

The Feasibility of Implementing Total Quality Management: A Case Study of Cyrene Teaching Hospital in Shahat City-Libya Farag A. Buhliga

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الملخص:

أدى تزايد الضغوط المفروضة على المنظمات العامة لتحسين جودة الخدمات والأداء التنظيمي إلى تنامي الاهتمام بإدارة الجودة الشاملة (TQM) بوصفها مدخلاً إدارياً متكاملًا. وعلى الرغم من الانتشار الواسع لتطبيق هذا المدخل في الاقتصادات المتقدمة، فإن الأدلة التجريبية المتعلقة بإمكانية تطبيقه في مؤسسات الرعاية الصحية العامة في الدول النامية ما تزال محدودة.

هدفت هذه الدراسة إلى تقييم إمكانية تطبيق إدارة الجودة الشاملة في مستشفى قورينا التعليمي بمدينة شحات، وذلك من خلال فحص عدد من الأبعاد التنظيمية الرئيسية، من بينها التزام الإدارة العليا، ومشاركة العاملين، والتدريب، والتحسين المستمر، والتخطيط الاستراتيجي، والتركيز على المستفيدين من الخدمة. وقد اعتمدت الدراسة المنهج الوصفي-التحليلي، وتم جمع البيانات باستخدام استبانة مُنظمة وُزعت على العاملين الإداريين والطبيين بالمستشفى، ثم جرى تحليل البيانات باستخدام الإحصاءات الوصفية واختبارات الثبات.

أظهرت نتائج الدراسة وجود مستوى متوسط إلى مرتفع من الجاهزية لتطبيق إدارة الجودة الشاملة، حيث برز التزام الإدارة العليا ومشاركة العاملين بوصفهما من أهم العوامل الداعمة للتطبيق، في حين تبين أن ممارسات التحسين المستمر والتقييم المنهجي للأداء تُعد من المجالات التي تتطلب مزيداً من التطوير. وتشير النتائج إلى أن النجاح في تطبيق إدارة الجودة الشاملة في مؤسسات الرعاية الصحية العامة لا يعتمد فقط على التزام الإدارة، بل يتطلب أيضاً استدامة التعلم التنظيمي وتبني آليات تحسين منظمة. تُسهم هذه الدراسة في إثراء الأدبيات الإدارية من خلال تقديم أدلة تجريبية من سياق إقليمي لم يحظَ بالاهتمام الكافي في الدراسات السابقة، كما توفر رؤى عملية لصناع القرار والمديرين الراغبين في تعزيز الأداء التنظيمي وجودة الخدمات في مؤسسات الرعاية الصحية العامة.

الكلمات المفتاحية: إدارة الجودة الشاملة؛ الجاهزية التنظيمية؛ الرعاية الصحية العامة؛ جودة الخدمة، مستشفى قورينا.

Abstract:

The growing pressure on public organizations to improve service quality and organizational performance has increased interest in Total Quality Management (TQM) as an integrated managerial approach. Despite its wide adoption in developed economies, empirical evidence

on the feasibility of implementing TQM in public healthcare institutions in developing countries remains limited. This study aimed to assess the feasibility of implementing TQM in Cyrene Teaching Hospital in Shahat city by examining key organizational dimensions, including top management commitment, employee involvement, training, continuous improvement, strategic planning, and customer focus. A descriptive–analytical research design was adopted, and data were collected through a structured questionnaire administered to administrative and medical staff. The data were analyzed using descriptive statistics and reliability tests. The findings indicated a moderate to high level of readiness for TQM implementation. Strong commitment from top management and employee involvement emerged as key enablers, while continuous improvement practices and systematic performance evaluation were identified as areas requiring further development. The results suggest that successful TQM implementation in public healthcare institutions depends not only on managerial commitment but also on sustained organizational learning and structured improvement mechanisms. This study contributed to the management literature by providing empirical evidence from an under-researched regional context and offers practical insights for managers and policymakers seeking to enhance organizational performance and service quality in public healthcare organizations.

Keywords: Total Quality Management; Organizational Readiness; Public Healthcare; Service Quality; Cyrene hospital.

1. Introduction:

Public healthcare organizations worldwide face increasing challenges related to service quality, efficiency, and rising stakeholder expectations. These challenges have intensified the search for managerial approaches capable of improving organizational performance while ensuring sustainable service quality (Oakland, 2014; Goetsch and Davis, 2016). Within this context, Total Quality Management (TQM) has emerged as a comprehensive management philosophy that emphasizes continuous improvement, employee involvement, customer focus, and leadership commitment as key drivers of organizational excellence (Deming, 1986). Although TQM has been widely implemented in private sector organizations, its application in public sector institutions—particularly healthcare organizations—remains complex and context-dependent. Public healthcare institutions operate under rigid administrative structures, resource constraints, and regulatory pressures that may hinder the effective adoption of quality management practices (Al-Damen, 2017; Talib et al., 2013). As a result, scholars have increasingly emphasized the importance of assessing organizational readiness before initiating TQM implementation in public organizations (Sousa and Voss, 2002). Previous studies suggest that the success of TQM initiatives depends on several interrelated organizational and managerial dimensions, including top management commitment, employee participation, training and capacity development, strategic planning, and continuous improvement mechanisms (Oakland, 2014; Goetsch and Davis, 2016). Empirical evidence indicates that leadership commitment plays a pivotal role in shaping quality-oriented cultures, while employee involvement enhances acceptance and sustainability of quality initiatives (Talib et al., 2011; Psomas and Antony, 2015). Despite the growing body of literature on TQM, most empirical studies have focused on manufacturing firms and organizations operating in developed economies. Research examining the feasibility of implementing TQM in public

healthcare institutions within developing-country contexts remains limited (Al-Damen, 2017; Talib et al., 2013). This gap restricts the applicability of existing findings and highlights the need for context-specific investigations that consider institutional, cultural, and resource-related factors.

In Libya, public healthcare institutions continue to face challenges related to service quality, administrative effectiveness, and patient satisfaction. Although awareness of quality management concepts has increased, the practical feasibility of implementing TQM in public hospitals has not been sufficiently explored. Cyrene Teaching Hospital, in Shahat city as a major public healthcare provider, offers a relevant context for examining organizational readiness for TQM implementation. Accordingly, this study aims to assess the feasibility of implementing Total Quality Management in Cyrene Teaching Hospital in Shahat city by examining key managerial and organizational dimensions from the perspective of hospital staff. By doing so, the study contributes to the management literature by extending empirical evidence on TQM readiness in public healthcare institutions within a developing-country context and by offering insights relevant to managers and policymakers concerned with improving organizational performance and service quality.

2. Problem Statement and Research Gap:

Despite its strategic role, Cyrene Teaching Hospital in Shahat city faces administrative bottlenecks, resource constraints, and the absence of a formally institutionalized quality system. Complaints related to waiting times, service coordination, and variability in clinical practices reflect the need for a more systematic approach to quality. However, little empirical evidence is available on the hospital's readiness to adopt TQM or on the internal factors that may facilitate or hinder such implementation. Existing Libyan studies have largely focused on isolated aspects of quality or on specific hospitals in other cities, such as Benghazi, and few have employed a comprehensive, multi-dimensional assessment of TQM readiness. The literature also reveals a broader gap regarding continuous improvement practices and their institutionalization in public hospitals. These gaps create uncertainty for decision-makers who wish to adopt TQM but lack diagnostic data on the current state of their organizations. Accordingly, the central problem addressed in this study is formulated as the following question:

“To what extent is the implementation of Total Quality Management feasible at Cyrene Teaching Hospital in Shahat city?”

3. Objectives and Research Questions:

3.1. Objectives:

The main objective of this study is to assess the feasibility of implementing TQM at Cyrene Teaching Hospital. Specifically, the study aims to:

1. Evaluate the overall organizational readiness for TQM.
2. Measure the level of leadership support for quality initiatives.
3. Examine the extent of employee involvement in quality-related activities.

4. Analyze the strength of the continuous improvement culture.
5. Explore the influence of demographic variables (age, gender, educational level) on perceptions of TQM dimensions.
6. Compare the findings with global, Arab, and Libyan studies on TQM in healthcare.
7. Provide practical recommendations for enhancing TQM feasibility at the hospital.

3.2. Research Questions:

- **RQ1:** What is the overall level of organizational readiness for implementing TQM at Cyrene Teaching Hospital in Shahat city?
- **RQ2:** How strong is leadership support for TQM-related initiatives?
- **RQ3:** To what extent are employees involved in decision-making and quality improvement activities?
- **RQ4:** How effective is the continuous improvement culture within the hospital?
- **RQ5:** Do demographic factors (age, gender, educational level) significantly influence perceptions of TQM dimensions?

4. Research Hypotheses:

Based on the literature and the research questions, the study tests the following hypotheses:

H1: There is a significant level of top management commitment toward TQM implementation.

H2: Employee involvement significantly supports the feasibility of TQM implementation.

H3: Training positively contributes to the feasibility of TQM implementation.

H4: Continuous improvement practices significantly influence TQM feasibility.

H5: Demographic variables (age, gender, and educational level) significantly influence perceptions of TQM dimensions.

5. Significance of the Study:

The study is significant at both practical and academic levels. Practically, it provides decision-makers at Cyrene Teaching Hospital in Shahat city with a diagnostic overview of their organization's strengths and weaknesses regarding TQM implementation. This can inform strategic planning, staff development programs, and resource allocation. Academically, the study contributes to the relatively scarce Libyan literature on TQM in public hospitals and offers a contextualized assessment that can be used for future comparative or longitudinal research. The study also responds to calls in the international literature for more research on TQM implementation in developing healthcare systems.

6. Theoretical and Conceptual Framework:

The theoretical framework of this study is grounded in TQM, conceived as a multidimensional approach that seeks to embed quality into all organizational processes through leadership commitment, staff empowerment, systematic training, continuous improvement, and customer focus. In healthcare, TQM emphasizes the integration of clinical and administrative processes to improve patient outcomes and service reliability.

TQM theory assumes that quality is the responsibility of every individual in the organization, not only top management. It also posits that sustainable quality improvement requires a supportive culture, data-driven decision-making, and continuous learning.

In this study, TQM at Cyrene Teaching Hospital in Shahat city is conceptualized through the following core dimensions:

- **Leadership commitment:** the extent to which hospital leaders articulate a clear vision for quality, allocate resources, and model quality-oriented behaviors.
- **Employee involvement:** the participation of staff in problem-solving, decision-making, and improvement initiatives.
- **Training and capacity building:** the provision of structured learning opportunities to enhance knowledge of quality concepts and tools.
- **Continuous improvement:** the use of systematic procedures such as the Plan–Do–Check–Act (PDCA) cycle to monitor and enhance processes.
- **Strategic planning:** the integration of quality objectives into formal plans, policies, and performance indicators.
- **Customer focus:** the identification and satisfaction of patient needs through responsive and patient-centered services.

These dimensions form the conceptual model guiding the empirical investigation and are operationalized in the study's questionnaire.

7. Operational Definitions:

For the purposes of this study, the following operational definitions are used:

- **Total Quality Management (TQM):**
The set of measurable practices captured in the questionnaire, including leadership, training, employee involvement, continuous improvement, strategic planning, and customer focus. Higher scores indicate higher readiness for TQM implementation.
- **Leadership:**
The degree to which hospital administrators demonstrate support for quality initiatives, communicate clear expectations, provide necessary resources, and guide staff towards improvement, as measured by Likert-scale items on vision, engagement, and supervision.
- **Training:**
The availability, frequency, and relevance of professional development programs related to quality concepts, patient safety, and performance improvement tools.

- **Employee Involvement:**

The extent to which staff participate in committees, decision-making, and problem-solving activities, including empowerment, motivation, and recognition.

- **Continuous Improvement:**

The presence of structured audit cycles, performance indicators, corrective actions, and regular review processes within departments.

- **Strategic Planning:**

The hospital's use of formal plans, documented policies, and quality objectives aligned with operational activities, including monitoring of indicators and long-term goal-setting.

- **Customer Focus:**

The efforts made by the hospital to identify patient needs, handle complaints, and measure patient satisfaction through systematic feedback mechanisms.

- **Organizational Readiness for TQM:**

The overall capability of the hospital to adopt TQM, measured by the combined scores of all questionnaire dimensions.

8. Literature Review:

The literature on TQM in healthcare highlights recurring themes related to leadership, training, employee involvement, continuous improvement, and strategic alignment. This section synthesizes global, Arab, and Libyan studies relevant to the present research.

8.1. Global Studies:

Sila (2020).

Examined organizational factors influencing TQM readiness across 315 institutions in Europe and Asia using a quantitative survey. Leadership commitment and employee empowerment were the strongest determinants of TQM readiness, while resistance to change emerged as a key barrier. This underscores the central role of leadership and empowerment in shaping quality culture.

Psomas & Antony (2017).

Evaluated TQM practices in 42 UK hospitals through a mixed-method design. Their findings showed that mature TQM systems significantly improved patient flow, reduced errors, and enhanced service reliability, leading to higher patient satisfaction.

Sadikoglu & Olcay (2014).

Investigated internal factors influencing employee involvement in TQM across manufacturing and service organizations. Training and skills development were strong predictors of involvement, and continuous improvement mediated the relationship between training and performance.

Talib et al. (2019).

Assessed the maturity of TQM dimensions in developing countries (India, Pakistan,

Malaysia) using 500 questionnaires. Continuous improvement was consistently the weakest dimension, while leadership and customer focus were relatively stronger. Lack of long-term planning hindered sustainability.

Kaynak (2021).

Explored the relationship between TQM and organizational performance using structural equation modeling on 380 organizations. TQM had a strong positive impact on performance only when strategically integrated into organizational plans; partial or isolated implementation yielded limited results.

8.2. Arab Studies:

Al-Khaldi (2020) – Jordan.

Measured TQM readiness in Jordanian public hospitals using a survey of 412 healthcare workers. Leadership was the strongest dimension, whereas continuous improvement was the weakest due to resource limitations and fragile follow-up systems. Staff also expressed doubts about the sustainability of quality initiatives.

Al-Shammari (2018) – Saudi Arabia.

Investigated training challenges that hinder TQM adoption in Saudi service institutions using a case study approach. Training programs were irregular, insufficiently specialized, and poorly linked to performance evaluation, leading many employees to perceive TQM as an administrative burden rather than a developmental tool.

El-Mezayen (2019) – Egypt.

Analyzed the role of employee motivation in achieving quality improvement in healthcare facilities based on a survey of 287 nurses and administrative staff. Motivation was a significant predictor of quality outcomes, and the absence of incentives increased resistance to TQM initiatives.

8.3. Libyan Studies:

Al-Hassi (2022).

Conducted a survey of 268 employees in three public hospitals in Benghazi. The study highlighted weak employee involvement, insufficient training, and a lack of performance monitoring as major obstacles to quality improvement.

Ben Amer (2021).

Examined awareness of quality concepts among 190 administrative employees in eastern Libyan hospitals. Findings indicated generally low awareness of TQM principles and limited familiarity with continuous improvement tools (PDCA, Kaizen).

El-Mabrouk (2020).

Evaluated strategic planning for quality improvement in five public hospitals using document

analysis and staff interviews. Most hospitals lacked long-term quality strategies, and quality departments often existed only nominally with minimal authority and weak links to measurable performance indicators.

Collectively, these Libyan studies portray a health sector in which leadership intentions may exist but are rarely supported by systematic training, staff involvement, or strategic planning—conditions directly relevant to Cyrene Teaching Hospital in Shahat city.

9. Methodology:

9.1. Research Design:

This study adopted a **descriptive–analytical research design**, which is appropriate for examining organizational readiness and assessing employees' perceptions regarding the feasibility of implementing Total Quality Management (TQM) in public healthcare institutions. The design allows for both the description of current practices and the statistical analysis of relationships among key organizational dimensions.

9.2. Study Population and Sample:

The study population consisted of **494 administrative, medical, and technical employees** working at Cyrene (Shahat) Teaching Hospital. Given the relatively big size of the population, a random sampling technique was employed. A total of 105 **questionnaires** were distributed, all of which were returned and deemed valid for statistical analysis, representing a response rate of approximately **100%**. This sample size is considered adequate for the objectives of the study and provides a reliable basis for statistical analysis.

9.3. Data Collection Instrument:

Data were collected using a **structured questionnaire** designed to measure key dimensions related to the feasibility of implementing Total Quality Management (TQM). The questionnaire consisted of **30 items** distributed across **six main dimensions**:

- Top management commitment (5 items)
- Employee involvement (5 items)
- Training and capacity building (5 items)
- Continuous improvement (5 items)
- Strategic planning (5 items)
- Customer (patient) focus (5 items)

Responses were measured using a **five-point Likert scale**, ranging from (1) *strongly disagree* to (5) *strongly agree*, with higher scores indicating higher perceived readiness for TQM implementation.

The questionnaire items were adapted from established TQM measurement scales reported in prior studies, ensuring content validity.

9.4. Validity and Reliability:

Content validity was ensured through a comprehensive review of relevant literature and previously validated TQM instruments. Reliability was assessed using **Cronbach's alpha coefficients** to evaluate internal consistency across the questionnaire dimensions.

9.5. Data Analysis Techniques:

Data were analyzed using statistical software. Descriptive statistics (means and standard deviations) were used to summarize respondents' perceptions of TQM dimensions. Inferential statistical analyses, including **independent samples t-tests** and **one-way ANOVA**, were conducted to examine differences in perceptions based on demographic variables (gender, age, and educational level). These analyses enabled the study to address the research questions and test the proposed hypotheses.

10. Results:

10.1. Reliability Analysis:

10.2. Descriptive Statistics:

Cronbach's alpha coefficients were calculated to assess the internal consistency of the questionnaire dimensions. As shown in Table (X), all coefficients exceeded the recommended threshold of 0.70, indicating **high reliability** of the measurement instrument.

Table 1. Reliability analysis using Cronbach's alpha

Dimension	Cronbach's Alpha
Leadership Support	0.89
Employee Involvement	0.86
Continuous Improvement	0.81
Organizational Readiness	0.91
Overall Scale	0.92

As shown in Table 1, all Cronbach's alpha coefficients exceeded the recommended threshold of 0.70, indicating a high level of internal consistency and confirming the reliability of the measurement instrument across all TQM dimensions. Descriptive statistics revealed a **moderate-to-high level of organizational readiness for TQM implementation**, as presented in Table (Y).

Table 2. Descriptive statistics of TQM dimensions

Dimension	Mean	SD	Interpretation
Leadership Support	4.02	0.51	High
Employee Involvement	3.71	0.62	Moderate–High
Continuous Improvement	3.29	0.58	Moderate
Organizational Readiness	3.82	0.49	Moderate–High
Overall TQM Readiness	3.71	0.55	Moderate–High

Table 2 indicates a moderate-to-high level of organizational readiness for TQM implementation. Leadership support recorded the highest mean value, reflecting strong managerial commitment, while continuous improvement scored the lowest, highlighting an area that requires further managerial attention.

10.3. Demographic Characteristics:

The demographic profile of respondents indicates a diverse workforce:

- **Gender:** 62% male and 38% female.
- **Age:** 21% under 30 years; 47% between 30–40 years; 23% between 41–50 years; 9% above 50 years.

Table 3. Demographic characteristics of respondents

Variable	Category	Percentage
Gender	Male	62%
	Female	38%
Age	< 30 years	21%
	30–40 years	47%
	41–50 years	23%
	> 50 years	9%
Education	Diploma	35%
	Bachelor's	54%
	Postgraduate	11%

The demographic profile presented in Table 3 demonstrates a diverse sample in terms of gender, age, and educational background, providing a suitable basis for examining demographic differences in perceptions of TQM dimensions.

- **Educational level:** 35% diploma holders; 54% bachelor's degree holders; 11% postgraduate qualifications.

This diversity supports the suitability of the sample for examining demographic differences in perceptions of TQM.

10.4. Inferential Analysis:

Table 4. Inferential analysis results for demographic variables

Variable	Dimension	Test	p-value	Result
Age	Employee involvement	ANOVA	0.04	Significant
Age	Continuous improvement	ANOVA	0.05	Significant
Gender	Employee involvement	t-test	0.03	Significant
Education	Most dimensions	ANOVA	< 0.05	Significant

As summarized in Table 4, the inferential analysis reveals statistically significant differences in selected TQM dimensions across demographic variables, indicating that age, gender, and educational level partially influence employees' perceptions of organizational readiness for TQM. The results of inferential statistical analyses indicate **partial demographic effects** on perceptions of TQM dimensions. *One-way ANOVA results revealed* statistically significant differences across age groups in:

- **Employee involvement** ($p = 0.04$)
- **Continuous improvement** ($p = 0.05$)

Younger employees reported higher levels of involvement and stronger support for continuous improvement initiatives.

Independent samples t-test results indicated that **female employees** reported significantly higher levels of employee involvement compared to male employees ($p = 0.03$).

Furthermore, educational level was associated with statistically significant differences in all TQM dimensions **except leadership support**, with respondents holding postgraduate qualifications reporting higher readiness levels. and managerial factors remain dominant.

Table 5. Hypotheses testing results:

Hypothesis	Description	Statistical Test	p-value	Result
H1	Top management commitment positively influences organizational readiness for TQM implementation	Descriptive analysis / Mean test	< 0.05	Supported
H2	Employee involvement positively influences organizational readiness for TQM implementation	Descriptive analysis / Mean test	< 0.05	Supported
H3	Training positively contributes to the feasibility of TQM implementation	Descriptive analysis / Mean test	< 0.05	Partially supported
H4	Continuous improvement practices significantly influence TQM feasibility	Descriptive analysis / Mean test	> 0.05	Weakly supported
H5	Demographic variables (age, gender, education) significantly influence perceptions of TQM dimensions	t-test / ANOVA	< 0.05 (partial)	Partially supported

Table 5 summarizes the results of hypotheses testing, indicating that leadership support and employee involvement significantly support organizational readiness for TQM implementation, while demographic factors exert partial effects.

11. Discussion:

This study examined the feasibility of implementing Total Quality Management (TQM) in a public healthcare institution by addressing a set of research questions related to organizational readiness, leadership support, employee involvement, continuous improvement culture, and the influence of demographic factors. In addition, the discussion interprets the empirical findings in relation to the proposed hypotheses, thereby integrating descriptive and explanatory perspectives.

11.1. Overall organizational readiness for TQM implementation (RQ1)

Addressing **RQ1**, the findings indicate that the overall level of organizational readiness for implementing TQM at Cyrene Teaching Hospital in Shahat is **moderate to high**. This suggests that the hospital possesses several foundational conditions required to initiate quality management practices, although full readiness has not yet been achieved. Such a pattern is consistent with prior studies emphasizing that readiness for TQM in public healthcare organizations tends to be incremental rather than comprehensive, particularly in developing-country contexts (Oakland, 2014; Al-Damen, 2017). These results provide a contextual understanding of feasibility, framing subsequent findings related to specific managerial dimensions.

11.2. Leadership support and employee involvement (RQ2, RQ3; H1, H2):

In response to **RQ2**, the results demonstrate a **strong level of leadership support** for TQM-related initiatives. This finding provides empirical support for **H1**, confirming that top management commitment plays a decisive role in shaping readiness for TQM implementation. The result aligns with extensive quality management literature identifying leadership commitment as a critical success factor for quality initiatives across sectors (Deming, 1986; Goetsch and Davis, 2016; Oakland, 2014). In public healthcare institutions, visible and sustained leadership engagement appears particularly important in overcoming administrative rigidity and resource constraints.

Regarding **RQ3**, the findings reveal that employees are **moderately to highly involved** in decision-making and quality improvement activities, thereby supporting **H2**. Employee involvement emerged as a key enabler of feasibility, reinforcing earlier empirical evidence that participatory practices enhance acceptance of organizational change and contribute to the sustainability of TQM initiatives (Talib et al., 2013; Psomas and Antony, 2015). Nevertheless, the results suggest that employee involvement is not yet fully institutionalized across all organizational units, indicating scope for further managerial action.

11.3. Training and continuous improvement culture (RQ4; H3, H4):

The analysis related to training indicates a **moderate contribution** to TQM feasibility, offering **partial support for H3**. While training programs exist, their effectiveness appears constrained by limited alignment with quality management objectives. This finding corroborates prior research emphasizing that training must be explicitly linked to quality tools, problem-solving techniques, and continuous improvement methodologies to effectively support TQM implementation (Oakland, 2014; Goetsch and Davis, 2016).

Addressing **RQ4**, the results further reveal that the culture of continuous improvement within the hospital is **relatively weak compared to other TQM dimensions**, resulting in **weak support for H4**. Although some improvement initiatives are present, they lack systematic structure, performance measurement, and feedback mechanisms. This outcome is consistent with earlier studies reporting that public sector organizations often struggle to institutionalize continuous improvement due to bureaucratic constraints and underdeveloped performance evaluation systems (Sousa and Voss, 2002; Al-Damen, 2017). The findings suggest that

leadership commitment alone is insufficient without robust systems that support learning and sustained improvement.

11.4. Strategic orientation, customer focus, and demographic influences (RQ5; H5):

With respect to RQ5, the findings indicate that demographic variables exert a partial but statistically significant influence on employees' perceptions of selected TQM dimensions. Age was associated with significant differences in employee involvement and continuous improvement, while gender differences were observed in involvement levels. In addition, educational level significantly influenced most TQM dimensions, except leadership support. These results suggest that demographic characteristics shape perceptions of TQM readiness to some extent, although organizational and managerial factors remain more influential overall. Similar mixed demographic effects have been reported in previous quality management studies (Talib *et al.*, 2011; Psomas and Antony, 2015).

11.5. Synthesis of findings:

Taken together, the integrated analysis of research questions and hypotheses reveals that readiness for TQM implementation is **uneven across organizational dimensions**. While leadership support and employee involvement represent clear strengths, deficiencies in continuous improvement and performance evaluation pose significant challenges. These findings support the view that TQM adoption should be approached as a long-term strategic transformation rather than a set of isolated managerial practices (Sousa and Voss, 2002). By explicitly linking empirical results to both research questions and hypotheses, this study provides a coherent and context-sensitive understanding of the feasibility of TQM implementation in public healthcare institutions.

12. Conclusion:

This study set out to assess the feasibility of implementing Total Quality Management (TQM) in a public healthcare institution by examining key organizational and managerial dimensions.

Consistent with prior research emphasizing the role of leadership and organizational culture in quality initiatives (Deming, 1986; Oakland, 2014), the findings indicate a moderate to high level of readiness for TQM implementation. Strong top management commitment and employee involvement emerged as critical enablers, confirming earlier empirical evidence in both public and service organizations (Talib *et al.*, 2013; Al-Damen, 2017).

However, weaknesses in continuous improvement practices and performance evaluation suggest that TQM implementation requires more than managerial support alone. As noted by Sousa and Voss (2002), sustainable quality improvement depends on structured systems, learning mechanisms, and systematic performance measurement. These results reinforce the view that public healthcare organizations must adopt a holistic and long-term approach to quality management.

13. Contribution to the Literature:

This study contributes to the management and quality management literature in several important ways.

First, it extends prior research on TQM by providing empirical evidence from a public healthcare institution in a developing-country context, addressing a gap frequently highlighted in the literature (Talib, Rahman and Qureshi, 2011; Psomas and Antony, 2015). By focusing on organizational readiness rather than post-implementation outcomes, the study responds to calls for more process-oriented and context-sensitive investigations of quality management adoption (Sousa and Voss, 2002).

Second, the integrated examination of multiple TQM dimensions offers a more comprehensive understanding of how managerial, human, and strategic factors interact to shape feasibility, supporting earlier conceptual frameworks proposed in quality management research (Oakland, 2014; Goetsch and Davis, 2016).

14. Managerial Implications:

The findings of this study offer several practical implications for managers and decision-makers in public healthcare organizations.

The central role of top management commitment confirms the importance of leadership-driven quality initiatives, as emphasized in foundational TQM literature (Deming, 1986; Goetsch and Davis, 2016). Managers should therefore move beyond symbolic support and actively engage in quality planning, communication, and monitoring activities.

Moreover, the results highlight employee involvement as a key driver of readiness, consistent with prior studies linking participatory management practices to successful quality initiatives (Talib et al., 2013; Psomas and Antony, 2015). Addressing gaps in continuous improvement and performance evaluation requires the development of formal measurement systems and training programs, which are widely recognized as essential components of sustainable quality management systems (Oakland, 2014).

15. Recommendations:

Based on the findings and discussion, the following recommendations are proposed:

1. **Strengthen strategic alignment:**

Translate leadership commitment into clear, measurable quality objectives and integrate them into the hospital's formal strategic and operational plans.

2. **Develop structured training programs:**

Establish continuous professional development on TQM principles, tools, and healthcare quality standards, with particular emphasis on staff who have limited prior exposure to quality concepts.

3. **Enhance employee involvement:**

Create participatory committees, suggestion systems, and recognition schemes that reward contributions to quality improvement and encourage shared ownership of outcomes.

4. **Institutionalize continuous improvement:**

Implement PDCA cycles, regular internal audits, and data-driven performance monitoring to move from reactive problem-solving to proactive organizational learning.

5. **Establish or strengthen a Quality Unit:**

Provide a dedicated Quality Unit with clear authority, adequate resources, and responsibility for coordinating quality initiatives across departments.

6. **Improve communication and feedback mechanisms:**

Ensure that quality-related information flows effectively between management and staff, and that patient feedback is systematically collected, analyzed, and acted upon.

7. **Tailor interventions to demographic groups:**

Design targeted training and change-management strategies for older and less-qualified staff to reduce resistance and promote a shared culture of quality.

8. **Promote ongoing evaluation and research:**

Conduct periodic internal assessments and encourage academic collaborations to monitor progress in TQM implementation and refine strategies over time.

16. Limitations and Future Research:

This study is subject to several limitations:

- It is confined to a single public hospital, which may limit the generalizability of the findings to other institutions in Libya or elsewhere.
- The data are based on self-reported perceptions, which may be influenced by individual biases and social desirability.
- The cross-sectional design does not allow for conclusions about causal relationships or temporal changes.

Future research could extend this work by:

- Including multiple hospitals in different regions of Libya.
- Employing longitudinal designs to track progress in TQM implementation.
- Incorporating objective performance indicators such as patient outcomes, waiting times, and error rates.
- Using qualitative methods to explore cultural and organizational factors that shape quality initiatives in greater depth.

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