

# Total Quality Management and Innovation in Nursing Service Organizations

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#### **Abstract**

Organizations require providing high quality and innovative services to compete well and enhance their competitive advantage. The aim of this review was to discuss the literature regarding the total quality management and Innovation in service organizations. The electronic search was carried out in the Google Scholar, Pub Med and MEDLINE databases. The typical manufacturing organizations are more possible to attain better performance in the term of employee relations, consumer satisfaction, business performance and operational performance by means of total quality management. Different studies were carried out on the subject of total quality management and innovation. The association connecting of total quality management practices and the innovation performance is unclear. This review offers scientific evidence about effective use of total quality management and confirmed its applicability on the health care sector. The nurse manager is a major facilitator of total quality management programs. The total quality management implementation in hospital needs awareness about the quality management, preparation and development of both framework and customer awareness.

Keywords: TQM; Innovation Organization; Nursing Organization; Continuous Quality Improvement; Health Service Organization

## Introduction

The service industry represents a huge economic activity that involves numerous numbers of organizations such as health care and education. Such organizations require providing high quality and innovative services to compete well and enhance their competitive advantage [1].

The total quality management (TQM) was described as the process persistent methods for the sustenance of consumer satisfaction [2], and as procedures applicable with the aim of increasing services or product in terms of efficiency and quality [3]. In the health care sector, the TQM was described as "A comprehensive strategy of organizational and attitude change for enabling personnel to learn and use quality methods, in order to reduce costs and meet the requirements of patients and other customers" [4]. Numerous studies have assured that TQM is a potentially constructive way to promote learning and increase the organization's competitive advantage [5], and to enhance the innovation process in an organization [1,6].

Innovation was described as an implementation of an internally generated or purchased device, process, policy, program, system, product or service specifically innovative to the adopting organization [7].

TQM and innovation encompass the same significance and purposes at performance of organizations, particularly in the service industry. Both of them try to combine organization objectives and functions to satisfy the consumers and enhance competitive advantage [8]. They have an essential role in service business achievement. The importance of the relationship connecting TQM and innovation appears from the value of TQM and innovation in strengthening and creating competitive business [9].

Currently, the health care organizations have several challenges; fast-rising dependence on technology, increases health care services cost, burden on health care organizations to improve quality with low cost to deal with the global organizations that create standards and offer certificates [10-22], patient satisfaction [23], and health care providers satisfaction [24-28]. Such challenges push the health care planners and hospitals to adopt TQM as a system that has the ability to manage all of these challenges and resolve problems of health care organizations [29-32]. In terms of nursing, the responsibility of nurses is primarily limited in the application and evaluation of TQM. According to figures, nurses represent over 80% of the health care workforces in any hospital [33]. These nurses have an important role in the application and accomplishment of TQM.

# Aim of the Study

This review paper intends to discuss the important literature regarding the subject of TQM and innovation in service organizations and health service organization.

#### Method

# Search methods

The electronic search was carried out in a number of databases: MEDLINE, Google Scholar, and PubMed. The keywords incorporated "TQM; Innovation", "Service Organizations". The studies included in the review were: (a) published in the English language (b) published in 2010 and 2020 (c) talk about the subject of TQM and innovation in both service and health service organizations. Studies involving comments, editorials, letters were excluded.

## Search outcome

The examination of MEDLINE, Google Scholar, and PubMed databases providing a total of 200 references. When adjusting for duplicates 160 stayed. Of these, 100 studies were unwanted since when appraising the abstracts, it looked that these studies obviously did not meet the inclusion criteria. Twenty other studies were unwanted as the study full text was not accessible or the study could not be practicably translated into English. The remaining 40 full text references were examined in further details. It looked that these studies met the inclusion criteria as described and were included in the review. See flow diagram figure 1.

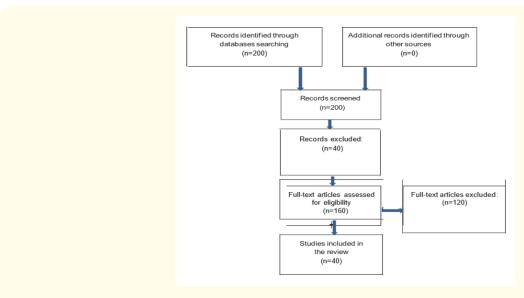


Figure 1: Flow of data through the different stages of the review.

#### **Results and Discussion**

The demand for quality and innovation in services organizations became central for their industry excellence and in competing throughout supporting their competitive advantage [34], and this encouraged several researchers to carry out studies on the subject of TQM and innovation.

Regarding the TQM implementation in services organizations, in Australia, in an assessment of 194 managers who worked in both manufacturing and non-manufacturing corporations. The study indicated that TQM significantly associated with product quality and product innovation performance [35]. Another study confirmed that there are significant variations in the association connecting TQM and organisational performance across industry sectors and diverse size companies, mainly on the impact of defect rates, licence costs and innovation of novel products. The study proposed that the association connecting TQM and innovation is stronger when investigated for a particular industry type [36]. In Malaysia, a study was conducted to examine the impact of TQM practices on an organization's innovation performance. The findings verify that TQM has a positive impact on innovation performance across five measured practices: customer focus, leadership, process management, strategic planning, and people management [37].

On the other hand, some previous studies propose a negative association connecting TQM and innovation. For example, a study was conducted in 2004 and found insufficient statistical confirmation to propose that TQM is related to innovation [37-39].

Despite the unclear relationship between TQM practices and the innovation performance, still the constant development, achieving consumer satisfaction and open culture, are core joint goals of TQM and innovation [39,40]. Consequently, the association connecting TQM and innovation can decide the organizational performance and its progress. As well, both provide a constant progress and sustaining the development [40]. And, the TQM and Innovation develop into central parts in founding and rising competitive advantage [5,7-9], See table 1.

Author	Major findings
[9]	TQM and Innovation develop into central parts in founding and rising competitive advantage
[35]	TQM significantly associated with product quality and product innovation performance
[36]	There are significant variations in the association connecting TQM and organizational performance across industry sectors and diverse size companies.
[37]	TQM has a positive impact on innovation performance across five measured practices: customer focus, leadership, process management, strategic planning, and people management
[38,39]	Found insufficient statistical confirmation to propose that TQM is related to innovation
[40]	TQM and innovation can decide the organizational performance and its progress. As well, both provide a constant progress and sustaining the development

**Table 1:** TQM implementation in services organizations.

Regarding the TQM implementation in health care service, there are a constantly needs to implement TQM in health care organisations to identify consumer requirements, a standard for good practice, and develop methods for providing appropriate health care [41]. The TQM implementation has the ability to increase consumer satisfaction, increase productivity, and accomplish high quality health care and improved morale of workers [42]. So, the TQM encouraged managers in hospitals to apply TQM dimensions in their hospitals [43].

The systematic assessment of the literature showed a scarcity of studies in the health care settings on the topic of TQM [44]. Past studies assessed the implementation of TQM dimensions in hospitals. For example, in Jordan studies established that TQM implementation in private hospitals was high compared with public hospitals [45,46]. In Nigeria, the TQM implementation was moderate (41). While, in Libya, TQM implementation at hospitals was assessed at about 33% [47].

Nurses achieve significant roles in the hospital, and they play a main role in the implementation of TQM. The nurse manager is a major facilitator of TQM programs. The TQM programs success need that the nurse manager should be involved through providing leadership to nurses and accept their accountability for quality as planned in their quality focus [48]. The nurse manager improves and announce to nurses' TQM structure. Develop effective approaches and support strategies to achieve TQM goals. And to be a role model for nurses regarding TQM culture [49]. However, the perception of nurse managers about the TQM practice principles was poor [49]. On the other hand, TQM implementation in hospital needs awareness about the quality management, preparation and development of both framework and customer awareness [50], See table 2.

Author	Major findings
[47]	TQM implementation was moderate.
[42]	TQM implementation has the ability to increase consumer satisfaction, increase productivity, and accomplish high quality health care and improved morale of workers.
[45,46]	TQM implementation in private hospitals was high compared with public hospitals
[47]	TQM implementation at hospitals was assessed at about 33%.
[48]	TQM programs success need that the nurse manager should be involved through providing leadership to nurses and accept their accountability for quality as planned in their quality focus.
[49]	The nurse manager improves and announce to nurses' TQM structure. Develop effective approaches and support strategies to achieve TQM goals. And to be a role model for nurses regarding TQM culture
[50]	TQM implementation in hospital needs awareness about the quality management, preparation and development of both framework and customer awareness

**Table 2**: TQM implementation in health care services organizations.

Additionally, researchers recommended a list of significant factors that may have an impact on the consequences of the TQM implementation: Organizational learning, leadership, teamwork, training, process management, and communication. Quality affirmation framework persuades health care providers, especially nurses, to endeavor for fabulousness in conveying quality care and to be more open and adaptable in testing new inventive ways to alter outdated frameworks [50-60]. In different populations, different settings and age groups [61-74].

#### **Conclusion**

Nowadays, nurses confront expanded work requests as a result of expansive ranges of control that has decreased their visibility and accessibility to strengthen and teach nursing staff, which led to disappointment for both medical caretakers and directors and undermining the quality of their working. The typical manufacturing organizations are more possible to attain better performance in the term of employee relations, consumer satisfaction, business performance and operational performance by means of TQM. This review offers scientific evidence about the effective use of TQM and confirmed its applicability on the health care sector, and primarily on nursing health care. The nurse manager is a major facilitator of TQM programs. The TQM implementation in hospital needs awareness about the quality management, preparation and development of both framework and customer awareness. And there are some factors that influence the consequences of TQM implementation.

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