



## TOTAL QUALITY MANAGEMENT PRACTICES IN HEALTH CARE ORGANIZATIONS: PERCEPTION OF HEALTH CARE PROVIDERS

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### Abstract:

Turkey has experienced a substantial development in Total Quality Management (TQM), measurement, and monitoring of hospitals. Ministry of Health has developed the Quality Standards in Healthcare (QSH) in order to adapt to international quality standards of health care to the health care services as a result of long research and experience. This study aimed to determine the effects of QSH applied in a public hospital on the quality performance of the organization. The researchers used a performance measurement model to measure the impact of the recently developed QSH on the quality performance and organizational excellence of a 320-bed public hospital in a developing country. Successful applying of TQM in hospitals requires the involvement and commitment of all health care providers. The study was carried out in an attempt to explore the attitude of health care providers applying TQM practices on hospital performance in a general public hospital. We collected data from 302 healthcare providers. We used a structured questionnaire to collect data. The study was based on total quality management theory and Kanji's Business Excellence (KBEM) model. The study used a 10-point Likert-type scale. The Structural Equation Model (SEM) was used to test whether the data obtained from the participants supported the model. The variable mean scores and path coefficients were calculated. The data were collected in five different periods between July 2017 and January 2019. The results of the study showed that the average attitudes of nurses, physicians, and administrative staff about the factors of hospital quality performance differed from the attitudes of technical staff. The study results reflected some strong areas, notably leadership, customer/patient satisfaction, quality management process, measurement, and organizational excellence. The results indicated that the hospital organization was mainly based on institutional excellence, quality improvement and patient safety, leadership and management performance, patient

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satisfaction and institutional learning, corporate ethical performance. The results also identified opportunities for improvement in QSH standards for human resource management and the absence of standards that address existing issues in organizations with organizational structures.

**Keywords:** health care providers' attitude, health care quality measurement, TQM

## 1. Introduction

Total quality management has been an imperative subject in health organizations in recent years. International regulations and guidelines made by governments, customer expectations, and initiatives of health organizations have increased the interest in total quality practices. Some concerns about quality, accountability and the need for health improvement have increased the interest of many countries in quality management programs, as a result; health organizations have started to implement total quality programs.

Total quality management (TQM) in health care organizations is to reorganize workflows of achieving the optimal health service quality, patient satisfaction, employee satisfaction, and overall performance results. Moreover, TQM provides organizations with a framework for success through delight the customer. And also, it aims to improve the organization's effectiveness, efficiency, flexibility, and competitiveness as a whole. What is more, TQM acting with an integrated management philosophy in health care organizations is gaining continuous improvement in inpatient treatment and care processes and reaching high quality and standards exceeding customer expectations. Providing organizational excellence as an integrated system in health organizations is directly related to the satisfaction of internal and external customers. It is possible to make sure the satisfaction of the patients and their relatives and the business satisfaction of the healthcare providers at optimum levels and to achieve organizational excellence, by constantly measuring organizational performance and evaluating the quality of health care services (Braithwaite et al., 2011; Ovretveit, 2002).

Performance measurement is a resource for future initiatives to assess an organization's progress in moving towards predetermined goals, to help identify the strengths and weaknesses of the organization, and to improve organizational performance. Organizational performance measurement is not a culmination in itself; is a tool for more effective management (Purbey et al., 2007). However, performance measurement has traditionally focused on financial metrics such as sales turnover, profit, debt, and return on investment. Traditional financial assessments are not in line with the competencies and skills required to face today's business environment. Today, the complexity of managing an organization requires that managers use "integrated management", which means they can view performance in many areas. Instead of analyzing the organization's performance from a historical perspective, it is necessary to

understand the quality initiatives that could potentially lead the organization to success through “*organizational excellence*” (Zink, 2008: 21-36).

Studies on the development and analysis of different performance and quality criteria in health services are carried out intensely. However, few publications have been published to knowing how healthcare providers perceive and evaluate routine practices and healthcare quality in healthcare organizations. Research conducted by Farr and Cressey is about how healthcare staff understands and evaluate their performance daily. In the research, the values, motivations, and behaviors of the personnel regarding the health performance of the personnel on how they perceive that they have done a good business were investigated. The findings showed that the quality and performance perceptions of the personnel providing healthcare services are based on different logic according to current performance and quality concepts. The study advocates that management models should also take into account the relational and experiential aspects of care quality to support the prioritization of patients' needs (Farr & Cressey, 2015).

Taking into account the attitudes of healthcare providers, the effectiveness of the quality initiative is of prime importance in evaluating organizational performance. Appleby and Jackson (2000) held interviews with professional healthcare professionals in the UK, demonstrating a relationship between quality management and staff motivation. Laschinger et al. (1999) collected data from nurses to determine the effects of leadership style on employees. The research tried to bring new changes to the working environment and to understand the effects of those changes on healthcare personnel.

The study of Valenstein et al. (2004), emphasized that the deliberate evaluation of the views of the healthcare providers is important in terms of providing successful quality monitoring programs. These evaluations could not be limited to a portion of healthcare providers, such as hospital managers or quality managers.

Business satisfaction measurements have been widely used in health services to achieve better health results and to improve health service quality. It is a basic concept of organizational behavior and employees' attitudes that are evaluated to assess organizational performance. These evaluations help healthcare staff (physicians, nurses, medical technicians, etc.) the level of business satisfaction, quality and results of health services, and very useful results (Meng et al., 2018). It shows that in hospitals that provide more support for managers, nurses, and physicians to improve themselves as well as using more resources for quality improvement projects, the organizational bond is stronger and can have significant results in terms of clinical performance, as well as specific quality improvement interventions, applied. It reveals that the role of physicians in organizational quality improvement studies has great contributions in improving patient safety and care quality (Patel, 2006: 45-46).

It is recognized that stakeholders in the health organization, especially professional healthcare professionals, have the potential to increase the organization's quality improvement activities performance, quality of care, safety standards, and consumer satisfaction. However, evaluation from the perspective of healthcare providers alone can also create bias Counte, Meurer (2001), and Hassan (2006) agreed that health

concepts could be understood in different ways, by warning against potential bias in assessments of healthcare providers. *"Considering that quality is the responsibility of the senior manager, the possibility arises that the responses may be affected by the pressure of stakeholders that emphasize quality care of the organizations."* Professional fields, such as technical staff, physicians, medical technicians, nurses, managers, are comprised of a wide range of related subcultures and can have very different quality perspectives that can sometimes be contradictory (Zabada et al., 1998; Greenfield et al., 2008; Pomey, 2004; Braithwaite et al., 2011; Groene et al., 2013).

To make the safety of patients, patient relatives, and employees permanent at the highest level, quality standards in health are developed, these standards are applied and the performances of health organizations regarding the quality standards applied are evaluated with a holistic approach. Republic of Turkey Ministry of Health considering the needs and priorities that need to be addressed urgently in health organizations, within the Health Transformation Program, the goals that have been revealed by the World Health Organization priority basis, examined the developments in the international health care, private and state-owned in all health institutions (hospitals) Implemented Quality Standards in Health (QSH) - Hospital (Version-5), which is the latest version of quality standards.

Some of the countries have implemented organizational structure-based quality management systems to regularly improve their performance so that investments in health would be used appropriately and optimal results are achieved in quality and patient safety (Pomey, 2004). At the same time, many total quality management systems are "first-level", health care that can functionally improve health, take protective measures against diseases, and overcome emerging diseases and direct patients to inpatient treatment centers when necessary, and develop treatment services (OECD, 2017: 132). Many countries have developed patient and organizational structure-based quality management systems to continuously improve their performance so that investments in health can be used locally and optimal results are achieved in quality and patient safety (Pomey, 2004).

Turkey has made in the development and standardization work to health care services in health care. As a result of these studies, quality standards guides or sets were created. With a systematic approach, Quality Standards in Health (QSH) take into account the long-term goals set by the World Health Organization; international developments are based on the country's health system needs and priorities. Opinions of different stakeholders were consulted during the preparation of standards. Among these sets, extensive improvements were made to the HQS Hospital Set in 2005, 2007, 2008, and most recently in 2011. "Service Quality Standards" was prepared by the Ministry of Health in 2011 to evaluate and improve the quality of health services provided in public, private, and university hospitals (Öter and Südaş, 2017). QSH Hospital Set (Version-4) has been revised and its latest version, QSH Hospital Version-5, Revision 01 (SKS, 2016), has been put into service to be applied in private and public hospitals.

Although there is various anecdotal evidence and numerous testimonials of performance improvement from health care organizations, no empirical studies have been conducted to demonstrate the overall benefits of applying the QSH standards. The problem addressed by this study was whether the application of these standards led to improvements in the perceived performance of health care organizations.

This research was also very important because QSH Hospital Version-5 was a work that revealed different stakeholder perceptions and was observed from an internal perspective in a general public hospital after its implementation.

## 2. Methodology

Ministry of Health of the Republic of Turkey implemented the final version of the quality program named Quality Standards in Health (Version-5) (QSH). It contains basic information about the quality of the health process. It is a guide for the private, university hospitals, and public hospitals and all the stakeholders in order to improve the quality of health services (SKS Hastane, 2015: 14-15).

In health organizations, health service providers, as well as those benefiting from health care providers, are the principal stakeholders who have the ability to evaluate the results of the applied quality standards. It is of utmost importance to identify the strengths of these stakeholders with the perspectives of these stakeholders, to identify the aspects of QSH that can be improved, and to maximize the delight of the customer.

The participants were divided into four groups according to their occupational groups. These are the nurses, physicians, administrators, and technical staff professional groups. It was analyzed whether QSH being implemented in the health organization make a difference in the attitude level of the dimensions of the Business Excellence Tool according to the occupational groups.

The standards of QSH Hospital Version-5 were based on the principles of TQM, the TQM indicators, International Quality Standards (ISQua), using criteria similar to the basic principles of the Joint Commission International (JCI) accreditation organization, make positive contributions to the validity and reliability of the data collection tools used in the research.

In the research, the Business Excellence Tool was used by the Business Excellence Model developed by Kanji (2002). Question items of the variables in the tool were answered with a Likert-type scale between 1 and 10. The scale was scored very little (1), completely agree (10). We transferred data to a computer environment and obtaining descriptive results with SPSS 24 program. The researchers used the AMOS 22 program to test whether Kanji's Business Excellence Model was statistically compatible with the data obtained from the participants' answers. We used the Structural Equation Model (SEM) to test whether the data obtained from the participants supported the model. We calculated the variable mean scores and path coefficients data analysis.

The Business Excellence Tool questionnaire consisted of 59 question items. As demographic information, the question about the healthcare providers' occupation

definition was added to the questionnaire form. Leadership was the prime and also delight the customer, management by fact, people-based management, and continuous improvement were four main principles and internal and external customers delight, all work was a process, measurement, teamwork, people make quality, continuous improvement cycle and prevention were eight core concepts and business excellence. These are based on Kanji's pyramid principles of TQM.

### 3. Results

The study results identified that health providers perceived a significant impact of the Quality Standards in Health on hospital performance measurement. 50% of the nurses, 28,6% of the physicians, 3,1% of the administrators and 18,4% of the technical staff expressed their attitudes towards the quality standards being applied by the healthcare providers. Laboratory and radiology technicians were also among the medical participants. The nurses embodied a higher rate than the other medical groups. The administrators represented the least among the general participants. It is useful to take these ratios into account when making general statistical evaluations.

**Table 1:** Demographic Information of Personnel Providing Health Care

Professionals	Size	(%)
Nurses	147	50,0
Physicians	84	28,6
Managers	9	3,1
Technical Staffs	54	18,4
Total	294	100

Performance results reflecting the attitudes of health care providers to QSH above according to the preliminary study results. (Confidence Alpha value; .944, mean value; 60%). The results of the QSH reflecting the attitudes of the patients and their relatives about the organizational performance were better than the results of the participants who provided the health services. (Confidence Alpha value; .887, mean value; 70%).

**Table 2:** Kaiser-Meyer-Olkin and Barlett Test Chart of Business Excellence Scale

Kaiser-Meyer-Olkin (KMO)	.947	Df	P
Bartlett Test Approx. Chi-Square	19575.439	1711	.000

The Kaiser-Meyer-Olkin and Barlett Test were used to determine whether the data used in the research were sufficient in number or not by statistical methods. In addition, Kurtosis and Skewness tests were carried out to statistically evaluate whether the data reflecting the participants' attitudes showed a normal distribution.

**Table 3: Data Normality Distribution**

Variables	Skewness	Kurtosis
Leadership	-.299	-.686
Delight the customer	-.177	.140
Management by Fact	-.028	-.790
People- based management	.350	-.394
Continuous improvement	.074	-.822
Customer focus	-.117	-.245
Process improvement	-.170	-.311
People performance	.162	-.286
Improvement culture	.152	-.559
Business excellence	-.087	-.505

Table 3 demonstrates that the values of kurtosis and skewness. It shows the distribution of the data belonging to the business excellence tool. It is within acceptable limits (Tabachnick & Fidell, 2013).

**Table 4: Descriptive Statistics Table for the Business Excellence**

	Question Numbers	Mean	Standard Deviation	Cronbach' $\alpha$ value	Factor loads
Leadership	6	6,63	1,90174	0,909	.843, .839, .777, .801, .713, .786
Delight the Customers	3	6,63	2,02328	0,838	.883, .814, .701
Management by Fact	3	5,50	2,01325	0,915	.896, .865, .896
People Based Management	4	4,76	2,10759	0,813	.803, .559, .861, .686
Continous Improvement	3	5,53	2,04186	0,871	.954, .900, .924
Customer Focus (Patient satisfaction + Staff satisfaction)	9	5,54	1,78127	0,895	.989, .962, .923, .900, .908, .511, .510, .478, .783
Process Improvement (All work is process+Measurement)	10	5,73	1,74234	0,929	.803, .849, .752, .804, .729, .664, .703, .709, .783, .841
People Performance (Teamwork + People Make Quality)	8	5,44	1,76219	0,901	.880, .900, .893, .593, .691, .605, .664, .805
Improvement Culture (Continuous improvement cycle+ prevention)	7	5,65	1,96594	0,896	.869, .838, .742, .810, .852, .867, .810, .850
Business Excellence	6	5,63	2,08497	0,947	.849, .896, .919, .831, .875, .823

The highest average value expressing the participants' attitudes in the latent indicators was the delight customer with 6.63. The lowest average was the people-based management indicator with 4.76. The internal consistency average reliability coefficients of indicators were evaluated based on latent indicators. As a result, the highest reliability coefficient belongs to organizational excellence with 0.947. The lowest reliability coefficient was the people-based management, with a coefficient of 0.813.

**Table 5:** Business Excellence Model Fitness Measures

Fitness Measures	Acceptable Fitness Values	Model Fitness Values	Results
$\chi^2$		232,047	
Df(p)		88	
$\chi^2/df$	$3,00 \geq \text{veya} 5,00$	2,395	Acceptable
GFI	$GFI > 0.90$	0,932	Acceptable
AGFI	$AGFI > 0.80$	0,943	Acceptable
CFI	$CFI > 0.90$	0,953	Acceptable
RMSEA	$RMSEA < 0.10$	0,765	Acceptable

Performing the confirmatory factor analysis of the business excellence model, the path analyzes of the models were made. The effects of the "leadership" variable on the "delight the customer", "management by fact", "people-based management", "continuous improvement" variables were tested.

And also, we tested the effects of delight customer variable on customer focus, management by the fact variable on process improvement, people-based management variable on people performance, and continuous improvement variable on improvement culture variable.

In addition, we also tested the customer focus variable on business excellence, process improvement variable on business excellence, people performance variable on business excellence, the effects of the improvement culture variable on the business excellence variable.

As a result of the confirmatory factor analysis showed that the collected data were in harmony with the model of the structural validity of the business excellence tool. Table 5. presents the numerical values of fit indices in detail. The values of  $\chi^2 / df = 2,395$  and  $p = .000$ ,  $GFI = 0,932$ ,  $AGFI = 0,943$ ,  $CFI = 0,953$ ,  $RMSEA = 0,765$ , were within acceptable limits.

We examined the goodness of fit index values, then, we examined the paths in the model and the parameter estimates related to the model. Accordingly, we removed the statistically insignificant path in the tested structural model and created the final model. Consequently, we removed the path from development culture to business excellence from the model.

According to the ANOVA one-way analysis of variance test results, the mean attitudes of the occupational groups regarding the leadership dimension differed significantly [ $F(3,290) = 3.32$ ,  $p = 0.020$ ].



The leadership attitude level of the professional group of nurses ( $M = 6.73$ ;  $Ss = 1.83$ ) differed significantly according to the attitude level of the technical staff ( $M = 5.91$ ;  $Sd = 1.72$ ).

The attitudes of the professional group of physicians ( $M = 6.87$ ;  $Sd = 2.07$ ) differed according to the average of technical personnel attitude ( $M = 5.91$ ;  $Ss = 1.72$ ). The attitude level of the managerial profession group the prime leadership ( $M = 6.93$ ;  $Sd = 1.42$ ) did not differ significantly compared to other occupational groups.

Nurses ( $M = 6.90$ ;  $Sd = 2.02$ ), physicians ( $M = 6.72$ ;  $p = 1.89$ ), administrators ( $M = 5.48$ ;  $p = 1.87$ ) regarding the attitude level of the delight the customer principle, the mean of technical personnel ( $M = 4.48$ ;  $Ss = 1.80$ ) did not differ significantly [ $F(3,290) = 1.91$ ,  $p = 0.12$ ] according to the ANOVA one-way analysis of variance test results.

The mean attitudes of the occupational groups regarding the management by fact principle differed significantly [ $F(3,290) = 2.84$ ,  $p = 0.038$ ] according to the ANOVA one-way analysis of variance test results.

The mean attitudes of nurses towards management by fact differed ( $M = 5.63$ ;  $Ss = 1.68$ ) compared to technical personnel ( $M = 4.87$ ;  $Ss = 1.73$ ). At the same time, the average attitudes of physicians towards management by fact differed ( $M = 5.86$ ;  $Sd = 2.20$ ) compared to technical personnel. However, the administrators' attitude towards the management by fact dimension ( $M = 5.59$ ;  $Ss = 1.17$ ) did not differ significantly compared to other occupational groups.

The mean attitudes of occupational groups regarding the people-based management dimension of the business excellence tool differed significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 4.23$ ,  $p = 0.006$ ].

The mean attitudes of nurses regarding the people-based management dimension did not differ significantly ( $M = 4.68$ ;  $Ss = 1.95$ ) compared to other occupational groups.

The physicians' attitudes towards the people-based management dimension differed ( $M = 5.43$ ;  $Ss = 2.42$ ) according to technical personnel ( $M = 5.91$ ;  $Ss = 1.72$ ).

The administrators' attitudes regarding the people-based management dimension ( $M = 6.93$ ;  $Ss = 1.12$ ) did not differ significantly by comparison with the other occupational groups.

The mean attitudes of the occupational groups regarding the continuous improvement dimension of the business excellence tool differed significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 2.75$ ,  $p = 0.043$ ].

The nurses' mean attitudes towards the continuous development dimension do not differ significantly besides the other occupational groups ( $M = 5.62$ ;  $Ss = 2.00$ ).

The mean attitudes of the medical profession group towards the people-based management dimension ( $M = 5.43$ ;  $Ss = 2.42$ ) differed according to the technical personnel ( $M = 4.96$ ;  $Ss = 2.02$ ).

The average attitudes of the administrators regarding the continuous development dimension ( $M = 5.51$ ;  $Ss = 1.08$ ) did not differ significantly compared to other occupational groups.

The mean attitudes of the occupational groups regarding the customer-based dimension differed significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 2.58, p = 0.056$ ].

The mean attitudes towards the customer-based dimension of the nurses ( $M = 5.64$ ;  $Ss = 1.77$ ) did not differ significantly compared to other occupational groups.

The mean attitudes towards the people-based management dimension of the professional group of physicians ( $M = 5.87$ ;  $Ss = 1.91$ ) differed significantly according to the technical personnel ( $M = 5.04$ ;  $Ss = 2.02$ ).

The administrators' attitudes regarding the people-based management dimension ( $M = 5.79$ ;  $Ss = 1.21$ ) did not differ significantly against the attitude level of other occupational groups.

The mean attitudes of the occupational groups regarding the process development dimension of the business excellence tool differed significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 2.72, p = 0.04$ ].

The nurses' mean attitudes towards the process development dimension ( $M = 5.93$ ;  $Ss = 1.56$ ) differed significantly according to the attitudes of the technical staffs' attitudes ( $M = 5.22$ ;  $Ss = 1.47$ ).

Physicians' mean attitude towards the process improvement dimension ( $M = 5.96$ ;  $Ss = 2.02$ ) differed significantly compared to the mean attitude of technical staff ( $M = 5.22$ ;  $Ss = 1.47$ ).

The administrators' attitudes regarding the people-based management dimension ( $M = 6.00$ ;  $Ss = 0.83$ ) did not differ significantly compared to the other professionals' attitudes.

The mean attitudes of the occupational groups regarding the people performance differed significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 2.66, p = 0.048$ ]. The nurses' mean attitudes towards people performance dimension ( $M = 5.52$ ;  $Ss = 1.60$ ) did not differ significantly compared to the averages of other professions.

The physicians' attitudes towards the people performance dimension ( $M = 5.74$ ;  $Ss = 2.08$ ) differed significantly compared to the mean attitudes of technical staff ( $M = 4.90$ ;  $Sd = 1.60$ ). The mean attitudes of the occupational groups regarding the development culture dimension of the business excellence tool differed significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 3.16, p = 0.02$ ].

The nurses' mean attitudes towards the dimension of developmental culture ( $M = 5.86$ ;  $Ss = 2.07$ ) differed significantly compared to the averages of technical personnel ( $M = 4.96$ ;  $Sd = 1.54$ ).

The mean attitudes of the physicians regarding the development culture dimension ( $M = 5.87$ ;  $Ss = 2.03$ ) differed according to the mean attitudes of the technical staff ( $M = 4.96$ ;  $Sd = 1.54$ ).

The mean attitudes of the occupational groups regarding the business excellence dimension did not differ significantly according to the ANOVA one-way analysis of variance test results [ $F(3,290) = 0.97; p = 0.4$ ].

The nurses' satisfaction ( $M = 6.90$ ;  $Ss = 2.02$ ), physicians ( $M = 6.72$ ;  $p = 1.89$ ), administrators ( $M = 5.48$ ;  $p = 1, 87$ ), the average of technical staff ( $M = 4.48$ ;  $Sd = 180$ ) did not differ significantly according to ANOVA one-way analysis of variance test results [ $F(3,290) = 1,91$ ,  $p = 0,12$ ].

#### 4. Discussion

The study tried to apply the attitude of health care providers on TQM practices hospital performance in a general public hospital. The findings obtained from the research revealed that leadership (the prime) significantly affected the main principles of total quality management as well as delight the customer, management by fact, people-based management, and continuous development. In addition, delight the customer affected customer focus, management by fact affected process improvement, the people-based management affected the people performance, and the continuous improvement affected improvement culture. Moreover, the customer focus affected the business excellence, and the people performance affected the business excellence. However, the process improvement and the improvement culture did not affect the business excellence.

The overall business excellence model showed that the people-based management affected people performance at the highest level. The leadership affected customer satisfaction the most. A one-unit increase in leadership level led to an increase of 0.875 units in customer satisfaction. The people-based management was the affected factor at the least level of the leadership factor. The findings indicated that the dimensions of people-based management, management by fact, continuous improvement, customer focus, people performance, development culture, and business excellence are areas of the organization that is manageable to improve compared to other dimensions.

The results indicated that the variables of people-based management, management by fact, continuous improvement, customer focus, people performance, improvement culture, and business excellence were areas of the organization that was manageable to improve compared to other principles.

However, Hassan's (2006) findings on the variables of business excellence supported our study results. Soysal and Koçoğlu's (2018) study showed that healthcare providers' understanding of customer focus was higher than the average attitude of patients.

The nurses' and the physicians' attitudes towards leadership differed significantly from the technical staff. The leadership attitude level of nurses and doctors was higher than the technical staff. In addition, the leadership attitude level of the administrators differed significantly compared to other occupational groups. The average attitude of administrators towards leadership was meaningfully higher than other occupational groups.

The attitude level of customer satisfaction dimension did not differ meaningfully according to occupational groups. The attitude regarding customer satisfaction dimension was close to each other in all occupations.

The attitude levels of administrators regarding the management by fact dimension were at a lower level compared to other professions. However, the nurses' and the doctors' attitudes towards the management by fact dimension were higher than the technical staff.

The nurses' attitudes towards the human-based management dimension differed significantly compared to other professionals. The nurses' attitudes towards people-based management were meaningfully less than other professionals. The attitudes of the physicians differed according to the attitudes of the technical staff. The attitudes of the physicians were at a lower level than the attitudes of the technical staff. The attitudes of the administrators towards the people-based management dimension showed a significant difference compared to the attitudes of other professionals. The attitudes of the administrators had a higher level than the attitudes of other professions.

Delight the customer dimension attitude level did not differ significantly in dealing with occupational groups. The average attitude towards delight the customer was close to each other in all professional groups.

The attitude level of the management by fact dimension of the executive profession group differed significantly compared to the other professional groups. The source of this difference was a significant decrease in attitude average compared to other occupational groups. However, the nurses' and physicians' attitudes towards the management by fact dimension differed significantly from the technical staff occupational group. The average attitude level of the technical staff was lower than the other two groups.

The nurses' attitudes towards the people-based management dimension differed significantly compared to other professional groups. The attitudes of the nurses towards people-based management decreased at a significant level compared to the other groups. The attitudes average of the physicians' differed significantly from the technical personnel. The attitudes average of the physicians was significantly lower than the technical personnel. The attitudes towards the people-based management dimension of the executive profession group showed a significant difference compared to the attitude level of other professional groups. The executive profession group had a higher level than the attitude average of other professional groups.

The nurses' and administrators' attitudes towards the continuous development dimension differed significantly from other professional groups. The nurses' and the administrators' attitudes were notably higher than the other groups.

The average attitude towards the customer-based dimension of the nurses did not differ significantly from other occupational groups. The nurses' attitudes were close to the other's professionals' attitudes. The attitude average of the physicians regarding the customer-based dimension differs according to the technical staff. The averages of the attitudes regarding customer-based of the technical staff were significantly lower than the physicians' attitudes. However, the administrators' attitudes towards customer-based did not differ significantly from other groups. The attitude level of the administrators was at an average level close to other averages.

The average attitude towards the process development dimension of the nurses and physicians differed meaningfully compared to the technical staff. The technical staff's level of attitude was higher than the other medical professionals. However, the level of attitude towards the process excellence of the executive profession group differed significantly from the level of attitudes of other professional groups. The level of attitude of technical staff on process excellence was meaningfully higher than the level of attitudes levels of other professions.

The level of attitude of the hospital administrators towards the people-based management dimension differed meaningfully from the level of attitudes of other professional groups. The reason for the difference was that the executive profession group created a higher level than the other group averages.

The attitudes of the nurses on the people performance dimension differed significantly compared to other occupational groups. However, the average attitudes of the physicians on the people performance dimension differed meaningfully from the technical staff. The source of this difference was that the attitude level of the physicians' profession group was higher than the technical staff attitude level.

The nurses' and physicians' attitudes on the development culture dimension differed notably from the technical staff. The average attitude towards the development culture of the technical staff professional group was less than the other professional groups.

The occupational groups' attitude level on the business excellence did not differ meaningfully. The average business excellence attitude of all occupational groups was very close to each other and slightly above average.

We believe that as the most objective analysis to link the workload in the health organization to the results that reflect the attitudes of the technical staff in general on business excellence indicators or the organizational performance quality indicators. The scientific identification of these differences will be possible with a detailed study in this field. In the research by Listyowardjo et al. (2012), there were differences in personnel attitudes towards the performance of the health organization. We think that conducting in-depth research on the causes of variations in quality standards across occupational groups will contribute to the quality improvement studies in health.

The healthcare providers' (internal customers'), average attitude reflected from the perspective of the healthcare quality standards of the organization from the perspective was 56.9%. This rate was slightly above average. In the study of Hassan (2006), this rate was 62.8%. The research revealed that if an available environment was delivered to healthcare providers, a high level of patient satisfaction would occur in the health organization (Leggat et al., 2017). Healthcare Standards require further efforts in these areas by determining the needs and expectations of the staff who play a role in the delivery of the health services of the top management, is primarily responsible for the success of the implementation.

The findings reflected the attitudes of health care providers towards the leadership dimension. The participants who provided health services expected that the top

management of the health organization to exhibit more exemplary behavior in the direction of improving quality standards in health. Undoubtedly, actively taking the initiative in total quality management practices of leadership and top management, plays a primary role among the indispensable factors for the success of quality improvement.

The leadership prime factor attitude average regarding the effect of QSH on Business Excellence or quality standards was 6.63. Although the attitude average of the study was above the average, one unit of improvement in leadership will lead to significant improvements in customer satisfaction, management by fact, people-based management, and continuous improvement. In the study of Halis and Şimşir (2017), which included twelve hospitals and a sample of oral and dental health, the average leadership attitude of the participants working as managers in health organizations was 3.02, and the average of attitudes of non-managerial participants was 2.43. The attitudes of the participants towards leadership in both studies were very close to each other. In the studies of Çapacıoğlu et al. (2018), using the Deming Model, the attitudes reflecting of the participants towards the leadership in public institutions was 3.78.

Since leadership is the driving force in the implementation and direction of quality standards in the hospital, the attitudes of the medical staff regarding the leadership performance in the hospital were more valuable. Danişman et al. (2015) revealed that leadership in different sectors affected organizational performance using the meta-analysis method. Harrison, 2007; Danişman et al., 2015, in their studies, argued that leadership had a significant impact on organizational performance. When the evidence-like findings of the researches evaluated, the leaders should make an effort to create a quality vision within the organization, to eliminate or minimize the resistance to change, to develop the quality culture, to meet the demands of the customers, and to ensure continuous development (Kanji, 2002).

Healthcare providers were aware of the fact that the healthcare organization they serve was customer-based (patient-based). They considered that it was one of the areas that needed to be improved that the healthcare organization could establish a system that might respond to patient needs as soon as possible. The attitudes of the health organization that it had a vision and strategic plan and effort on patient satisfaction were good condition. Health care providers had a good attitude towards continuing education on improving service delivery.

Internal customer satisfaction was one of the areas that needed to be improved related to the health organization's practices of quality standards in health care. The job satisfaction average of the personnel providing health services was below the average. The health care providers stated that the hospital management did not value them enough, did not appreciate themselves, and did not receive enough support from the senior management to improve themselves. It requires for optimal success of the healthcare services to get the full support of the healthcare providers and to ensure the job satisfaction of the employees physically and mentally.

As in all organizations, seizing the success goals of the organization's objectives in TQM organizations can only be achieved by applying managing by facts methods. It

means constantly measuring and analyzing the performance of the organization. The findings obtained as a result of the research showed that the attitudes of the health service providers towards management by fact of the health organization were above the average. Participants who provide health services thought that the organization invested in the knowledge development and performance measurement systems of the health organization they served, but it was not enough.

While the health care providers' attitudes on measuring the satisfaction of patients and their relatives regularly were close to an expected level, their attitudes towards measuring their expectations and satisfaction were below the average level. The success of QSH will undoubtedly be possible by meeting the satisfaction and expectations of health care providers.

The average attitude towards people-based management of the business excellence tool of healthcare providers was moderate. It is vital supporting the employees to quality improvement in the quality improvement studies implemented in the health organization. The attitude averages of the health service providers in this field were below the average. In addition, the average attitude towards ensuring agreement between the top management of the health organization and the health service providers was below the average. The achievement of the main principle goals of QSH will only be possible by bringing the unanimity between the management and the health care providers at an optimal, and ensuring and encouraging teamwork. Poor teamwork and communication among healthcare providers are associated with adverse effects and high patient morbidity and mortality. However, studies are needed to support the link between team communication and medical errors (Rabøl et al., 2012: 129).

One of the areas of QSH that needs strengthening in the health organization is teamwork. A prerequisite for effective and efficient collaboration is establishing a solid framework for communication, knowing the skills and experience of other team members, and establishing a flat hierarchy that allows everyone to express their opinions. Teamwork and communication problems among healthcare providers are related to adverse effects and high patient morbidity and mortality. However, studies are needed to support the link between team communication and medical errors (Rabøl et al., 2012: 129-138).

In health organizations, nurses have a critical place in the teams that provide health services. Effective nursing teamwork is an essential component of quality healthcare and patient safety. Understanding the factors that encourage teamwork in health organizations enables the development and maintenance of teamwork characteristics. In the study of Polis et al. (2017) on inpatients and outpatients in a tertiary-based hospital in Australia, they found that leadership and communication among nurses are eminent determinants of teamwork.

The average attitude of health care providers regarding the implementation of QSH, taking precautions against possible problems in the health organization and, if a problem arises, analyzing the studies on the essence of the problem and solutions to problems was at an average level. It is essential to take the necessary precautions

regarding the safety of patients and employees, which is one of the primary indicators of TQM management, and to carry out more studies on this in cooperation.

The health providers thought they could not reach the intended strategic goals sufficiently in the quality standards applied in the health organization. However, they argued that they could be successful in this area should be done in cooperation. They believed that the health organization would make the necessary effort to ensure community welfare.

The top management that manages the health organization must transform performance evaluation into a process. On the other hand, broadening the culture of organizational excellence and continuous improvement requires carrying out some activities such as the using of knowledge management and spreading it within the organization. In addition to respecting customers inside and outside the organization, promoting organizational values and learning, receiving feedback to improve organizational performance, transforming it into a learning organization that includes customers' requests and suggestions should be among the goals of top management.

Leadership and people management are the main factors of organizational performance. Some studies link the source of high job dissatisfaction with health care providers with variables related to the work environment and perceived health quality. The studies state that employee satisfaction is directly related to patient satisfaction. In addition, administration support directly affects patient satisfaction. Providing a good training and development opportunity to the employee by the senior management is efficient in reducing patient deaths. The most defining feature of the hospitals with the best performance is the participation of employees in matters concerning the organization and the sharing of leadership authority areas (West et al., 2015:18-19). The results indicated that there was a significant relationship between the dimensions of quality management (such as leadership, customer-based, management by fact) and organizational quality performance.

The research showed that hospital administrators should focus on personnel training to increase their awareness of international standards.

The findings also suggest that administrators should not rely solely on patient satisfaction results or staff satisfaction. It needs monitoring the organization by external professional organizations based on quality standards performed by trained personnel to make this comparative criticism.

Providing opportunities for employees' career planning, developing and rewarding employees, giving employees a chance to be promoted, improving the working hours of employees, and making improvements in wage management are highly significant steps in terms of internal customer satisfaction (Şentürk and Kaya, 2017: 171-172).

It is essential to retain "excellent" personnel to maintain and improve performance quality in health organizations. QSH practices indicate that personnel did not have enough influence to adopt processes that ensure business continuity. Retention of personnel in the organization requires their satisfaction, continuous training, and growth



opportunities. We have found that QSH does not arrange sufficient emphasis on personnel satisfaction and that the influence of employees in the processes for evaluating the organization's quality is quite limited. The researchers argue that much more consideration needs on the issue in the stages that require revision in the QSH set.

It would be more beneficial for the Ministry of Health to switch to a gradual transition system to achieve the desired success in QSH implementation targets. For example, a gradual application can be made according to the number of beds of the organization and geographical differences.

Applying quality standards in all health organizations at the same time may cause some problems in practice. In small health organizations, there is great benefit in reinforcing areas such as trained personnel support.

Considering the regional and structural differences in QSH assessment procedures; will increase the reliability of the measurements while making organization comparisons.

The study should be repeated on the same sample in the future to examine the long-term impact of the practice-based standards in the QSH healthcare organization and whether the hospital maintains the same level of performance, improves its standards further, or deteriorates quality standards. Moreover, the researchers recommend that a similar study be carried out in the future, using the same methodological ways, in health organizations in different geographical regions to support the generalizability and reliability of the results.

Kanji's performance measurement system predicts low scores in the early stages of performance evaluation of organizations because of the use of qualitative indices. The model bases on the corporate excellence model and the scorecard. Repeating the measurements is available effective performance measurement and observing the performance changes in the organization (Naghavi et al., 2011: 8547).

Repeating the methodology and techniques followed by the study, it is favorable to conduct studies that will be the source of attainment of more specific results in several different hospitals based on the basic quality criteria of QSH. In addition, it is recommended to carry out studies to measure the effectiveness of QSH, which is applied by the hospital, on some major diseases and quality criteria.

Performance measurement is an argumentative concept for those who evaluate it. Staff, patients, and other stakeholders can produce results at quite different levels in performance-based measurements. The results of the study showed that the evaluation of the performance results by the stakeholders varied. We suggest conducting the reasons for the different levels of perception of performance on varied stakeholders in future studies.

As a result, the findings of the research contribute to both theoretical and managerial perspectives. From a theoretical point of view, the results obtained from this research show consistency with the previous literature supporting these theories by providing empirical evidence to the accumulation of knowledge about quality

improvement theories. It also supports the need for a holistic approach in performance evaluations in the health organization in the administrative sense.

There is solid evidence that data based on patients' and their relative's experiences are ways of measuring the quality standards in health organizations, in the meantime, there has been considering evidence that staff experience has reflected significant positive improvements in patient satisfaction and patient health outcomes. Consequently, in health organizations, exploration of the quality perceptions of patients, patient relatives, and service providers as customers is quite important in evaluating organizational performance.

## 5. Conclusion

This study provides empirical evidence for the credibility of the health care quality standards, which have become a potential solution for improving the quality of health care services in a developing country. It validates a reliable method of measuring the performance of the healthcare sectors from the perspectives of healthcare providers and encourages other researchers' effectiveness of total quality management initiatives in the health sector. The study may provide a positive contribution to quality standards initiatives of developing countries.

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## Conflict of Interest Statement

The authors declare that they have no conflict of interest related to the study or preparation of the manuscript.

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