

# The Role of Implementing Total Quality Management in Improving the Performance of Public Hospitals in the Kingdom of Saudi Arabia

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## ABSTRACT

Total Quality Management (TQM) has emerged as a crucial approach for improving the performance of healthcare organizations, particularly in the Kingdom of Saudi Arabia. This study aims to examine the effectiveness of implementing TQM in Saudi public hospitals and identify the challenges associated with its successful application. The healthcare sector in Saudi Arabia faces numerous challenges, including rising costs, increasing prevalence of patients with multiple health conditions, economic constraints, technological advancements, and heightened patient demand for high-quality services. TQM offers a comprehensive strategy to address these challenges by transforming organizational attitudes, empowering the workforce, and focusing on patient satisfaction while minimizing costs. However, the implementation of TQM in Saudi hospitals is often inadequate, despite growing recognition of its importance. Key barriers include moderate levels of patient satisfaction, low job satisfaction among nurses, and poor work-life balance for healthcare professionals. A case study conducted in 2017 revealed five central themes related to healthcare quality and patient satisfaction: level of understanding, inter-institutional communication strategies, enhanced competency development and training, management and leadership, and barriers to improving quality. Addressing these challenges requires a

sustained commitment to policy reform, investment in human resources, and fostering a collaborative organizational culture. By tackling these obstacles and refining the implementation process, Saudi public hospitals can fully realize the potential of TQM to enhance service quality, meet patient expectations, and achieve sustainable improvements in healthcare delivery.

**KEYWORDS:** Total Quality Management, healthcare sector, TQM barriers, Saudi healthcare, healthcare management.

## 1. Introduction

The concept of "quality" can be understood through various perspectives and incorporates a diverse range of ideas. It encompasses not only the objective quality of goods and services primarily in terms of satisfying customer requirements but also subjective quality, which pertains to achieving acceptable standards in production quality (Alzoubi et al., 2019). From a business standpoint, research has proposed that quality management is closely tied to better corporate economics and improved business outcomes (Conti, 2012). Quality management, in fact, serves as a crucial strategic tool for enhancing an organisation's overall performance (Khan et al., 2011). Moreover, it is anticipated that the dynamics of quality management in the 21st century will be shaped by increasing economic pressures, intensifying global competition, heightened customer expectations, and the adoption of modern management methodologies (Conti, 2012). Notably, the significance of service quality became a focal point of academic inquiry during the 1980s and 1990s. This period marked the integration of quality assurance and quality management practices into organisations, especially within the manufacturing sector, as a critical requirement (Halis et al., 2017).

Regarding Total Quality Management (TQM), its primary aim is to provide organisations with the capability to deliver superior products and services (Kurupparachchi & Perera, 2010). Achieving high-quality outcomes for both employees and customers is typically the driving force behind the adoption of TQM (Fields & Roman, 2010). Another essential factor motivating organisations to embrace TQM is customer satisfaction (Chang et al., 2010). Additionally, TQM is designed to support the attainment of several secondary objectives, such as eliminating waste and minimising non-productive activities (Yusuf et al., 2007). TQM also plays a pivotal role in improving service quality and enhancing efficiency in resource utilisation (Ishfaq et al., 2016). One of the unique aspects of TQM is its emphasis on a collaborative and collective organisational approach. It seeks to sustain and improve quality through the concerted efforts of every individual within an organisation. This collaborative ethos is achieved through the adoption of the continuous improvement philosophy inherent in TQM (Talib et al., 2016).

In recent decades, there has been a noticeable rise in customer demands and expectations regarding service quality, with the healthcare sector being no exception (Halis et al., 2017). Healthcare services hold a significant position in bolstering the economy. For instance, the Organisation for Economic Co-operation and Development (OECD) reported that in 2018, the healthcare sector accounted for 9.5% of the gross domestic product (GDP) in European nations. Similarly, in the

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United States, the healthcare sector contributed 16.9% of GDP during the same period (Aburayya et al., 2020). This substantial economic contribution highlights the importance of ensuring high-quality healthcare products, processes, and services, making it a key priority for healthcare organisations (Alhashmi et al., 2020).

Moreover, the healthcare sector operates through intricate interactions involving not only healthcare professionals, such as doctors and nurses, and patients but also other key stakeholders, including pharmaceutical suppliers, regulatory authorities, and providers of non-medical equipment (Tosic, 2018). This complexity underscores the necessity of establishing and implementing a robust framework for effective Total Quality Management (TQM) within the healthcare sector. Consequently, the current study aimed to examine the TQM approach in the context of the healthcare sector by evaluating its effectiveness and identifying the challenges associated with its implementation in healthcare organisations.

### Description of TQM

The Total Quality Management (TQM) approach is designed to deliver products and services that align with customers' expectations and address their needs. In essence, it reflects the overarching culture and mindset of organisations (Halis et al., 2017). Furthermore, TQM is closely connected to the concept of Continuous Quality Improvement (CQI), with both focusing on enhancing the quality of products and services while embedding a sustained commitment to these improvements. These methodologies emphasise collaborative, multidisciplinary efforts to implement constructive changes within organisational processes and to assess the impact of these changes effectively (Balasubramanian, 2016). Edward Deming, an American statistician and a leading figure in the modern quality movement, is widely recognised as the pioneer of quality management. He defined "quality" as encompassing aspects of planning, service, conformance, and design.

### Concept of quality and TQM in healthcare

The concept of quality improvement in healthcare emerged during the 1850s. During this period, Florence Nightingale, a pioneer in nursing, emphasized the importance of proper hygiene and sanitation in reducing the mortality rates of soldiers during the Crimean War (VituriI & ÉvoraI, 2015). Her findings reinforced the idea that implementing quality assurance measures could enhance patient satisfaction and mitigate healthcare-related risks (Padilha, 2001). The healthcare sector necessitates unique and tailored quality management practices due to its distinct nature compared to conventional business and industrial sectors.

The first distinction lies in the healthcare sector's reliance on continuous interactions between patients and healthcare professionals such as doctors and nurses (Tosic, 2018). Additionally, healthcare providers are tasked not only with meeting the healthcare needs of their primary customers (patients) but also with satisfying third-party entities, such as family members or others financially responsible for the patients' care (Tosic, 2018). In this context, Total Quality Management (TQM) emerges as a comprehensive strategy aimed at transforming organisational attitudes and processes to empower the workforce to apply quality methods effectively. This

enables them to fulfil patient needs while minimising costs. In essence, TQM represents an approach to maximising patient satisfaction by balancing the benefits and drawbacks associated with healthcare products and services (Balasubramanian, 2016).

### Quality Management Standards in the Healthcare Sector

Several quality management standards are particularly relevant to the healthcare sector:

- **ISO 9000 (Quality Management):** The ISO 9000 family of standards, developed by the International Organization for Standardization (ISO), outlines the requirements for effective quality assurance and management systems. These standards aim to improve customer satisfaction by enhancing organisational systems and ensuring compliance with statutory quality regulations (Tosic et al., 2018).
- **EN 15224 (Quality Management System in Healthcare):** Representing European standards (EN), EN 15224 focuses on the quality management needs of healthcare organisations. It is designed to ensure the delivery of consistent healthcare services that meet patients' needs while promoting system improvements to boost customer satisfaction. Key considerations under this standard include appropriate care, patient engagement, evidence-based practices, socio-psychological integrity, and accessibility (Tosic et al., 2018).
- **ISO 15189 (Medical Laboratories):** This standard establishes criteria for ensuring quality and competence in medical laboratories. It assists regulatory bodies and customers in evaluating laboratory competence while enabling laboratories to assess their quality management practices (Tosic et al., 2018).
- **ISO 13485 (Medical Devices):** This standard specifies requirements for medical devices throughout their life cycle. It is applicable to various stages, including design, production, storage, distribution, installation, and servicing, to ensure the quality of medical devices (Tosic et al., 2018).
- **IWA 1 (Process Improvements in Healthcare Organisations):** The International Workshop Agreement (IWA 1) serves as a widely recognized quality management system in healthcare. It provides a set of guidelines for maintaining and enhancing the quality of healthcare organisations. Furthermore, it offers additional management insights, particularly in areas related to medical research and training (Tosic et al., 2018).

### Effectiveness of TQM in the Healthcare Sector

The healthcare sector is currently grappling with numerous challenges, including the rising costs of healthcare services, an increase in the prevalence of patients with multiple health conditions, economic constraints, a growing emphasis on technological advancements, and heightened patient demand for high-quality healthcare services (Alzoubi et al., 2019). These challenges can be effectively addressed through the adoption of appropriate quality management strategies by healthcare organisations, one of which is the implementation of Total Quality Management (TQM). A significant factor in determining the effectiveness of healthcare services is patient input. This includes patients' needs, communication

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about their health and conditions, and their expectations. Without a clear understanding of these inputs, it becomes challenging to deliver effective treatment or implement efficient quality management practices within healthcare organisations (Tosic et al., 2018).

## TQM in Saudi Hospitals

In the context of TQM, critical success factors (CSFs) refer to the essential elements required to ensure its successful implementation. Additionally, these factors provide insights into how TQM can be structured within organisations. Numerous studies have evaluated the implementation of TQM in Middle Eastern countries, including Saudi Arabia, by assessing these CSFs (Abanumy & Alshetri, 2015; Kumar & Sharma, 2015; Mohammad Mosadeghrad, 2014). For instance, a study in Saudi Arabia identified 21 CSFs associated with TQM implementation. Moreover, research has indicated a growing concern regarding the quality of healthcare services in Saudi Arabia (Alaloola & Albedaiwi, 2008; Alghamdi, 2014).

Despite the increasing recognition of TQM as a crucial requirement for Saudi hospitals, its application is often inadequate (Albejaidi, 2010). Various studies have explored the challenges that hinder the effective implementation of TQM in the Saudi healthcare sector. These challenges include moderate levels of patient satisfaction with healthcare services, low job satisfaction among nurses, and poor work-life balance for healthcare professionals in general. Since both nurses and patients play a vital role in the successful application of TQM in the healthcare sector, any issues impacting them constitute significant barriers to the proper implementation of TQM in healthcare services (Almalki et al., 2012; Ishfaq et al., 2016).

## Case Study: Key Themes

In 2017, a case study was conducted to examine the TQM practices in Saudi hospitals. Interviews with staff members from various hospitals revealed five central themes related to the quality of healthcare and patient satisfaction (Alqasimi, 2017).

### 1. Level of Understanding

The first key theme relates to the connection between TQM and the overall level of understanding within healthcare organisations. According to the analysis, one sub-theme was the need for enhanced strategic vision and policy planning. A gap in understanding was noted regarding the strategic vision and policy initiatives of the Saudi Ministry of Health (MoH). Multiple statements from the interviewees emphasized the necessity of incorporating patient-centred care within Saudi hospitals. Thus, strategic visioning and policy planning should be adopted even at the administrative levels of hospitals. Furthermore, the responses, including comments from head nurses, underscored that patient-centred care should be applied uniformly to all patients, regardless of social status, to ensure high-quality care for everyone. An increased understanding among employees at all levels was suggested to improve healthcare quality. Additionally, healthcare managers in Saudi Arabia showed a preference for the concept of total quality, indicating that TQM should

remain a priority on organisational agendas (Alqasimi, 2017).

## 2. Inter-Institutional Communication Strategies (IICS)

The second theme identified from the interviews pertains to communication. Interviewees highlighted significant limitations in communication, including inadequate policy and regulatory communication from the MoH, restricted inter-hospital communication, and insufficient interaction from the Healthcare System Advisory Board. These communication challenges were identified as critical obstacles to the successful implementation of TQM in Saudi healthcare organisations (Alqasimi, 2017).

## 3. Enhanced Competency Development and Training

The interviewees stressed the importance of financial investment in human resources (HR) to enhance TQM effectiveness. They suggested that increasing budgets for hospital staff, infrastructure, and facilities, while focusing on patient care, could improve the effectiveness of TQM in the Saudi healthcare sector. A notable sub-theme was employee job satisfaction, which was identified as a key factor influencing healthcare quality. For instance, nurses indicated that feeling valued leads to better performance and enhanced competency. Additionally, interviewees emphasized the importance of incorporating cultural aspects into training for expatriate nurses to improve their ability to meet patients' diverse needs. Consequently, the Saudi government could consider replacing expatriate nurses with local staff to reduce cultural barriers affecting TQM implementation (Alqasimi, 2017).

## 4. Management and Leadership

Hospital management should prioritize providing refresher and specialized training for nursing staff to optimize TQM implementation. Key sub-themes included setting standards, such as creating metrics for measuring patient satisfaction, and offering incentives like financial rewards for staff. Another sub-theme was managerial commitment to patient-centred care, which interviewees recommended should be a central focus for healthcare managers. Additionally, fostering a participatory culture or leadership style emerged as a crucial element. Engaging hospital employees, including nurses, in meetings and decision-making processes was reported to significantly enhance the quality of healthcare services in Saudi Arabia (Alqasimi, 2017).

## 5. Barriers to Improving Quality

The interviews revealed several barriers that hinder the improvement of healthcare quality (Alqasimi, 2017):

1. Nurse-Related Barriers:
  - o Staff shortages were reported by seven interviewees.
  - o Nine interviewees highlighted a lack of time for patient treatment.
  - o Four interviewees pointed to the pressures of heavy workloads.

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- o Psychological barriers, including disinterest in nursing and reluctance to learn advanced treatment methods, were identified as detrimental to healthcare quality.

- o Language barriers, especially for expatriate nurses lacking Arabic proficiency, posed significant communication challenges with patients.

## 2. Patient-Related Barriers:

- o Nine interviewees mentioned that patient behaviour heavily influences healthcare quality improvements.

- o Patient-related challenges included refusal to accept treatment and disrespectful behaviour, often linked to varying literacy, education levels, or cultural and ethnic differences.

## 3. Administration-Related Barriers:

- o Ineffective administration by hospital management resulted in employee dissatisfaction.

- o Inadequate training provided by educational instructors in healthcare quality improvement further hindered TQM implementation.

## Barriers to Effective TQM Implementation

The following factors have been identified as challenges to successfully implementing Total Quality Management (TQM) practices in healthcare organisations:

### Requirement for a Long Implementation Duration

Although many organisations have adopted TQM to enhance their performance, several failures in its application have also been observed (Kumar & Sharma, 2015). A key challenge is that achieving tangible results through TQM is often a slow and time-consuming process. This delay underscores the observation that the longer an organisation commits to implementing TQM, the greater the likelihood of its eventual success (Talib et al., 2013).

### Lack of Resources

Healthcare services display significant disparities across countries globally. For instance, certain health indicators suggest that developed countries provide superior healthcare services compared to developing nations. Furthermore, within the category of developing countries, the quality of healthcare services can vary greatly (Halis et al., 2017). These differences are not limited to the services offered but also extend to structural factors and the overall quality of healthcare systems. The primary reason for these disparities lies in developed countries' greater access to resources and their stronger focus on improving healthcare systems through more robust regulations, methodologies, and approaches (Halis et al., 2017).

### Limited Commitment

A lack of involvement and insufficient commitment among healthcare professionals is another significant obstacle to successful quality management and improvement in hospitals. This issue often arises when specialists and physicians show reluctance to engage with TQM procedures, primarily due to limited commitment to their respective institutions (Balasubramanian, 2016).

### Diffusion of Interests

The personal interests of many doctors often diverge from the overarching goals and objectives of the hospitals in which they work. This misalignment of interests can significantly impede efforts to improve healthcare services and implement necessary reforms (Balasubramanian, 2016).

### Improper Hospital Structure

Another critical barrier is the lack of involvement of healthcare personnel in integrating TQM within hospital structures. This exclusion often prevents the effective incorporation of TQM practices into institutional frameworks (Balasubramanian, 2016).

## 2. Conclusion

The implementation of Total Quality Management (TQM) in the healthcare sector represents a comprehensive approach to improving service quality, patient satisfaction, and operational efficiency. However, the integration of TQM is not without its challenges. Factors such as prolonged implementation timelines, resource disparities between developed and developing nations, limited commitment among healthcare professionals, and structural barriers within hospitals significantly hinder the successful application of TQM practices.

In the context of Saudi Arabia, despite growing awareness of the importance of TQM in healthcare, several barriers persist, including moderate patient satisfaction, low job satisfaction among nurses, and cultural challenges faced by expatriate staff. Interviews and case studies highlight critical themes for improvement, including enhanced strategic visioning, effective communication strategies, investment in competency development, and participatory management approaches. Addressing these challenges requires a sustained commitment to policy reform, investment in human resources, and fostering a collaborative organisational culture.

By tackling these obstacles and refining the implementation process, healthcare organisations can fully realise the potential of TQM to enhance service quality, meet patient expectations, and achieve sustainable improvements in healthcare delivery.

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