

A STUDY ON IDENTIFYING TQM NEEDS AND BARRIERS IN IMPLEMENTATION ON HOSPITALS IN THOOTHUKUDI DISTRICT, TAMIL NADU

A. Aysha Muzammila and R. Samundeswari

Department of Commerce, A.P.C. Mahalaxmi College for Women, Affiliated to Manonmaniam Sundaranar University, India

Abstract

Total Quality Management (TQM) is a widely recognized management philosophy that has revolutionized various industries, including healthcare, by striving to enhance the quality of services provided to patients. TQM can help hospitals differentiate themselves from their competitors by providing higher quality care, better patient outcomes, and improved efficiency. This can help attract more patients and increase revenue, which is essential in an increasingly competitive healthcare market. TQM principles encourage employee involvement and empowerment, which can lead to increased job satisfaction, better teamwork, and improved staff performance. TQM emphasizes the need for continuous improvement and waste reduction. By implementing TQM practices, hospitals can increase efficiency in processes, reduce waste, and improve the overall quality of care. A study on TQM implementation in hospitals can help identify the most effective strategies for engaging employees and improving organizational culture. However, implementing TQM in healthcare is not a simple process and faces numerous challenges that hinder its success. This paper examines the challenges encountered in implementing TQM in healthcare in terms of identifying the quality of care within the hospitals and to analyse the barriers in improving quality and to explore the perceptions of nurses on training for them in TQM. In this study, we aim to explore the implementation of TQM principles in the healthcare facilities of Thoothukudi district, with a focus on improving patient care and outcomes. The study findings suggest that TQM implementation in the healthcare sector in Thoothukudi district is moderate, with a significant positive impact on healthcare quality. This is valuable guidance for healthcare organizations in Thoothukudi to optimize their TQM practices, streamline processes, reduce errors, and enhance patient satisfaction. This paper suggests some principles to follow while developing quality improvement in their organisations. By adopting TQM principles effectively, organizations can improve patient outcomes, safety, and overall satisfaction.

Keywords:

TQM, Healthcare, Hospitals, Quality Management, Barriers

1. INTRODUCTION

Total quality management is a system that makes quality the responsibility of all clinicians and administrators throughout the health care organization. In TQM, systems are established to prevent clinical and administrative problems, increase patient satisfaction, continuously improve the organization's processes, and provide healthcare services as good, or better, than those of the competitors. Customer focus, error prevention, employee participation, teamwork, systemization, leadership and continuous quality improvement are TQM universal management concepts that can be transferred to any business setting. TQM is a comprehensive organizational and attitude change strategy that aims to equip personnel with quality methods to reduce costs and meet the needs of patients and other customers. The objective is to promote a culture of continuous learning and improvement to enhance the quality of service delivery [1]. Quality in healthcare

refers to the process of maximizing patient satisfaction while taking into account all the potential gains and losses associated with a healthcare procedure. The goal is to optimize patient care while considering the costs and benefits involved [15].

TQM is a management approach that consists of both a philosophy and a method for achieving continuous quality improvement. According to experts, there are four key functions of good management, which include empowering clinicians and managers to analyze and improve processes and prioritizing customer preferences as the primary determinants of quality. Here, the term "customer" refers to both patients and providers involved in the healthcare process [16].

TQM uses quality as the fundamental measurement metric, continuous improvement as the philosophy and employee involvement as the approach. Healthcare sector plays a vital role in providing quality healthcare services to people, and its importance cannot be overstated [17]. The term quality of patient care is still subject to debate and has no specific definition yet, since the guides to quality of healthcare are highly probabilistic due to estimations of the outcomes [18].

The outcomes are not certain; therefore the measures of its quality must include dimensions of both the outcome of the care provided and processes by which the care is carried out. Consequently measures of quality of care should include an evaluation of the provider-patient relationship [19].

The healthcare sector in Tamilnadu State has been experiencing rapid growth in recent years, with the government investing heavily in healthcare infrastructure and services. However, there are still challenges in delivering quality healthcare services, including inadequate resources, lack of coordination, and quality assurance issues. The purpose of this study is to conduct an empirical investigation on the implementation of TQM in the healthcare sector in Thoothukudi district, with the aim of identifying the quality of care within the hospitals in Thoothukudi district and to analyse the barriers in improving quality in hospitals in Thoothukudi district and to explore the perceptions of nurses on training for them in TQM.

1.1 OBJECTIVES

- To identify the quality of care within the hospitals
- To analyse the perceptions of nurses on training for them on TQM
- To find out the barriers in improving quality care in hospitals.

1.2 STATEMENT OF THE PROBLEM

Healthcare organizations operating at various levels within our society are actively pursuing strategies to increase their profitability. To achieve comprehensive development in the healthcare system, significant emphasis is placed on the

implementation of Total Quality Management (TQM). TQM has become an imperative for both public and private hospitals worldwide, as it enables them to secure an increasing market share. By adopting TQM principles, healthcare organizations can effectively reduce costs, enhance operational efficiency, and deliver high-quality care to patients. Customer satisfaction stands out as the most critical factor in healthcare, as customers can exert influence and provide critical feedback. To ensure a substantial profit margin, healthcare organizations must conduct thorough analyses of all aspects of their operations, fostering mutual benefits for both customers and organizations while establishing a strong market presence.

Consequently, healthcare organizations must carefully manage the cost of appointments, medical treatments, hospital quality, doctor quality, and the timely provision of services. Striking a balance between cost-effective measures and satisfactory treatment is paramount for long-term success in the hospital industry.

Hospitals in Thoothukudi district, like healthcare organizations worldwide, are increasingly driven to enhance their financial performance while simultaneously delivering high-quality services. Implementing TQM principles can bring about significant cost reduction, improved operational efficiency, and the delivery of high-quality care to patients. To achieve a competitive market share, hospitals in Thoothukudi district must thoroughly analyze all aspects of their operations, ensuring both patients and organizations benefit from improved services and outcomes. Given the circumstances, it is essential to conduct an in-depth analysis of the challenges associated with implementing TQM in the healthcare industry within Thoothukudi district. This analysis serves as a valuable guide for hospitals in Thoothukudi district, enabling them to navigate the complexities of TQM implementation, leading to improved healthcare outcomes and sustained success in the region.

2. LITERATURE REVIEW

Al-Ani et al. [1] focusing on the implementation of TQM in hospitals within developing countries, researchers highlighted the need to align TQM practices with the specific characteristics and requirements of healthcare organizations. The study emphasized the significance of addressing cultural barriers, providing comprehensive training and support to staff during the implementation process, and adapting TQM principles accordingly.

Alshamsi et al. [2] Alshuridehet et al. [3] revealed that there were numerous descriptions for quality as the concept of quality is diverse in nature.

Deming [4] stated that TQM is an approach that emphasizes continuous improvement, customer satisfaction, and employee involvement in all aspects of an organization. It involves a set of principles, tools, and techniques that aim to enhance quality of services and products by reducing defects, errors, and waste.

Dove and Juran [5] defined the term quality as fitness for purpose. Evans and Lindsay [6] mentioned that TQM is helpful for continuous improvement of the quality in order to meet the needs and wants of customers.

Ghobadian et al. [7] conducted a comprehensive review addressing the challenges and barriers associated with implementing TQM in healthcare organizations. The study identified factors such as organizational culture, resistance to change, inadequate training and education, and lack of top management commitment as significant barriers to the successful implementation of TQM.

Haque and James [8] concluded that several studies have been conducted on TQM implementation in healthcare sector, and the critical success factors have been identified as top management commitment, employee involvement, continuous improvement, customer focus, and training and education.

Mian and Khalid [9] suggested that based on their analysis in their study that in healthcare, TQM has been used to improve patient safety, reduce medical errors, and enhance healthcare quality.

Mosadeghrad [10] identified that most of the health care sectors have started implementing TQM practices in order to improve the outcomes' quality and efficient services.

Nambiar and Barua [11] conducted a study on the implementation of TQM in Indian hospitals, identifying key needs and barriers. The research emphasized the importance of strong leadership commitment, employee involvement, continuous training and education, effective communication, and the integration of TQM principles into strategic planning processes. Additionally, barriers such as resistance to change, limited resources, and inadequate performance measurement systems were identified.

Pyzdek and Keller [12] noted that the application of TQM in business make them to compete in an international market.

Singh and Singh [13] conducted a study that explored the critical success factors and barriers to implementing TQM in hospitals. The findings underscored the importance of leadership commitment, employee involvement, continuous improvement, and effective communication as crucial factors for success. Conversely, barriers such as resource limitations, resistance to change, and a lack of awareness were identified as potential obstacles.

Talib et al. [14] observed that implementation of TQM in health care sectors must meet the expectations and satisfaction of the patients so as to give best caring outcomes.

3. METHODOLOGY

This study employs a mixed-methods approach, combining a quantitative survey and qualitative interviews, to investigate the implementation of Total Quality Management (TQM) in the healthcare sectors in Thoothukudi district. A sample of 120 respondents which includes nurses and others (doctors, administrative staff and patients) were selected randomly from hospitals across the district using a stratified random sampling technique.

4. ANALYSIS AND DISCUSSION

The Table.1 shows the respondents' perceptions of the hospital's quality control measures and healthcare provision.

Table.1. Quality of Care within Hospital

| Factors | Weighted Average Score |
|---|------------------------|
| The hospital applies quality control measures | 3.58 |
| Nursing care is provided according to patient’s needs | 3.56 |
| Nurses equipped to care for patients efficiently and effectively | 3.5 |
| Healthcare provision is reasonably quick according to patients’ conditions | 3.36 |
| Ethical issues are considered while providing healthcare in terms of respect for patients’ humanity | 3.35 |

Table.2. Perceptions of Nurses’ Training on TQM

| Factors | Mean | Median | Mode | SD |
|--|------|--------|------|-------|
| Training is important in helping nurses deal with medications and their actions | 3.4 | 4 | 4 | 1.3 |
| Training is important in helping nurses learn about health problems and how to deal with them | 3.6 | 4 | 4 | 1.02 |
| Training on TQM can improve nurses’ skills in communicating with patient and their families | 3.73 | 4 | 4 | 0.959 |
| Staff require more quality training | 3.39 | 4 | 4 | 1.154 |
| Government should support staff training, in order to achieve the optimum level of management skills | 3.36 | 3 | 4 | 1.2 |
| Nurse’s pay should be increased with training | 3.32 | 3 | 4 | 1.26 |
| Training is required to achieve higher quality | 3.58 | 4 | 4 | 1.09 |
| More leadership training is required | 3.6 | 4 | 3 | 1.05 |
| More management training is required | 3.59 | 4 | 4 | 1.02 |
| Government investment in nursing training programmers is necessary and valuable | 3.5 | 4 | 4 | 1.05 |
| Training on TQM is available for staff in my hospital. | 3.45 | 3 | 3 | 1.06 |
| The hospital supports nurse training in TQM | 3.33 | 3 | 3 | 1.01 |
| TQM and its trainees should be followed up through regular evaluations to update continuous training | 3.37 | 3 | 3 | 1.06 |

Table.3. Barriers in improving the quality of care

| Factor | Frequency of Ranks given by Respondents * Garrett Scores | | | | | | | Garrett Scores | Mean | Rank |
|--|---|------|------|------|------|------|------|----------------|-------|------|
| | 1*73 | 2*65 | 3*57 | 4*50 | 5*42 | 6*34 | 7*21 | | | |
| Shortage of nurses | 45 | 30 | 19 | 11 | 5 | 4 | 6 | 7540 | 61.17 | II |
| Communication may be barriers | 1 | 2 | 5 | 13 | 24 | 23 | 52 | 4020 | 33.5 | VII |
| Lack of staff Knowledge in their specialization | 54 | 20 | 18 | 12 | 8 | 4 | 4 | 7424 | 61.87 | I |
| Time deadline | 12 | 18 | 17 | 3 | 28 | 27 | 15 | 5574 | 46.45 | VI |
| Lack of staff experience | 29 | 10 | 11 | 17 | 8 | 18 | 27 | 5759 | 47.99 | V |
| Lack of time for staff to provide training in TQM | 39 | 1 | 16 | 9 | 21 | 19 | 20 | 6222 | 51.85 | III |
| Staff are busy in administrative roles which limit their time working toward quality of care | 12 | 28 | 15 | 27 | 3 | 17 | 18 | 5983 | 49.86 | IV |

The factor with the highest weighted average score is “The hospital applies quality control measures” with a score of 3.58, indicating that the majority of respondents agree that the hospital implements quality control measures. The factor with the lowest weighted average score is “Ethical issues are considered while providing healthcare in terms of respect for patients’ humanity”

with a score of 3.35, indicating a neutral response from the majority of respondents. The factors “Nursing care is provided according to patient’s needs” and “Nurses equipped to care for patients efficiently and effectively” received high scores of 3.56 and 3.5 respectively, indicating that respondents generally agree that nursing care is provided well. However, the factor

“Healthcare provision is reasonably quick according to patients’ conditions” received a relatively low score of 3.36, indicating a somewhat neutral response from the majority of respondents.

The Table.2 presents the perceptions of respondents regarding nurses’ training in TQM. The mean scores for various factors indicate that respondents generally believe that training in TQM is important for nurses and can improve their skills in dealing with medications (mean=3.4), health problems (mean=3.6), and communication with patients and their families (mean=3.73). The respondents also suggest that there is a need for more quality training (mean=3.39) and government and hospital support for nurses’ training in TQM (mean=3.36 and 3.33, respectively). The standard deviation shows that the responses are relatively consistent for most factors, but there is more variability in the perceptions about the need for increased pay for nurses with training (mean=3.32, SD=1.26). Overall, the data suggests a positive attitude towards TQM training among nurses, but also highlights the need for more resources and support to improve the quality of training (means ranging from 3.37 to 3.73, SDs ranging from 0.959 to 1.26).

The Table.3 shows the frequency of ranks and Garrette scores for seven factors affecting the quality of care in a healthcare setting, as rated by respondents. The Garrette scores represent the average weightage given to each factor by the respondents. Based on the mean Garrette score, the factors are ranked as follows: Lack of staff knowledge in their specialization (I) with a score of 61.87, Shortage of nurses (II) with a score of 61.17, Lack of time for staff to provide training in TQM (III) with a score of 51.85, Staff are busy in administrative roles which limit their time working toward quality of care (IV) with a score of 49.86, Lack of staff experience (V) with a score of 47.99, Time deadline (VI) with a score of 46.45, and Communication may be barriers (VII) with a score of 33.5.

5. SUGGESTION

To implement TQM in hospitals, it is recommended to establish a clear vision and mission for the hospital and communicate it to all employees. Developing a culture of continuous improvement is also important, which involves encouraging and recognizing employee suggestions for quality improvement, measuring and monitoring quality, training employees on quality management principles and techniques, and involving employees in quality improvement initiatives. Additionally, fostering teamwork and collaboration, establishing partnerships, and regularly reviewing and evaluating the effectiveness of quality improvement initiatives are key. Patient-centric care should be emphasized, and employees should be rewarded and recognized for their contributions to quality improvement. It is important to note that the specific actions taken will depend on the hospital’s individual needs and circumstances.

6. CONCLUSION

In conclusion, the study findings suggest that TQM implementation in the healthcare sector in Thoothukudi district is at a moderate level, and there is a significant positive impact of TQM on healthcare quality. The study suggestions provide some guidance for healthcare organizations in Thoothukudi district to enhance TQM implementation and improve quality in health care.

Overall, the implementation of TQM in the healthcare sector in Thoothukudi district has the potential to improve healthcare quality and benefit patients and society as a whole.

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