to collect data from participants.

TQM principles were assigned as:

TQMA: Organizational commitment to quality.

TQMB: Customer focus organization.

TQMC: Employee involvement.

TQMD: Teamwork.

TQME: Continuous improvement.

TQMF: Education and training.

### **Data Analysis**

The impact of TQM on hospital effectiveness was tested using stepwise multiple regression analysis.

## **Study results**

### **Multiple regression analysis for TQM principles on overall hospital effectiveness**

As shown in table 1, the results of multiple regression analysis showed that all TQM principles had impacts on overall hospital effectiveness ( $p = 0.000$ ).

Table 1: Multiple regression analysis for TQM principles on overall hospital effectiveness

Independent Variable	B	Beta	t-value	p-value	VIF
TQMA	0.211	0.214	6.643	0.000	3.408
TQMB	0.178	0.192	6.633	0.000	2.735
TQMC	0.152	0.191	6.875	0.000	2.530
TQMD	0.109	0.116	4.128	0.000	2.562
TQME	0.101	0.109	3.951	0.000	2.490
TQMF	0.125	0.144	5.608	0.000	2.147

### The relative importance of TQM principles on overall hospital effectiveness

Using stepwise multiple regression analysis, Beta coefficient was computed to identify the relative importance of TQM principles on overall hospital effectiveness. The results showed that the highest value for beta coefficient was 0.214 for TQMA, followed by TQMB (Beta 0.192), TQMC (Beta 0.191), TQMF (Beta 0.144), TQMD (Beta 0.116), and the lowest value of Beta coefficient was 0.109 for TQME.

Table 2: The relative importance of TQM principles on overall hospital effectiveness

Independent Variable	Beta
TQMA	0.214
TQMB	0.192
TQMC	0.191
TQMF	0.144
TQMD	0.116
TQME	0.109

### Discussion

Although application of TQM principles is a crucial step to achieve overall organizational effectiveness, we were interested through the present study to identify which of TQM principles has the greatest impact on overall hospital effectiveness and which one may represent the principle to be intervened.

The present study included 5 governmental hospitals which were accredited by health care accreditation council (HCAC).

The results of the present study indicated that all principles of TQM had positive impact on overall hospital effectiveness as perceived by health care professionals who worked in the hospital for more than 3 years and witnessed the period before and after applying TQM principles represented by achieving accreditation as a tool for quality improvement in health care settings.

The findings of the present study are in consistent with other studies in which each construct of quality is important to satisfy overall quality management achievement (Anderson Fornell and Lehmann, 1994; Anderson,

Rungtusantham, and Schroeder, 1994; Douglas and Fredendall, 2004; Grandzol and Gershon, 1998; Rust, Zahorik, and Keiningham, 1995; Tersine and Hummingbird, 1995).

Our findings showed that TQMA was the most important principle to impact the overall hospital effectiveness. TQMA represents the organizational leadership commitment to quality. This finding confirmed the findings of several studies in the field of TQM. In a study by Deborah (2010), health Care managers were shown to impact hospital performance in creating stability within the organizational structure, to develop, implement, and sustain an environment of growth and competitive advantage. Furthermore, Shipton et al (2008), stated that "Organizational leaders shape effective quality performance outcomes by determining a vision and developing a commitment by health care individuals and teams which influences positive performance on quality activities set by the health care organization".

Our results also agree with other studies including the study of Ovretveit (2004) who put stress on the consideration that the leadership is a key factor in achieving quality improvement. In the existing healthcare environment, leadership possess the ability to offer the support to transcend quality activities into the highest level of standard performance, furthermore he argued that healthcare leaders have a responsibility to the public to initiate, and support healthcare policies to offer high quality services (Ovretveit and Al Serouri, 2006).

The lowest value for Beta coefficient was observed for the TQME, which presents continuous improvement. This finding identified the principle of TQM that need to receive the attention to achieve better overall hospital effectiveness.

## **Conclusion**

The findings of the present study showed all TQM principles were significant to achieve overall hospital effectiveness, and organizational leadership commitment was the most significant TQM principle in achieving overall hospital effectiveness, whereas continuous improvement was the less significant as perceived by health care professionals and need to receive more attention in order to optimize the overall hospital effectiveness in the context of governmental health care system in Jordan.

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