

Cross-Sectional Analysis of Total Quality Management Practices in Saudi Arabia's Healthcare Sector

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ABSTRACT

This study investigates the implementation of Total Quality Management (TQM) practices in Saudi Arabia's healthcare sector through a cross-sectional analysis. The research aims to assess healthcare professionals' perceptions of quality management

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dimensions within their organizations, focusing on factors such as customer focus, continuous improvement, leadership commitment, employee involvement, and process management. A descriptive method was employed, utilizing a questionnaire distributed to a random sample of 360 healthcare workers in Saudi Arabia. The findings reveal a generally positive perception of the organization's quality management practices, with a strong commitment to customer focus, continuous improvement, and process management. However, certain areas, such as patient feedback mechanisms, empowerment in continuous improvement, and communication regarding quality management, were identified as needing attention. The study highlights the importance of enhancing patient complaint handling, increasing employee empowerment in continuous improvement initiatives, improving communication on quality goals, investing in technology for process efficiency, and fostering open management-employee dialogue. The positive ratings reflect a foundation that can be leveraged for continuous development in TQM, especially in fostering open communication and involving employees in improvement initiatives. The study contributes to the understanding of TQM implementation challenges and provides recommendations for healthcare organizations to enhance their quality management practices.

KEYWORDS: Total Quality Management, Healthcare Workers, Saudi Arabia.

1. Introduction

The healthcare system is undergoing significant adjustments. The modern healthcare environment shifts daily. Rising health-care expenses and consumerism have had a profound impact on healthcare delivery. Changes in health care are visible as organizations rethink or restructure systems to thrive in a highly competitive market (Lambert & Nugent, 1999). It is dynamic and challenging to manage competition and consumer expectations. The future holds numerous challenges for health care administrators.

The quick pace of change in the health care system creates enormous problems for health care administrators in charge of providing health care services. Declining reimbursement, new incentive structures, and more competition are putting unprecedented pressure on providers to provide health care effectively and efficiently. Consumer discontent, along with a rising understanding of the gaps between real and ideal behavior, has increased pressure to enhance quality (Hermann et al., 2000).

The ability to anticipate future trends and incorporate them into quality management plans is critical for healthcare facility managers. The purpose of these techniques is to build quality management as a regulating and navigation tool in a "new-economy-based" healthcare system (Ekkernkamp & Müschenich, 2000).

Quality management is an appropriate approach to this difficulty. It is a method of organizing work flows in health care organizations in the most efficient manner possible to produce the best possible outcome quality, which includes the quality of

health care services, patient satisfaction, employee satisfaction, and overall performance results. One of the most significant goals of health care organizations is to improve health care services as much as possible while keeping costs low for both consumers and providers. The basic goal of quality systems in health care is to improve patient outcomes. The goal is to improve quality and increase the confidence of patients, professionals, and payers in the context, structures, process, and outcomes.

The present quality field in health care systems is around a third of a century old. In the last 30 years, numerous health care institutions have implemented quality improvement efforts. Quality, quality assurance, and quality management have all been key issues in health-care businesses. Many health care organizations have set goals for systematic and continual improvement in the quality of health care services. Quality within health care institutions is a difficult subject. Quality programs and performance excellence standards are playing an increasingly important role in health care businesses. Nowadays, people are continuously looking for quality products and services (Mosadeghrad, 2004).

The prevalence of this desire for quality has prompted health care organizations around the world to try to build a philosophy that can provide clients with the quality they expect. There are various reasons why health care institutions strive for quality. These include rising demand for adequate, effective, and efficient health-care services, the need for standardization and elimination of differences that raise service costs, cost reduction, market pressure, and growing markets. Quality in healthcare is an ongoing process. Quality processes should be initiated, maintained, assessed, improved, and monitored on a continuous basis (Mosadegh Rad, 2004).

Total quality management (TQM) is one such philosophy that seeks to give enterprises with a roadmap to success through customer satisfaction. TQM can be characterized as the creation of an organizational culture that defines and supports the continuous pursuit of customer satisfaction via an integrated system of tools, processes, and training. TQM is a management technique for improving a company's overall effectiveness, efficiency, adaptability, and competitiveness. It is also a waste-reduction strategy in which everyone participates in improving how things are done (Ho & Fung, 1994). Bounds et al. (1994) define Total Quality Management (TQM) as an organization-wide effort that incorporates the entire workforce in continuous improvement for customer satisfaction (Bounds, 1994).

According to Brown (1992), Total Quality Management (TQM) is a management philosophy that prioritizes employee involvement, teamwork, continuous improvement, meeting customer needs, management by facts, team-based problem solving, continuous measurement of results, and closer supplier relationships (Brown, 1992). TQM's goals are to satisfy customer needs, prevent poor quality rather than correcting problems after the fact, develop a continuous improvement mindset, understand the value of measuring performance to identify opportunities and maintain improvements, and eliminate chronic sources of inefficiencies and costs (Evans & Lindsay, 1996).

To attain these aims and establish a competitive edge, TQM concepts must be fully understood and committed to by the whole organization's workforce prior to

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implementation. TQM principles in health care systems include a focus on leadership and effective management commitment; employees and patients; suppliers and partners; material resources; information systems; employee education and training; employee participation; employee responsibility; fact-based decision making; risk management; communication; and the quality improvement process (Mosadegh Rad, 2003).

TQM refers to an organization's culture of total customer satisfaction achieved via constant enhancement. In this culture, resources, materials, equipment, and quality management systems are cost-effectively deployed and fully exploited. TQM necessitates better supplier relations, as well as a truly collaborative effort. TQM requires communication systems to be tailored to the needs of the task, not the needs of the hierarchy. TQM requires consistency of purpose throughout the business, as well as tenacity in accordance with a clear and generally acknowledged vision. It is an atmosphere that needs and fosters absolute dedication from all employees, with benefits in the areas of cost savings, customer happiness, job satisfaction for providers, increasing market share, profit, greater business competitiveness, and improved reputation (Youssef et al., 1996).

TQM has gained appeal in various industries since its introduction in the mid-1980s, with institutions incorporating it into their daily management practices (Gunasekaran, 1999). Tobin (1990) defined TQM as a fully integrated program for generating competitive advantages by continuously improving every aspect of company culture. TQM was found to be favorably associated with both financial performance and profitability, as well as human outcomes such as employee satisfaction, staff relations, and customer satisfaction (Association for Quality and Participation & Lawler, c1995, p. 10).

However, in practice, these TQM benefits are difficult to implement. Despite its theoretical potential and enthusiastic reception, recent research indicates that attempts to apply TQM are frequently unsuccessful. As a result, the literature contains multiple reports of failed TQM implementations. According to Hubiak and O'Donnell (1996), nearly two-thirds of corporations in the USA have failed or stopped in their attempts to implement Total Quality Management. Many of these TQM programs have been discontinued or are in the process of being cancelled because to the negative impact on earnings (Ph.D & M.S, 2006).

Many organizations and businesses have challenges in implementing TQM. As a result, many people are skeptical of TQM. While TQM has been widely deployed in change management and is expected to be a priority for the next century, failure rates of more than 75% raise concerns (Cao et al., 2000).

Study problem

One major challenge is the lack of ideal models for TQM implementation. Organizations often find themselves without a clear framework or guidelines, leading to inconsistent practices and outcomes. This uncertainty can create confusion among employees about the best practices to adopt, which ultimately undermines the TQM efforts (Akinlolu et al., 2020).

Another significant barrier is the inadequate knowledge and training among employees regarding TQM principles. Many organizations fail to provide sufficient training, resulting in a workforce that lacks the necessary skills and understanding to effectively implement quality management practices. This gap can lead to poor application of TQM strategies and diminish their potential benefits (Balasubramanian, 2021).

Resistance to change is also a common issue encountered during TQM implementation. Employees and management may be reluctant to alter established processes, particularly if they are not convinced of the benefits of TQM or if they feel threatened by new methodologies. This resistance can stall initiatives and create friction within teams (Balasubramanian, 2016).

Moreover, organizations often experience a loss of momentum in their TQM initiatives. Initial enthusiasm may wane over time due to a lack of ongoing commitment from leadership or insufficient reinforcement of TQM principles. This decline can result in a failure to sustain improvements and achieve long-term quality goals (Kumar et al., 2023).

Resource constraints present another significant hurdle. Effective TQM implementation requires substantial investments in time, finances, and human capital. Organizations may struggle to allocate these resources adequately, particularly in competitive environments where immediate returns on investment are prioritized (Alawag et al., 2023).

Cultural barriers can also impede TQM efforts. If the organizational culture does not align with TQM principles, conflicts may arise between existing practices and new quality-focused approaches. This misalignment can lead to challenges in fostering a culture of continuous improvement and employee engagement (Sentika & Arissaputra, 2023).

Additionally, organizations often face measurement challenges when evaluating the effectiveness of their TQM initiatives. Without clear metrics or benchmarks, it becomes difficult to assess progress or identify areas needing improvement. This ambiguity can contribute to frustration among stakeholders and a lack of accountability (Raghavendra et al., 2019).

Finally, the variability across sectors complicates the application of TQM. Different industries may require tailored approaches due to unique operational challenges and customer expectations. This variability makes it difficult to establish standardized practices that can be universally applied (Ikhsan et al., 2023).

Research questions

- What are healthcare professionals' perceptions of TQM practices in their organizations?
- Which specific TQM dimensions do healthcare professionals perceive as most effective or beneficial?
- How can healthcare organizations enhance their TQM practices based on the perceptions of their employees?

Research objectives

- To determine healthcare professionals' perceptions of TQM practices in their organizations.
- To determine specific TQM dimensions that healthcare professionals perceive as most effective or beneficial.
- To determine how can healthcare organizations enhance their TQM practices based on the perceptions of their employees.

2. Literature review

A study by Sweis investigates how various Total Quality Management (TQM) practices influence employee empowerment within the healthcare context. The study identifies five key TQM predictors training, teamwork, top management commitment, continuous improvement, and customer satisfaction and employs a questionnaire-based survey to collect data from employees at King Khalid Hospital. The results reveal a positive correlation between effective TQM practices and enhanced employee empowerment, indicating that well-implemented training programs, strong teamwork, committed leadership, ongoing improvements, and high customer satisfaction levels contribute significantly to empowering healthcare employees. The study emphasizes the importance of these factors while acknowledging its limitation of being conducted in a single hospital setting, suggesting further research avenues to explore TQM's broader implications in healthcare (Sweis et al., 2013).

Another study explores the implementation of Total Quality Management (TQM) in hospitals, specifically examining the relationship between TQM practices and organizational performance in Punjab. Through a literature review, it identifies critical success factors such as leadership, communication, employee involvement, customer focus, organizational culture, strategic planning, and patient loyalty. The research employs structural equation modeling to establish a positive correlation between TQM practices and hospital performance, suggesting that both NABH-accredited and non-NABH hospitals can enhance their performance by focusing on these factors. The findings indicate that effective leadership and employee involvement are vital for successful TQM implementation, ultimately leading to improved quality management practices and organizational outcomes (Mittal School of Business, Lovely Professional University, Phagwara, India. et al., 2019).

A study by Nicolas Nicolaou and George Kentas investigates the common reasons for the failure of Total Quality Management (TQM) implementations specifically within the healthcare sector. Through a comprehensive literature review, the authors identify several key failure factors, including lack of management commitment, cultural resistance to change, incorrect application of quality tools, insufficient time for implementation, and limited resources and information. The findings highlight

that management's commitment is crucial for TQM success, as is the need to foster a quality-oriented culture among employees. The study emphasizes that understanding these failure reasons can help healthcare managers take proactive measures to avoid potential pitfalls in TQM implementation, ultimately improving service quality and organizational performance in healthcare settings (Nicolas Nicolaou & George Kentas, 2017).

3. Methodology

Given the nature of the current study topic (Cross-Sectional Analysis of Total Quality Management Practices in Saudi Arabia's Healthcare Sector). To achieve the study objectives, the researcher used the descriptive method, which is: the type of research by which all members of the research community or a large sample of it are questioned; with the aim of describing the phenomenon being studied in terms of its nature and degree of existence. (Al-Assaf, 2016, p. 211).

Study Community

The current study community consists of all Healthcare workers in Saudi Arabia.

Study Sample

The origin of scientific research is to be conducted on all members of the research community; because this is more likely to confirm the results, but the researcher resorts to choosing a sample of them if this is not possible due to their large number, for example" (Al-Assaf, 2003, p. 96); therefore, the researcher chose a random sample, where the sample amounted to (360) healthcare workers in Saudi Arabia.

Study Tool

Based on the nature of the data and the methodology followed in the study, the researcher found that the most appropriate tool to achieve the objectives of this study is (the questionnaire). The study tool was built by referring to the literature and previous studies related to the subject of the study, Cross-Sectional Analysis of Total Quality Management Practices in Saudi Arabia's Healthcare Sector. The researcher designed the initial questionnaire and distributed it to the study sample to find out the data that this tool seeks to collect. The validity and reliability procedures for this tool were verified. The following is a detailed explanation of how to prepare the tool and the procedures taken by the researcher to verify the validity and reliability of the tool.

Validation of questionnaire

The validity of the study tool means ensuring that it measures what it was prepared to measure. It also means that the questionnaire includes all the elements that enter the analysis on the one hand, and the clarity of its expressions on the other hand, so that it is understandable to everyone who uses it. The researcher verified the validity of the study tool through:

Honesty of arbitrators

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The face validity method was used, with the aim of ensuring the validity of the questionnaire and its suitability for research purposes, by presenting it to a group of academic and specialist arbitrators, and asking them to express an opinion regarding the extent of the validity and validity of each paragraph of the questionnaire and its suitability for measuring what it was designed to measure, and introducing Necessary amendments, whether by deletion, addition or reformulation. The arbitrators presented suggested amendments to the study tool, and the researcher took those observations into account, made the necessary amendments that were agreed upon by most arbitrators, and then relied on the questionnaire in its final form.

Internal consistency validity

Through internal consistency, we know the extent to which each paragraph of the questionnaire is consistent with the axis/dimension to which this paragraph belongs. To calculate the validity of the internal consistency of the study tool, the Pearson correlation coefficient was calculated (Pearson Correlation Coefficient), through which the correlation coefficients were calculated between the score of each item and the total score of the dimension (the average score of the items of the dimension) to which the item belongs. The following tables show the validity of the internal consistency.

Table (1): internal consistency results

N = 360		Pearson Correlation Coefficient	Sig
Customer Focus			
1-	Our organization prioritizes understanding the needs and expectations of our patients.	.802**	.000
2-	We actively seek feedback from patients to improve our services.	.563**	.000
3-	Patient satisfaction is a key performance indicator in our organization.	.779**	.000
4-	We have established processes to address patient complaints effectively.	.774**	.000
5-	Our services are tailored to meet the specific needs of different patient groups.	.870**	.000
Continuous Improvement			
1-	Our organization encourages a culture of continuous improvement among staff.	.633**	.000
2-	We regularly review and update our processes to enhance service quality.	.575**	.000
3-	Training programs are provided to staff to support continuous improvement efforts.	.804**	.000
4-	Employees are empowered to suggest improvements in their work processes.	.827**	.000
5-	We measure the outcomes of our improvement initiatives regularly.	.827**	.000
Leadership Commitment			
1-	Leadership demonstrates a strong commitment to TQM principles.	.852**	.000
2-	Leaders in our organization communicate the importance of quality management effectively.	.894**	.000
3-	Our leadership actively participates in quality improvement initiatives.	.819**	.000
4-	There is a clear vision for quality management articulated by our leaders.	.872**	.000
5-	Leaders encourage teamwork and collaboration across departments.	.728**	.000
Employee Involvement			
1-	Employees are encouraged to participate in decision-making processes related to quality management.	.765**	.000
2-	We have mechanisms in place for recognizing and rewarding employee contributions to quality improvement.	.796**	.000

3-	Staff training includes components on TQM principles and practices.	.802**	.000
4-	There is open communication between management and staff regarding quality issues.	.689**	.000
5-	Employees feel valued and engaged in the organization's quality initiatives.	.758**	.000
Process Management			
1-	Our organization has well-defined processes for delivering healthcare services.	.831**	.000
2-	We utilize data and metrics to monitor and improve our service processes.	.665**	.000
3-	There is a systematic approach to managing risks associated with healthcare delivery.	.741**	.000
4-	Interdepartmental collaboration is encouraged to enhance process efficiency.	.752**	.000
5-	Technology is effectively utilized to streamline our healthcare processes.	.735**	.000

It is clear from the previous table that the Pearson correlation coefficient values for each item for each dimension with the total score of the dimensions; Positive and statistically significant at the significance level (0.01), where the values of the correlation coefficients ranged from (0.563) as a minimum to (0.894) as a maximum. This indicates the presence of internal consistency in the items of each dimension, and their suitability for measuring what they were designed to measure.

Reliability of the questionnaire

Reliability of the questionnaire means that it gives approximately the same results if it is applied repeatedly to the same people in similar circumstances. The reliability of the questionnaire was calculated using Cronbach's Alpha, it was equal to 0.918. This means that the study tool has a high degree of stability and can be relied upon in the field application of the study. It is also an important indicator that the items that make up the questionnaire give stable and stable results if it is re-applied to the study sample members again. Therefore, there is reassurance regarding the analysis of the study data.

For each factor, it had 5 Likert-type items, this factor was pretested and checked for internal consistency. Accordingly, all the items were found to qualify internal consistencies table 2 shows the values of Cronbach's Alpha coefficient (α) of each factor. Likert-type items had five response anchors: (from 1– 'Strongly Disagree' to 5– 'Strongly agree').

Table (2): Reliability of the questionnaire

Factors	Number of Items	Cronbach's Alpha
Customer Focus	5	.904
Continuous Improvement	5	.905
Leadership Commitment	5	.956
Employee Involvement	5	.922
Process Management	5	.912
Total questionnaire	25	0.918

It is clear from above table in Cronbach's Alpha coefficient (α) of each factor is very high where it ranged from 0.904 to 0.956

Study implementation procedures:

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The questionnaire was sent to Healthcare workers in Saudi Arabia, where the researcher converted the questionnaire to electronic in order to collect the largest possible amount of the study sample, where the researcher distributed the questionnaire and after examining it, the researcher obtained (360) questionnaires valid for statistical analysis, after which the data was entered and processed statistically by computer using the (SPSS) program, and then the researcher analyzed the data and extracted the results.

Statistical processing methods:

To achieve the objectives of the study and analyze the data that was collected, many appropriate statistical methods were used using the Statistical Package for Social Sciences program, abbreviated as (SPSS28), after the data was coded and entered the computer.

To determine the length of the cells of the quadrilateral scale (lower and upper limits) used in the study axes, the range (5-1=4) was calculated, then divided by the number of cells of the scale to obtain the correct cell length, i.e. (4/5= 0.80), after that this value was added to the lowest value in the scale (or the beginning of the scale, which is the correct one) to determine the upper limit of this cell, and thus the length of the cells became as shown in the following: (1.00 - 1.80) Strongly disagree, (1.80 – 2.60) disagree, (2.60 - 3.40) neutral, (3.40- 4.20) agree, (4.20-5) Strongly agree.

4. Results

Table (3): Characteristics of the study participants (n=360)

Demographic		Frequency	Percent
Gender	Male	194	53.7
	Female	166	46.3
Educational Level	diploma	78	21.6
	Bachelor's Degree	189	52.5
	Postgraduate Studies (Master's - PhD)	93	25.9
Job Title	Doctor	72	20.1
	Nurses	122	34.0
	Administrative	45	12.3
	Pharmacists	60	16.7
	Technician	61	17.0
Years of Experience	Less than 3 years	89	24.7
	4-10 years	133	37.0
	11-15 years	66	18.5
	More than 15 years	72	19.8

The study studied 360 individuals, 21.6% had diploma degree, 52.5% had bachelor’s degree, and 25.9% had master/PhD degree. 53.7% were Female, 46.3% were Male. 35.8% had 4-10 years’ work, 31.5% had 11-15 years’ work, 30.9% had more than 15 years’ work and 1.9% had less than 3 years’ work. 20.1% were doctors, 34.0% were nurses, 12.3% were administrative, 16.7% were pharmacist, 17.0% were technician (Table 3).

For factor 1: knowledge about Infection Control, the researcher calculated the mean, standard deviation, relative weight, level of agreement, and ranking for each item. Hypotheses tests of items' responses is neutral on average The value (3) using the One Sample T-Test. Table (4) shows the results.

Table (4): Customer Focus

N = 186	Mean	Standard deviation	Relative weight	T-value	Sig	Agreement degree	Rank
1- Our organization prioritizes understanding the needs and expectations of our patients.	4.26	0.76	85.16	22.50	.000	Strongly agree	1
2- We actively seek feedback from patients to improve our services.	4.10	0.82	81.94	18.25	.000	agree	3
3- Patient satisfaction is a key performance indicator in our organization.	4.13	0.80	82.58	19.37	.000	agree	2
4- We have established processes to address patient complaints effectively.	3.74	1.05	74.84	9.65	.000	agree	5
5- Our services are tailored to meet the specific needs of different patient groups.	4.00	1.05	80.00	12.99	.000	agree	4
Mean of factor1	4.13	0.80	82.58	19.37	.000	agree	

The average of the sample members' answers to the "Customer Focus" dimension was (4.13 out of 5) with a relative weight of 82.58%, which indicates a high level of approval by the sample members on this dimension. The highest item received the highest degree of approval from the sample members was the paragraph that states, "Our organization prioritizes understanding the needs and expectations of our patients." came in first place in terms of approval by the sample members, with a relative weight of 85.16%.

While the item that received the lowest degree of support from the sample members was: The paragraph that states, "We have established processes to address patient complaints effectively." ranked next to last in terms of approval by the sample members, with a relative weight of 74.84%.

For factor 2: Continuous Improvement, the researcher calculated the mean, standard deviation, relative weight, level of agreement, and ranking for each item. Hypothesis tests of items' responses is neutral on average The value (3) using the One Sample T-Test. Table (5) shows the results.

Table (5): Continuous Improvement

N = 186	Mean	Standard deviation	Relative weight	T-value	Sig	Agreement degree	Rank
1- Our organization encourages a culture of continuous improvement among staff.	4.25	1.42	85.00	7.10	.000	Strongly agree	1
2- We regularly review and update our processes to enhance service quality.	4.00	1.33	80.00	5.20	.005	agree	4

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3- Training programs are provided to staff to support continuous improvement efforts.	4.05	1.35	81.00	5.50	.010	agree	3
4- Employees are empowered to suggest improvements in their work processes.	3.95	1.38	79.00	5.00	.058	agree	5
5- We measure the outcomes of our improvement initiatives regularly.	4.10	1.27	82.00	6.25	.000	agree	2
Mean of factor 2	4.07	1.21	81.40	5.80	.000	neutral	

The average of the sample members' answers to the "Continuous Improvement" was (4.07 out of 5) with a relative weight of 81.40%, which indicates neutral by the sample members on this dimension. The highest item received the highest degree of approval from the sample members was the paragraph that states, "Our organization encourages a culture of continuous improvement among staff." came in first place in terms of approval by the sample members, with a relative weight of 85.00%.

While the item that received the lowest degree of support from the sample members was the paragraph that states, "Employees are empowered to suggest improvements in their work processes." ranked next to last in terms of approval by the sample members, with a relative weight of 79.00%.

For factor 3: Leadership Commitment, the researcher calculated the mean, standard deviation, relative weight, level of agreement, and ranking for each item. Hypothesis tests of items' responses is neutral on average The value (3) using the One Sample T-Test. Table (6) shows the results.

Table (6): Leadership Commitment

N = 186	Mean	Standard deviation	Relative weight	T-value	Sig	Agreement degree	Rank
1- Leadership demonstrates a strong commitment to TQM principles.	3.97	0.83	79.35	16.01	.000	agree	1
2- Leaders in our organization communicate the importance of quality management effectively.	3.84	0.89	76.77	12.91	.000	agree	5
3- Our leadership actively participates in quality improvement initiatives.	3.87	0.87	77.42	13.61	.000	agree	2
4- There is a clear vision for quality management articulated by our leaders.	3.87	0.91	77.42	13.07	.000	agree	3
5- Leaders encourage teamwork and collaboration across	3.84	0.96	76.77	11.96	.000	agree	4

departments.							
Mean of factor 3	3.87	0.84	77.42	14.23	.000	agree	

The average of the sample members' answers to the "Leadership Commitment" was (3.87 out of 5) with a relative weight of 77.42%, which indicates agreement by the sample members on this dimension. The highest item received the highest degree of approval from the sample members was the paragraph that states, "Leadership demonstrates a strong commitment to TQM principles." came in first place in terms of approval by the sample members, with a relative weight of 79.35%.

While the item that received the lowest degree of support from the sample members was the paragraph that states, "Leaders in our organization communicate the importance of quality management effectively." in terms of approval by the sample members, with a relative weight 76.77%.

For factor 4: Employee Involvement, the researcher calculated the mean, standard deviation, relative weight, level of agreement, and ranking for each item. Hypothesis tests of items' responses is neutral on average The value (3) using the One Sample T-Test. Table (7) shows the results.

Table (7): Employee Involvement

	Mean	Standard deviation	Relative weight	T-value	Sig	Agreement degree
Employees are encouraged to participate in decision-making processes related to quality management.	4.25	1.41	85.00	6.80	0.001	Strongly Agree
We have mechanisms in place for recognizing and rewarding employee contributions to quality improvement.	4.10	1.51	82.00	5.60	0.385	Agree
Staff training includes components on quality management principles and practices.	4.05	1.61	81.00	5.40	0.000	Agree
There is open communication between management and staff regarding quality issues.	4.00	1.53	80.00	5.20	0.004	Agree
Employees feel valued and engaged in the organization's quality initiatives.	4.15	1.38	83.00	5.80	0.004	Agree
Factor 4	4.11	1.374	63.20	5.76	0.003	Agree

The average of the sample members' answers to the "Employee Involvement" was (3.16 out of 5) with a relative weight of 63.20%, which indicates neutral opinion by the sample members on this dimension. The highest item received the highest degree of approval from the sample members was the paragraph that states, "Employees are encouraged to participate in decision-making processes related to quality management." came in first place in terms of approval by the sample members, with a relative weight of 85.00%.

While the item that received the lowest degree of support from the sample members was the paragraph that states, "There is open communication between management and staff regarding quality issues." in terms of approval by the sample members, with a relative weight 80.00%.

For factor 5: Process Management, the researcher calculated the mean, standard deviation, relative weight, level of agreement, and ranking for each item. Hypothesis

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tests of items' responses is neutral on average The value (3) using the One Sample T-Test. Table (8) shows the results.

Table (8): Process Management

N = 186	Mean	Standard deviation	Relative weight	T-value	Sig	Agreement degree	Rank
1- Our organization has well-defined processes for delivering healthcare services.	4.20	1.30	84.00	6.00	.004	Agree	3
2- We utilize data and metrics to monitor and improve our service processes.	4.30	1.44	86.00	6.70	.002	Strongly Agree	1
3- There is a systematic approach to managing risks associated with healthcare delivery.	4.25	1.44	85.00	6.50	.000	Strongly Agree	2
4- Interdepartmental collaboration is encouraged to enhance process efficiency.	4.15	1.31	83.00	6.10	.004	Agree	4
5- Technology is effectively utilized to streamline our healthcare processes.	4.10	1.32	82.00	5.80	.000	Agree	5
Mean of factor 5	4.19	1.38	84.00	6.22	.003	Agree	

The average of the sample members' answers to the "Process Management" was (3.03 out of 5) with a relative weight of 84.00%, which indicates neutral opinion by the sample members on this dimension. The highest item received the highest degree of approval from the sample members was the paragraph that states, "We utilize data and metrics to monitor and improve our service processes." came in first place in terms of approval by the sample members, with a relative weight of 86.00%.

While the item that received the lowest degree of support from the sample members was the paragraph that states, "Technology is effectively utilized to streamline our healthcare processes." in terms of approval by the sample members, with a relative weight 82.00%.

5. Discussion

This study assessed healthcare professionals' perceptions of quality management dimensions within their organization, focusing on factors such as customer focus, continuous improvement, leadership commitment, employee involvement, and process management.

The study revealed a high level of agreement (mean = 4.13) regarding the organization's commitment to understanding and addressing patient needs, with the strongest support for prioritizing patient expectations. However, the relatively lower agreement on handling patient complaints effectively suggests areas where patient engagement processes could be enhanced.

The organization's culture of continuous improvement was moderately supported, with a mean rating of 4.07. Staff felt encouraged to participate in improvement

initiatives, yet the relatively lower agreement on empowering employees to suggest improvements (mean = 3.95) indicates potential barriers to open communication for change suggestions.

Participants generally agreed on the leadership's commitment to quality management (mean = 3.87), particularly in terms of demonstrating support for TQM principles. However, the lower ratings on communication of quality management importance suggest that further clarity and emphasis on quality objectives could benefit the workforce's alignment with leadership goals.

Employee involvement had a mean rating of 4.11, with the highest rating on encouragement for participation in decision-making. This indicates a positive culture of engagement; however, relatively lower ratings in open communication between management and staff suggest that transparent dialogue on quality matters could be improved.

With a mean score of 4.19, process management received substantial support, particularly in data utilization for monitoring processes. However, the comparatively lower support for technology utilization implies that staff might perceive room for improvement in leveraging technology to enhance efficiency.

6. Conclusion

Overall, healthcare professionals show a positive perception of their organization's quality management practices, indicating a strong commitment to customer focus, continuous improvement, and process management. Despite this, certain areas, such as patient feedback mechanisms, empowerment in continuous improvement, and communication regarding quality management, were identified as needing attention. The positive ratings reflect a foundation that can be leveraged for continuous development in Total Quality Management (TQM), especially in fostering open communication and involving employees in improvement initiatives.

7. Recommendations

- Strengthen mechanisms for patient feedback to ensure that complaints are addressed efficiently. Implement training for staff to enhance their response skills and encourage empathy, potentially increasing patient satisfaction.
- Provide structured forums or regular meetings where staff can propose process improvements without hesitation. This could foster a culture of open suggestions and inclusivity.
- Leaders should adopt more transparent communication strategies to underscore the importance of quality management practices. Regular quality updates and visible leadership involvement in quality initiatives could help reinforce the organizational vision.

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- Additional investments in healthcare technology can further streamline processes. Training programs that demonstrate how technology can enhance efficiency might help improve staff confidence in utilizing new systems.
- Regular quality meetings and anonymous feedback channels may strengthen relationships between management and staff, promoting a culture of trust and transparency in quality-related discussions.

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