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Assessment of Total quality management Practices in the healthcare sector on Patient outcome : A Systematic review

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ABSTRACT

The Research article is to have a discussion on TQM implementation and quality Practices in the hospitals system and to investigate out the relationship between TQM practices and organization performance of hospitals in patient outcome and patient satisfaction. This research is based on literature review of Quality Management and various critical success factors namely leadership, communication, employee involvement, customer focus, organization culture, strategic planning and patient loyalty hence improve hospital performance and patient satisfaction and patient outcome. This article has made an attempt to establish a positive relation between a second order construct of Total Quality Management and their influence on the organizational performance of hospitals and patient outcome. Searches across 10 computerized databases (CINAHL, EMBASE, MEDLINE, Scopus, Social Science Citation Index, Web of Science, and Google Scholar) were used to perform a systematic review with research synthesis. Studies offering information on Total Quality Management Practice well as in in the healthcare industry that were published in journals between 2013 and 2023 were qualified for inclusion. Eight research papers that passed the eligibility check conducted by the study's authors were included in the analysis. Total Quality management Practices impact varies greatly across research. this meta-analysis showed that Total Quality management Practices had a significant effect Patient outcome and patient satisfaction in healthcare system , despite the low quality of the data, which signalled uncertainty. Other comparisons produced contradictory results. Based on the findings, TQM is an effective way to improve Healthcare professionals' skills on patient satisfaction, but further high-quality research with adequate sample sizes is needed.

Keyword:- TQM, healthcare, quality, hospital outcome, patient satisfaction.

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INTRODUCTION

In Healthcare organization are of fundamental interests to all level of Hospitals in our nation. Eventually, increasing importance and reliance are placed on total quality management practices in healthcare systems to improve patient satisfaction . Due to this rising importance that is also reflected in the increasing percentage of national and international resources for both private and public sector to allocated in hospital management systems. Hospitals and other healthcare organization across the globe have impact , progressively implementing TQM to reduce costs, improve efficiency and provide high quality patient care. Contrary to popular belief, the TQM movements were not the start of concerns about quality in healthcare. The roots of quality assurance initiatives in healthcare extends at least as far back as the time of Florence Nightingales's work during the Crimean War(1854- 1856),when the introduction of nutrition, sanitation and infection control initiatives in war hospitals contributed to reduction in the death rate from 43% to 10%. TQM can be an effective and important part of hospitals' in the competitive environment in the healthcare industry. Thus, TQM, which places on improved customer satisfaction and hospital outcomes, offers the prospect of great market share and profitability in the healthcare industry.TQM can be an important part of hospitals competitive strategy in quality of healthcare system. Hospitals in competitive markets are more likely to attempt to differentiate themselves from their competitors on the basic of higher service quality. Thus, TQM which places a heavy emphasis on improvement in Customer satisfaction index that offers the prospect of grater combines internal quality measures with value analysis and conformance to specifications. Acceptable quality services not onlyinclude direct medical services such as diagnoses, medicines, surgery and treatment but indirect operations such as administration and purchasing whose costs are reflected in what the buyer pays. It may also include Total Quality of performance that is directly related to patient safety, security, attitude of nursing and word boy, role of doctors in terms of 'time' includes appointment, delay time, service time, timing with regards to medical treatment and surgery. People define quality in many ways. Some think of quality as superiority of excellence, others vies it as a lack of patient care and service defects. According to Crosby, quality is 'conformance to requirements'. (Zero defects). Today most mangers agree that the main reason to purse quality is to satisfy the customers. The American National Standards Institute (ANSI) and American Society Quality (ASQ) define quality as "The totality of

features and characterizes of a care or service that bears on its ability to satisfy given needs". The view of quality as the satisfaction of customer needs is often called fitness for use.

Assessment of TQM in Healthcare systems

Health system include a wide variety of quality aspects, all of which are important. In the case of medical services, the seller is doctors, hospitals, nursing homes, clinics, etc. because they offer health services for sale as stipulated prices. They buyeris the client or patient who buys thesehealth services at the stipulated prices. It may also include quality of performance thatis directly connected and closely related to healthcare such as food, housing, safety, security, attitude of employees, and other factors that arise in connection with hospitals and nursing homes. So, the time takes in to the fix an appointment, delay time, services time, timing with regard to medical treatment and surgery.An organization is said to be of quality service when it is able to provide services in accordance with standards (standard desicion), then can satisfy its customers (customer satisfaction), develops to be said to be of quality if customer delight is notonly satisfying, but tends to provide services that are in accordance with standards, providing excellent service. can satisfy its customers, and pay attention to theemotional aspect, namely how the customer's emotional response in receiving the services provided, and always thinking about the innovation aspect by providing services that exceed expectations. Recognizing the objectives and aspirations of customers, in this instance patients, is critical for patient happiness. Satisfied peopleare a very important asset since they will continue to utilize the services of theirchoice; on the other hand, unsatisfied consumers will tell others twice as much about their negative experiences. In relation to the quality management system, one tool that is considered to be able to help improve organizational performance to achieve organizational goals is Total Quality Management (TQM). Therefore, Total Quality Management (TQM) can be chosen as one of the methods. In the Health care sector, TQM motivates staff to increase their productivity through high and continuous performance and improvement with staff and patients having full satisfaction through strong strategies and effective plans. TQM is used to improve patient satisfaction, reduce costs and reduce medical errors. The requirements for implementing TQM inorganizations Healthcare depends on the organization's managers to make some changes in the structure, processes, work systems, and employees (Alolayyan et al.,2010).

Objective :- TO evaluate total Quality Management Practices on patient outcome in Hospitals.

MATERIAL AND METHODS:

CINAHL, EMBASE, MEDLINE, Scopus, Social Science Citation Index, Web of Science, and Google Scholar were among the electronic databases that were searched. The keywords "TQM," "healthcare "quality," "hospital outcome," "patient satisfaction" and "Healthcare professional" were used in searches related to total quality management on patient satisfaction. Each of these phrases was coupled with a different search term that was focused on total quality management on patient outcome. These included "TQM" in "healthcare," "Hospital," and "Patient satisfaction." The reviewer then conducted an independent evaluation of a selected sample of articles using data extraction questionnaires along with quality assessment tools that had already been established. Every single point on the item's rating scale was discussed in public to reach consensus.

Inclusion Criteria

1. Article reported the effect of Total quality management on Healthcare sector.
2. Full Text articles
3. Articles of any design written in English

Exclusion Criteria

1. Articles not reporting the effect of Total quality management on Healthcare sector.
2. Non peer reviewed articles

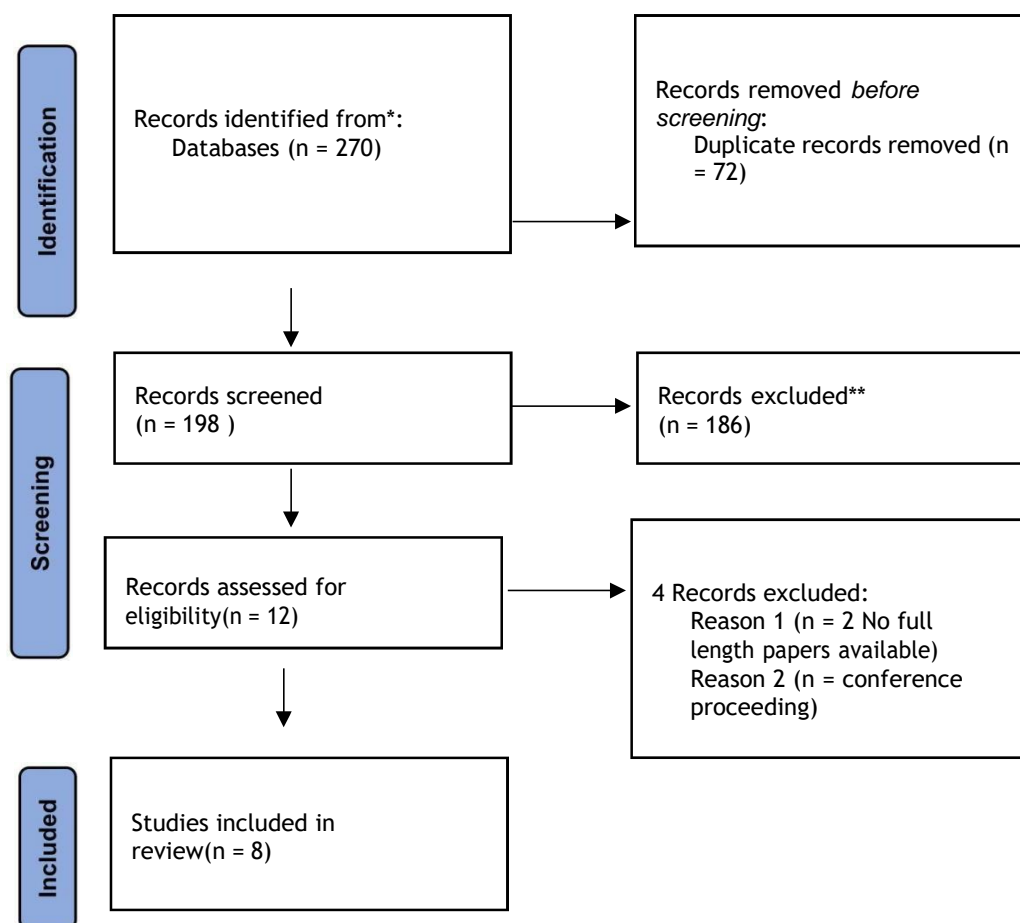
Quality Assessment :- There had been not any linguistic limitations when exploring a range of printed nor digital items. A number of websites were also employed to go through potential references on the internet. There were established criteria for inclusion and disqualification in writing. Wide standards for critical review were used to conduct a more complete quality assessment on selected publications.

These comprehensive quality assessments were utilized to assess heterogeneity and decide if meta-analyses were required. A detailed process was developed to choose the optimal control group for this experiment. The criteria for evaluating the literature have taken P.I.C.O. into account.

DATA EXTRACTION

The study design, Time period, participant characteristics, description and limitations were all gathered using a standard proforma. Inclusion and exclusion criteria were applied. The duplicate articles were removed. Total 270 articles were extracted. After applying the filters, the remaining articles were screened by the titles and full text. The remaining articles were fully read and additional articles were fully retrieved. The final 8 articles were extracted and charted as follows

Table 2: PRISMA FLOWCHART



Findings

AUTHOR	DESIGN	SAMPL E SIZE	KEY FINDING
Gaurav Puri (Gaurav Puri et <i>al.</i> , 2019)	Descriptive and cross- sectional.	251	Research has empirically proved that Quality practices have a significant influence on organization performance of hospitals. Although, there has been a limitation of less participation from the public hospitals in this survey, this research contributes to the private health-care sector in Punjab through providing empirical studies which can act as a reference for future studies. Also, the shift from towards good quality practices and increase in organization performance contributes significantly to the academic literature related to health-care quality as well as to the methodological part especially in terms of using Structural Equation Modelling analysis. Thus, future studies are suggested to extend the research geographically and include more hospitals especially from public sectors.
Mohannad Abu Daqar.(Mohanna a et <i>al.</i> 2020)	Descriptive and cross- sectional	200	Study aims to clearly address the role of TQM factors on the quality of private healthcare services in Palestine. The findings indicate a significant positive relationship between the private healthcare service quality and TQM. TQM factors (customer satisfaction, employee involvement, continual improvement,

			<p>processes, and top management commitment) predict 95% of the variation in the service quality of the private healthcare services in Palestine. The findings show that the continual improvements by these private healthcare organizations and centers are the key to successfully adopt and implement an effective TQM system inside their organizations and centers. Top management commitment is the main factor among all six factors of TQM, which is highly responsible in influencing the service quality of healthcare services in Palestine from the employees' point of view; decision-makers are responsible to follow up and keep the continual improvements of these centers. The notable issue was the high direct relationship between the continual improvements and processes.</p>
Muhsina Begum (Muhsina begum. al et.,2020)	cross-sectional comparative	226	<p>TQM is the system of activities directed at achieving delighted customers, empowered employees, higher revenues, and lower costs. Overall management system was found better in TQM implemented hospital than TQM non-implemented hospital. Providing training on TQM to service providers, increasing number of skilled</p>

			health service provider and be strengthening proper supervision and monitoring system could make the management better in both hospitals. the recommendations can be putted forward, TQM non-implemented hospital should implement TQM for better management, both hospital employees should be trained on TQM,
Zakariah, Zuraimi (Zakariah, Zuraimi al et 2021)	cross-sectional comparative	300	The components of Total Quality Management (TQM) that influence patient fulfillment in emergency clinics show restraint Focus, Obsession with Quality, Scientific Approach, Longterm ,responsibility, Teamwork, Continuous framework improvement, Education and preparing, Controlled opportunity, Involvement and Employee strengthening. The component of Total Quality Management (TQM) that most impacts patient fulfillment in clinics is the component of Focus on Patients. This is in accordance with the assistance framework utilized in emergency clinics today, to be specific Patient Centered Care (PCC). The PCC approach has been displayed to work on tolerant status through better correspondence and to support association among patients and suppliers. Components of Total Quality Management (TQM) that influence representative fulfillment in emergency clinics show restraint centre, fixation on quality, collaboration, ceaseless

			framework improvement, instruction and preparing, controlled opportunity, worker association and strengthening.
Emmanuel Otieno Awuor (Emmanuel Otieno Awuoral et 2013)	Descriptive and cross-sectional.	160	TQM has gained increasing popularity as a method to introduce transformation change in an organization managerial philosophy and operational effectiveness. The principles for implementation TQM well match principles long stated in philosophies long sated in philosophies of organization development and change. Whereas most investigations have identified benefits of TQM in manufacturing-type settings, this study sought to extend this knowledge to health-care organization.
Nyaz Salah (Nyaz Salah) al.et, 2022	Descriptive and cross-sectional.	370	In the study presented here has provided conclusive evidence to support the hypothesis that quality practices exert a considerable impact on the organizational effectiveness of hospitals. This research contributes to the private healthcare sector in Kurdistan by providing empirical studies that can act as a reference for future studies. The findings revealed that the highest value was between information and analysis as TMP practice with healthcare service performance, on the other hand, the lowest value was between the relationship between patient focus and healthcare service performance.

			In addition, employee involvement is another important aspect of TQM's success (Khan et al. 2020). Employees are the foundation of a business, and implementation can only take place at the ground level. In the future, researchers can try to determine whether or not there is a connection between TQM and performance in a variety of regions and then compare the results to one another.
Hilmi Atalç (hilmi Atalic 2021 al.et,2021)	Descriptive and cross- sectional.	380	study provides empirical evidence for the credibility of the health care quality standards, which have become a potential solution for improving the quality of health care services in a developing country. It validates a reliable method of measuring the performance of the healthcare sectors from the perspectives of healthcare providers and encourages other researchers' effectiveness of total quality management initiatives in the health sector.
Khaled Abdoh (Khaled Abdoh al.et.,2022)	Descriptive and cross- sectional.	200	The total quality management in hospitals in Sana'a governorate and in Ye men must be implemented with leadership support who push the wheel of quality forward, enhance the culture of customer focus, create the

			<p>appropriate environment for continuous improvement, support and respond to the training needs of workers and encourage everyone to develop a strategic plan for quality, which in turn will contribute to improving the quality of health services provided to beneficiaries in hospitals. The study recommended that healthcare facilities should invest in TQM in order to promote the healthcare quality services improvement.</p>
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DISCUSSION

According to the Research study review, total quality management practices and its effect on healthcare organization performance and particular importance to health-care professionals who are concerned with their hospitals management skills and implicate knowledge which influence their attitudes and willingness towards improvement and reinforcement in hospitals outcomes and patient satisfaction. Hospitals can develop the quality management and sanders operating procedure , profiles for the employees in accordance with implementation of strategies for quality strengthening in healthcare organization for hospital performance and patient satisfaction. The objective of this research had been to determine the influence of TQM implementation on the organization performance of hospitals and patient outcome . For this, several critical success factors for measuring quality in hospitals had been impact in the study. The results obtained from this research has shown a significant impact of good TQM practices on organization performance. Such findings are consistent with previous literatures that have found a effective relationship between TQM practices and hospital performance. It has been identify in the study that the key determinant factor for Quality Management success impact in the more intangible, behavioral factors of top management support, employee empowerment and employee involvement. Also, some of the more important TQM tools and techniques like customer focus and quality improvement rewards contribute to the successful implementation of TQM, as shown

by the factor loading. The research has identified critical aspects of TQM that can determine the success of a TQM program in the healthcare organization on patient satisfaction. These factors include top management commitment, customer focus, employee focus and employee involvement. The literature and the perspectives of several different authors have been discussed, and point of contention is that the most important key determinant variables affecting TQM are leadership, communication, and employee involvement. Strong executives who are interested in implementing TQM can steer their organizations through challenging periods and contribute to the overall improvement of their organizations' performance. In addition, communication between the highest levels of management and the lowest levels of employees is an essential component of the TQM implementation process. Research study also concludes that total quality management practices improve patient satisfaction and patient outcome in competitive environment in the healthcare sector.

LIMITATIONS

When interpreting the findings, a number of constraints should be taken into account, such as how the sample of people studied in the different publications was different and how the level and form of Total Quality Management Practices on patient satisfaction affect the result. quality of management Practices and clinical implementation ; the possibility of bias in the studies the fact were taken into account is questionable.

CONCLUSION

Research study concludes that Total Quality practices have a significant impact on organization performance of hospitals. Although, there has been a limitation of less participation the public hospitals in the healthcare system , this research contributes to the private health-care sector through which they improve patient outcome and hospitals performance . Also, the shift from towards good quality practices and increase in organization performance contributes significantly to the health-care quality as well as to the methodological part especially in terms of using Structural Equation Modelling analysis. TQM among healthcare providers is a way of managing to improve the effectiveness, flexibility and competitiveness of the health care facilities and services provided.

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