

A SCIENTIFIC PAPER TITLED: THE IMPACT OF TOTAL QUALITY MANAGEMENT ON THE PERFORMANCE OF HEALTHCARE STAFF IN GOVERNMENT HOSPITALS IN RIYADH CITY

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Summary:

The study aimed to explore the impact of Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh city, Saudi Arabia, as well as to assess the level of implementation of Total Quality Management and the performance of healthcare staff in government hospitals in the Kingdom of Saudi Arabia. The study used a descriptive analytical approach to achieve its objectives, and the sample consisted of 265 employees from government hospitals in Riyadh city from healthcare staff. Data was collected using a questionnaire, and the results showed a statistically significant positive relationship between the implementation of Total Quality Management and the performance of healthcare staff in government hospitals in Riyadh city. Based on these results, the study recommends the adoption of Total Quality Management by hospital management in Riyadh city as a framework for improving performance and developing healthcare processes. The study also emphasizes the importance of legislation and regulations that facilitate the implementation of Total Quality Management and urges the development of an effective accounting system for healthcare institutions. Additionally, the study advises the development of strategic plans for Total Quality Management based on the needs of beneficiaries, and the adoption of unified policies for both material and moral incentives for employees in the healthcare sector, aiming to create a work environment that encourages excellence and outstanding performance.

Keywords: Total Quality Management - Healthcare staff performance - Healthcare sector - Hospitals - Riyadh - Riyadh hospitals.

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Introduction

The recent decades of the twentieth century witnessed modern developments focusing on the human aspect in organizational operations. Modern management thinking focused on developing production processes and improving service quality to achieve effective organizational efficiency. This was implemented through the concept of Total Quality Management (TQM), which seeks continuous improvement in services and products, in addition to focusing on organizational culture and establishing democratic foundations within the organization. The concept of Total Quality Management began to attract the interest of organizations, especially healthcare organizations seeking continuous development and improvement of healthcare services. This aims to enhance the competitive advantage of hospitals in the region, facing significant and diverse challenges, ranging from increasing costs in the production of medical services to improving the quality of these services. Healthcare institutions are among the most sensitive organizations to implement the concept of quality, as they deal with human health.

One of the most important philosophies of modern management is Total Quality Management, which prioritizes improving the performance of the institution by focusing on improving all activities, functions, and employees within the organization. Based on the principle that beneficiary satisfaction is the core and fundamental axis of the institution, Total Quality Management plays a fundamental role in healthcare institutions by contributing to improving and developing the performance of workers in the healthcare sector, thereby providing high-quality healthcare services with international standards, ensuring the safety of the beneficiary and achieving their satisfaction with the provided services (Kwadieck, 2021).

Total Quality Management is considered a new approach in conducting business and managing it in a modern way, exceeding all traditional management methods. It focuses on meeting the requirements and expectations of consumers, whether internal or external to the institution, by understanding their requirements and needs, and then meeting them and performing them correctly through continuous improvement and development, reaching the highest levels of performance, which is the desired perfection (Al-Tamimi & Isa, 2014).

Since the field of interest in the healthcare sector relates to human health and human life, the quality of healthcare services is considered a commitment rather than a preference. Service quality is defined as the institution's ability to meet or exceed the expectations and needs of customers. Simply put, it *Eur. Chem. Bull.* 2023, 12(Regular Issue 03), 3075 - 3087

is about providing the best service to meet customer expectations (Erkan & Unal, 2022). Total Quality Management has become one of the most important requirements of modern management and a condition for its success. It is no longer a luxury but has become the standard that governs the survival and growth of modern organizations, amid the intense competition experienced by the world at this time, and amidst the scientific and technological advancements that have helped in the existence of modern systems to apply and monitor Total Quality Management (Abbas & Abdul, 2019). Recently, the healthcare sector has witnessed significant attention at all levels, in order to apply Quality Management standards procedures to achieve continuous change and improvement, to keep pace with the needs of the social. economic, political, and cultural community. The healthcare sector is considered a "safety valve" to preserve the health of all users of healthcare services, which necessitates the application of quality systems as an important means of organizational change, and gaining the trust of beneficiaries of healthcare services, which is one of the foundations of modern management that contribute to advancing work amidst challenges and successive developments (Abbas, 2019). Thus, there is a need to understand Total Quality Management and its impact on the performance of workers in the healthcare sector.

The Problem of Study

The challenges facing many healthcare sectors include increasing costs, a shortage of available resources, rising demand and interest in various health services due to the spread of epidemics and diseases, as well as the spread of preventive culture. Additionally, there's an increase competitiveness, rapid practical and technological developments, and an increase in cultural awareness among beneficiaries. All of this has compelled healthcare sectors to search for the best methods and practices that contribute to enhancing the performance of healthcare staff in the healthcare sector. This is to provide medical services with the highest possible efficiency and quality. This will only be achieved through healthcare sectors' efforts to change their traditional administrative methods and adopt modern management concepts, such as Total Quality Management, to overcome these challenges and achieve the best performance for employees and the healthcare sector as a whole.

Kharoubi and others (2021) confirm that hospitals are seeking to adopt Total Quality Management as a management philosophy to enhance performance in healthcare and achieve patient satisfaction.

However, hospitals face several challenges in implementing Total Quality Management, such as lack of knowledge of Total Quality Management concepts and philosophy, lack of employee motivation, and insufficient training availability. Total Quality Management is considered one of the modern strategies for management processes, based on several principles that healthcare sectors must commit to, apply, and adopt to achieve excellence in performance and exceed the expectations of stakeholders. It is a modern administrative approach that achieves continuous development and improvement in the quality of healthcare services provided in those sectors, through the concerted efforts and collaboration of management and employees to perform activities and tasks within the institution or administrative body correctly. It focuses on meeting the expectations, desires, and needs of beneficiaries by involving them in designing and delivering the services provided to them. Therefore, the implementation of Total Quality Management in the healthcare sectors in the Kingdom of Saudi Arabia is considered one of the most important success factors in those sectors. Adopting the principles of Total Quality Management leads to continuous improvement in the performance of healthcare staff in the healthcare sector, thus improving the performance of the healthcare sector and the quality of healthcare services through innovation and dissemination (Al-Tamimi and Issa, 2014).

Furthermore, Al-Awadi's study (2018) affirms that the application of Total Quality Management will positively affect the performance of healthcare staff in healthcare institutions. Total Ouality Management is a continuous process that does not stop over time. Therefore, the application of this concept must be comprehensive, starting with the application of the basic principles and foundations and continuing with the continuous work on developing and improving this system and finding new means and methods. The performance of healthcare staff reflects the performance of the institution as a whole, and there is a close relationship between Total Quality Management and performance improvement. Based on that, the main question of the study can be summarized as follows:

What is the impact of Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh?

Study Questions:

- What is the level of Total Quality Management in government hospitals in Riyadh?

- What is the level of performance of healthcare staff in government hospitals in Riyadh?
- What is the impact of Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh?
- Is there a positive reciprocal relationship between Total Quality Management and the performance of healthcare staff in government hospitals in Riyadh?

Study Hypotheses:

- There is a positive reciprocal relationship between Total Quality Management and the performance of healthcare staff in government hospitals in Riyadh.
- There are statistically significant differences in the responses of the study sample towards Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh in favor of variables (profession, years of experience, number of training sessions).

Study Objectives:

- To determine the level of Total Quality Management in government hospitals in Riyadh.
- To determine the level of performance of healthcare staff in government hospitals in Rivadh.
- To determine the impact of Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh.
- To determine the relationship between Total Quality Management and the performance of healthcare staff in government hospitals in Riyadh.

Study Importance:

The importance of this study lies in shedding light on the role of Total Quality Management in enhancing the performance of healthcare staff in the Saudi healthcare sector. This study will not only contribute theoretically to enriching Saudi knowledge on a new and important topic in the field of hospital management in general and Total Quality Management in particular, but it will also provide practical contributions by directing leaders and officials regarding the level of application of Total Quality Management in the Saudi healthcare sector and its importance in enhancing the performance of healthcare staff. Additionally, the study will provide a set of recommendations and proposals to support the application of Total Quality Management principles in the healthcare sector, thereby enhancing the efficiency of healthcare staff performance in the Saudi healthcare sector overall.

Study Limitations:

- Spatial limitations: The study will be conducted in government hospitals in the Kingdom of Saudi Arabia in Riyadh.
- Temporal limitations: The study will be conducted in 2023.
- Human limitations: The study will be conducted on a sample of healthcare staff in government hospitals in Riyadh.
- Objective limitations: It is limited to studying "the impact of Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh."

Literature Review

Study (Kharoubi et al., 2021): The study aimed to understand the impact of implementing Total Quality Management on hospital performance. It utilized a descriptive method and targeted a sample of 53 individuals, collecting data through a questionnaire. The study revealed important findings, including a statistically significant strong positive relationship between top support for Total management Quality Management implementation and hospital performance. The results also showed a positive relationship between the hospital's focus on customers and its performance, as well as between continuous improvement, employee involvement in decision-making, and hospital performance. The study recommended enhancing teamwork and reconsidering the incentive system, along with promoting a research culture in hospitals to improve policies and providing training courses on Total Quality Management in collaboration with universities or institutes.

Study (Abukhader & Onbaşıoğlu, 2021): The study aimed to identify the impact of Total Quality Management practices on employee performance by analyzing the influence of five factors of these practices in healthcare on employee performance in public hospitals in Turkey. These practices included top management commitment, customer individual management, continuous improvement, and process management. The study used a descriptive analytical method to achieve its objectives, with a sample of 200 employees in public hospitals in Turkey, using a questionnaire for data collection. The study demonstrated that Total Quality Management practices significantly affect employee performance, and balanced training enhances the connection between employee performance and Total Quality Management factors. The results also indicated that commitment to quality programs by top management, meeting patient requirements, and developing effective training programs can enhance employee Eur. Chem. Bull. 2023, 12(Regular Issue 03), 3075 - 3087

efficiency in the public healthcare sector. The study recommended the development of a framework supporting the implementation of Total Quality Management practices in Turkish hospitals, focusing on enhancing their efficiency and performance. Additionally, it suggested expanding the scope of the study to include both public and private hospitals and exploring more performance indicator keys for a deeper understanding of employee performance in healthcare.

Study (Awadah, 2018): The study aimed to explore the impact of implementing Total Quality Management principles on the performance of employees at "Nabih Berry Governmental University Hospital" and to assess the extent of applying these principles in the hospital. The study adopted a descriptive analytical method and included a sample of 82 employees from various departments in the hospital, selected randomly, using a questionnaire as a data collection tool. The results showed a strong positive impact of implementing Total Quality Management principles on the hospital's employee performance, reaching nearly 100% positive impact, especially regarding their involvement in decision-making, streamlining procedures, and task allocation. The hospital has an advanced information and decisionmaking system, along with data and information archives. The hospital management is highly concerned about employees' needs and satisfaction, continuously working on their training, motivation, and engagement in teamwork, as well as addressing their complaints and involving them in decisionmaking relevant to their work. The study recommended continued development improvement of hospital systems and services to achieve full satisfaction by both employees and patients.

Study (Baouda & Youb, 2017): Titled "Total Quality Management and Its Relationship with Job Performance: A Field Study at (SIMAP) and (SNV) Institutions," the study aimed to explore the relationship between Total Quality Management (TQM) and job performance in two productive institutions in Oran, in addition to identifying the dimensions of Total Quality Management as perceived by the expert "Jurán." The descriptive analytical method was used to achieve the study's objectives, with a sample of 65 employees from both institutions, selected randomly, using a questionnaire as a data collection tool. The results showed a statistically significant positive relationship between all dimensions of Total Quality Management and job performance. The study also highlighted significant interest from both institutions in applying Total Quality Management dimensions and improving job performance levels.

Based on the results, the study recommended enhancing the application of Total Quality Management dimensions and focusing on the most important dimensions with the greatest impact on performance. It also emphasized the importance of clarifying top management's significance in institutions regarding application of Total Quality Management for all employees and providing training courses in this field to increase awareness and enhance performance and productivity, as well as introducing employees to the importance of quality and its development programs.

Study (Al-Tamimi & Isa, 2013): The study aimed to understand the application of Total Quality Management as a basis for improving employee performance in private Algerian hospitals. The descriptive analytical method was used to achieve the study's objectives, with a sample of 50 employees from various positions in nine private hospitals in Algeria, selected randomly, using a questionnaire as a data collection tool. The results strong statistically significant relationship between Total Quality Management and employee performance in private Algerian hospitals, including job satisfaction, operational efficiency, and administrative service quality. The study also revealed positive trends in private Algerian hospitals towards adopting Total Quality Management as a method to improve employee performance. Based on the results, the study recommended the implementation of Total Quality Management in these hospitals, overcoming any obstacles that may hinder implementation. It also emphasized the importance of developing strategic plans to improve Total Quality Management in all private hospitals based on patient needs and recommended establishing a quality system focusing on quality assurance and error prevention as a shared responsibility among all departments and individuals within their scope of work and specialization.

Study Methodology:

The researchers in this study relied on the descriptive analytical methodology through surveying the opinion (study population) of all healthcare professionals in government hospitals in Riyadh city using a questionnaire. This methodology was chosen because it aligns with the nature of the study and is one of the most suitable approaches for descriptive studies due to its flexibility and simplicity in application, allowing the researcher to achieve the study objectives.

Study Population:

The study population consists of all healthcare professionals in government hospitals in Riyadh Eur. Chem. Bull. 2023, 12(Regular Issue 03), 3075 - 3087

city. The questionnaire was distributed to all members of the population during the current academic year 2023 AD.

Study Sample:

The researchers took a simple random sample from the study population of healthcare professionals at King Fahd Medical City, Riyadh, consisting of 265 healthcare professionals.

Study Tool and Design Stages:

The researchers relied on a questionnaire in this study as it is one of the most suitable tools for achieving study objectives. A questionnaire is defined as a method of collecting information from individuals in the research community through their responses to questions posed to them about a topic without assistance from researchers (Al-Qahtani et al., 2004).

External Validity of the Study Tool:

Validity of the tool ensures that it measures what it is intended to measure (Al-Asaf, 2000; Ubeidat et al., 2016). After preparing the questionnaire on the impact of Total Quality Management (TQM) on the performance of healthcare professionals in government hospitals in Riyadh, it was distributed to a group of faculty members and experts in the field for feedback. Based on their feedback and suggestions, necessary modifications were made to the questionnaire, leading to its finalization.

Study Phases:

The questionnaire was divided into two parts:

Part 1: Basic Data of the Participants:

This part concerns independent variables, represented by personal and occupational characteristics of the study participants. It includes five variables: gender, marital status, educational level, job title, years of experience, and number of training courses.

Part 2: Study Axes:

This part includes the study axes with a set of choices (strongly agree, agree, neutral, disagree, strongly disagree). The Likert scale with five gradients was used for this part. The second part consists of three axes chosen due to their high agreement rate among the reviewers:

First Axis: Level of Total Quality Management Implementation in Government Hospitals in Riyadh, including six dimensions.

The second axis: The level of performance of healthcare professionals in government hospitals in Riyadh, including (14) Phrases.

Most reviewers agreed that these axes and Phrases have a strong relevance to the study topics, ensuring the external validity of the tool. Following reviewers' feedback, the necessary adjustments were made to the questionnaire, making it ready for distribution.

Validity and Reliability Tests: Calculating Internal Consistency Reliability: To ensure internal consistency, Pearson's correlation coefficient was calculated between the score of each Phrase and the total score of the axis to which the Phrase belongs. The researchers applied the questionnaire to a sample of 35 participants to confirm the internal consistency validity by calculating the correlation coefficient between their scores, as shown in the table below:

Table (1): Correlation Coefficient of Axis Phrases with the Total Score for Each Dimension in the Axis

Support of senior management for total quality		management for total Continuous		Participa training	ntion and	Motivati employed performa	es'	Custome	r focus	Reliance decision-	on data for making
Phrase No	Correlation coefficient with the axis	Phrase No.	Correlation coefficient with the axis	Phrase No	Correlation coefficient with the axis	Phrase No.	Correlation coefficient with the axis	Phrase No.	Correlation coefficient with the axis	Phrase No.	Correlation coefficient with the axis
1	0.858**	1	0.776**	1	0.863**	1	0.764**	1	0.564**	1	0.812**
2	0.835**	2	0.859**	2	0.815**	2	0.763**	2	0.897**	2	0.810**
3	0.537**	3	0.871**	3	0.873**	3	0.689**	3	0.823**	3	0.583**
		4	0.872**			4	0.813**				

It is evident from "Table (1) above, which reviews the paragraphs of the first axis (Level of Total Quality Management in Government Hospitals in Riyadh City), that all phrases belonging to this axis show a high correlation, indicating that all phrases are highly valid. The corrected correlation coefficients ranged between (0.537-0.903).

Table (2) shows the correlation coefficients of the phrases of the second axis with the total score of the axis.

Phrase No.	Correlation coefficient with the axis	Phrase No.	Correlation coefficient with the axis
1	0.707**	8	0.763**
2	0.638**	9	0.703**
3	0.914**	10	0.699**
4	0.701**	11	0.685**
5	0.864**	12	0.773**
6	0.644**	13	0.732**
7	0.688**	14	0.592**

It is evident from "Table (2) above, which reviews the paragraphs of the second axis (Level of Performance of Healthcare Staff in Government Hospitals in Riyadh City), that all phrases belonging to this axis show a high correlation, indicating that all phrases are highly valid. The corrected correlation coefficients ranged between (0.514-0.914), indicating that the axis exhibits a high level of internal consistency.

Reliability:

To measure the reliability of the study instrument (questionnaire), Cronbach's alpha coefficient was used. Table (3) illustrates the reliability coefficient for the study instrument axes.

Table (3) Cronbach's Alpha Coefficient for Measuring the Reliability of the Study Instrument

Survey Axes and Dimensions	Phrase No.	Axis stability
First Axis: Level of Total Quality Management in Government Hospitals in Riyadh City	20	0.956
Second Axis: Level of Performance of Healthcare Staff in Government Hospitals in Riyadh City	14	0.948
Overall Reliability	34	0.960

Table (3) indicates that the study instrument enjoys statistically acceptable stability, where the overall

reliability of the study is (0.960). The reliability coefficients for the study instrument ranged

between (0.956, 0.948-0.856), representing high reliability coefficients that can be relied upon in applying the study instrument.

Study Results:

Firstly: Preliminary Data:

Table (4) Distribution of the Study Population According to Primary Variables.

, ,		Frequency	Percentage
Gender	Male	137	51.7
Gender	Female	128	48.3
	Diploma	44	16.6
Educational	Bachelor's Degree	183	69.1
Level	Postgraduate Studies (Master's, PhD)	38	14.4
	None	76	28.7
Training	3-1 training courses	65	24.5
Courses	7-4 training courses	38	14.3
	10-8 training courses	86	32.5
	Administrative	42	15.8
Occupation	Doctor	64	24.1
	Nurse	87	32.8
	Technician	72	27.2
	Less than five years	43	16.3
Years of Experience	From 5 years to less than 6 years	108	40.8
	11 years to less than 15 years	54	20.4
	16-25 years	60	22.6

Secondly: Results Related to Survey Axes:

Answering the first question: What is the reality of Total Quality Management in government hospitals in Riyadh city through the dimensions of Total Quality Management (Top management support for TQM, Continuous improvement, Participation and training, Employee performance incentives, Customer focus)?

To identify the reality of Total Quality Management in government hospitals in Riyadh city through the dimensions of Total Quality Management from their perspective, the arithmetic means, standard deviations, and ranks were calculated for the responses of the study participants on the dimensions of Total Quality Management among healthcare staff in government hospitals in Riyadh city. The results are presented in the following table:

Table (5) Study participants' responses to the Phrases of the first axis according to agreement means.

No	Phrases:	Average	Standard deviation	Rank
1	The management adopts a strategic plan to disseminate and achieve a culture of quality in all hospital departments.	4.04	0.90	1
2	The hospital management continuously monitors the quality level of the services provided.	3.72	1.16	2
3	The hospital provides the necessary time, manpower, equipment, and sufficient funds to implement quality-related activities.	3.66	1.23	3
Suppor	t from senior management for total quality management.	3.81	1.10	
1	The hospital seeks to continuously improve the quality of its services.	3.11	1.4	4
2	The hospital management constantly reviews and simplifies its systems to ensure continuous improvement of its services.	4.03	1.01	1
3	The hospital continuously keeps pace with technological advancements in the medical field to improve its services.	3.89	1.03	2

4	The hospital continuously develops modern means to contribute to improving the quality of the services provided.	3.82	1.16	3
Contin	Continuous improvement.			
1	Employees participate in providing solutions and suggestions to improve the quality of services provided.	3	1.42	3
2	The hospital management involves employees in developing plans and policies related to their work.	3.88	1.05	1
3	Management supports employees in accomplishing their tasks by involving them in task teams.	3.80	1.15	2
Partici	pation and training.	3.56	1.21	
1	Employees receive appropriate material and moral incentives in appreciation of their work.	3.64	1.06	3
2	The hospital provides employees with good opportunities for development and career advancement.	2.94	1.46	4
3	The hospital evaluates the performance of employees and continuously trains them.	4.06	0.99	1
4	Management listens to employees' complaints and always seeks to meet them and achieve their satisfaction.	3.96	1	2
Motivating employee performance.			1.13	
1	The hospital seeks to achieve patient satisfaction and regularly studies them.	3.23	1.27	2
2	The hospital continuously meets the needs and desires of as many patients as possible.	2.87	1.47	3
3	The hospital management seeks to address and resolve patient opinions and complaints quickly.	4.21	0.97	1
Custon	Customer focus.			
1	Management promptly provides all necessary information to the employee during the performance of his duties.	4.1	0.97	1
2	The hospital management documents all business results and preserves them in records for reference when making decisions.	4	1.03	2
3	Management works on collecting and updating data and information periodically.	3.75	1.16	3
Decisio	n-making relies on data.	3.95	1.05	

Through the results shown in Table (5), it becomes clear that there is variability in the agreement of the study participants regarding the dimensions of the reality of total quality management in government hospitals in Riyadh among healthcare personnel in Riyadh health institutions. The averages of their agreement ranged from (4.21 to 2.87), falling within the fourth and fifth categories of the fivepoint scale, indicating (strongly agree, agree, somewhat agree) on the study tool, demonstrating consistency in agreement among the study participants regarding the dimensions of the reality of total quality management in healthcare personnel in government hospitals in Riyadh among healthcare personnel in Riyadh health institutions, which were ranked in descending order according to the averages of agreement by the study participants as follows:

First: Support of Top Management for Total Quality:

- Phrase (1), "Management adopts a strategic plan to disseminate and achieve a culture of quality in all hospital departments," ranked first among the support of top management for total quality, with a mean agreement of (4.04).
- Phrase (2), "The hospital management continuously monitors the quality level of the services provided," ranked second among the support of top management for total quality, with a mean agreement of (3.72).
- Phrase (3), "The hospital provides the necessary time, human resources, equipment, and money to implement quality-related activities," ranked last among the support of top management for total quality, with a mean agreement of (3.66).

Second: Continuous Improvement:

- Phrase (2), "Hospital management continuously reviews its systems and simplifies them to

- ensure continuous improvement of its services," ranked first among continuous improvement, with a mean agreement of (4.03).
- Phrase (3), "The hospital continuously keeps up with technological developments in the medical field to improve its services," ranked second among continuous improvement, with a mean agreement of (3.89).
- Phrase (1), "The hospital seeks to continuously improve the quality of its services," ranked last among phrases of continuous improvement, with a mean agreement of (3.11).

Third: Participation and Training:

- Phrase (3), "Hospital employees feel accountable for the services they provide," ranked first among participation and training, with a mean agreement of (4.06).
- Phrase (4), "Management listens to employees' complaints and works to address them, always seeking their satisfaction," ranked second among participation and training, with a mean agreement of (3.96).
- Phrase (2), "The hospital provides employees with good opportunities for development and career advancement," ranked last among participation and training, with a mean agreement of (2.94).

Fourth: Motivation of Employees' Performance:

- Phrase (2), "The hospital evaluates employees' performance and trains them continuously," ranked first among motivating employees' performance, with a mean agreement of (4.06).
- Phrase (4), "Management listens to employees' complaints and works to address them, always seeking their satisfaction," ranked second among motivating employees' performance, with a mean agreement of (3.96).
- Phrase (2), "The hospital provides employees with good opportunities for development and career advancement," ranked last among motivating employees' performance, with a mean agreement of (2.94).

Fifth: Customer Focus:

- Phrase (3), "Hospital management seeks to meet the opinions and complaints of patients and works to solve them quickly," ranked first among customer focus, with a mean agreement of (4.21).
- Phrase (1), "The hospital seeks to achieve patient satisfaction and regularly studies them," ranked second among customer focus, with a mean agreement of (3.23).
- Phrase (2), "The hospital continuously meets the needs and desires of as many patients as possible," ranked last among customer focus, with a mean agreement of (2.87).

Sixth: Data-driven Decision Making:

- Phrase (1), "Management quickly provides all the necessary information to the employee during their work," ranked first among datadriven decision making, with a mean agreement of (4.10).
- Phrase (2), "The hospital documents all business results and keeps them in records for reference when making decisions," ranked second among data-driven decision making, with a mean agreement of (4.00).
- Phrase (3), "Management works on collecting data and information regularly," ranked last among data-driven decision making, with a mean agreement of (3.75).

Results of the Second Question: What is the reality of the performance level of healthcare personnel in government hospitals in Riyadh from the perspective of healthcare personnel in government hospitals in Riyadh:

To understand the level of healthcare personnel in government hospitals in Riyadh from the perspective of healthcare personnel in government hospitals in Riyadh, the frequencies, percentages, arithmetic means, standard deviations, and ranks were calculated for the study participants' responses to the axis Phrases of the performance level of healthcare personnel in the Saudi healthcare sector from the perspective of healthcare personnel in government hospitals in Riyadh, and the results are as shown in the following table:

Table No. (6) Study participants' responses to axis Phrases of the second axis ranked in descending order according to the averages of agreement

No	Phrases:	Average	Standard deviation	Rank
11	Availability of resources in the company is considered one of the main factors in improving employee performance.	4.47	0.83	1
5	Participation in decision-making in the hospital motivates employees to perform tasks better.	4.38	0.91	2
6	Management commitment to quality and improvement positively affects employee performance.	4.35	0.95	3
9	Providing all required information quickly contributes to improving performance.	4.31	0.89	4
12	One of the indicators of improving employee performance in the company is the management's interaction with employees.	4.29	0.97	5
10	Keeping up with scientific and technological developments in the hospital contributes to improving and developing employee performance.	4.28	1.02	6
13	Clarity of policies and plans is considered a factor in improving employee performance.	4.23	0.98	7
8	Simplifying procedures and defining tasks helps improve work performance.	4.18	0.96	8
7	Focus on achieving patient satisfaction motivates better task performance.	4.18	0.98	9
2	Hospital management focuses on employee satisfaction and provides incentives and benefits to motivate performance.	4.12	0.85	10
14	Management works to create a positive competitive atmosphere to improve employee performance.	4.08	1.08	11
4	The hospital provides employees with training programs that contribute to developing skills and task performance.	4.05	1.02	12
1	Improving internal operations and developments according to changes reflect on employee performance.	4.05	1.04	13
3	The hospital works to achieve customer satisfaction by meeting their desires, needs, and expectations.	4	1.12	14
	Overall average for the axis:	4.21	0.97	

Based on the results above, it is evident that the study participants agree to a degree indicating agreement with the axis of the level of performance of healthcare personnel in government hospitals in Riyadh from the perspective of healthcare personnel in government hospitals in Riyadh, with an average of (4.21) and a standard deviation of (0.97).

Furthermore, the results indicate variability in the agreement of study participants regarding the axis of employee performance level in the Saudi healthcare sector from the perspective of employees in government hospitals in Riyadh. The averages of their agreement on the level of employee performance in the Saudi healthcare sector from the perspective of employees in government hospitals in Riyadh ranged from (4.47 to 4), falling into the fifth and fourth categories of the pentagonal scale, indicating strong agreement

to agreement with the study tool. This indicates variation in the agreement of study participants regarding the axis of employee performance level in the Saudi healthcare sector from the perspective of employees in government hospitals in Riyadh, which were ranked in descending order according to the averages of agreement by the study participants as follows:

The results also showed that the Phrase "Availability of resources in the company is considered one of the main factors in improving employee performance." received the highest agreement rate from the study participants, ranking first with a strongly agree response rate and an average of (4.47).

The Phrase "Participation in decision-making in the hospital motivates employees to perform tasks better." ranked second in agreement among the

study participants, with a strongly agree response rate and an average of (4.38).

The Phrase "Management commitment to quality and improvement positively affects employee performance." ranked third in agreement among the study participants, with a strongly agree response rate and an average of (4.35).

While the Phrase "Providing all required information quickly contributes to improving performance" ranked fourth in agreement among the study participants, with a strongly agree response rate and an average of (4.31).

The Phrase "Improving the hospital's internal operations and developments according to changes reflect on employee performance." ranked second to last in agreement among the study participants, with an agree response rate and an average of (4.05).

Lastly, the Phrase "The hospital works to achieve customer satisfaction by meeting their desires, needs, and expectations" ranked last in agreement among the study participants, with an agree response rate and an average of (4).

Regarding the third question: What is the relationship between Total Quality Management and the performance of healthcare personnel in government hospitals in Riyadh?

To answer the question about understanding the relationship between Total Quality Management and the performance of healthcare personnel in government hospitals in Riyadh from the perspective of healthcare personnel in government hospitals in Riyadh, the researchers used Pearson correlation coefficient to clarify the significance of the relationship between the variables. The results are as follows:

Table (8) Results of Pearson correlation coefficient to clarify the relationship between Total Quality Management and the performance of healthcare personnel in government hospitals in Riyadh

Total Quality	Performance of healthcare staff in government hospitals			
Management	in Riyadh			
	Pearson correlation value	Level of signi	ficance	
Overall degree of Total Quality Management	0.583**	0.00		

**At a significance level of (0.01)

Through the results shown in the table above, it is evident that there is a positive correlation coefficient of (0.583) with statistical significance at a significance level of (0.01), between the overall degree of Total Quality Management and the performance of healthcare staff in government hospitals in Riyadh, according to healthcare staff in government hospitals in Riyadh.

This result indicates the impact of Total Quality Management on the performance of healthcare staff in government hospitals in Riyadh, from the perspective of healthcare staff in government hospitals in Riyadh.

Study Results:

Results of Question 1What is the reality of Total Quality Management among healthcare staff in government hospitals in Riyadh?

There is variability in the agreement of the study participants regarding the dimensions of the reality of Total Quality Management among workers in government hospitals in Riyadh, according to respondents from healthcare institutions in Riyadh. The average agreements ranged from (4.21 to 2.87), falling in the fourth and fifth categories of the five-point scale, indicating strong agreement to moderate agreement on the study tool. This

indicates the consistency in agreement among the study participants regarding the dimensions of Total Quality Management among workers in government hospitals in Riyadh, according to respondents from healthcare institutions in Riyadh.

Results of Question 2: What is the reality of the performance level of healthcare staff in government hospitals in Riyadh from the perspective of healthcare staff in government hospitals in Riyadh?

The study participants agree to a degree indicating agreement with the axis of the performance level of healthcare staff in government hospitals in Riyadh, from the perspective of healthcare staff in government hospitals in Riyadh, with a mean score of (4.21) and a standard deviation of (0.97). Their agreement on the performance level of employees in the Saudi healthcare sector from the perspective of employees in government hospitals in Riyadh ranged from (4.47 to 4), falling within the fifth and fourth categories of the five-point scale, indicating strong agreement to agreement on the study tool. This illustrates the variation in agreement among the study participants regarding the axis of the performance level of healthcare staff government hospitals in Riyadh, from the

perspective of healthcare staff in government hospitals in Riyadh.

Results of Question 3: What is the relationship between Total Quality Management and the performance of employees in the Saudi healthcare sector?

There is a positive correlation coefficient of (0.583) with statistical significance at a significance level of (0.01), between the overall degree of Total Quality Management and the performance of healthcare staff in the Saudi healthcare sector, according to healthcare staff in government hospitals in Riyadh.

Recommendations:

Based on the results obtained, the study recommends the following:

- The senior management in Riyadh hospitals should adopt Total Quality Management as a framework for improving performance and continuously developing internal and external hospital processes.
- 2. It is essential to enact laws and regulations that remove obstacles to the implementation of Total Quality Management, through the development of an effective accounting system in healthcare institutions.
- 3. Strategic plans for Total Quality Management should be developed by all healthcare institutions and the Saudi Ministry of Health, based on the needs of beneficiaries.
- 4. Unified policies for the material and moral incentive system in the healthcare sector, including incentives, rewards, and promotions, are necessary to promote excellence in performance and create a work environment that encourages outstanding performance.
- 5. Training courses on Total Quality Management standards and how to implement Total Quality Management should be organized for healthcare workers to enhance their performance and improve healthcare services in the Kingdom of Saudi Arabia.

References:

- 1. Ben Ouda, Q., Kort, W., Youbi, M. (2017). Total Quality Management and its Relationship with Job Performance: A Field Study at the Boohran (SIMAP) and (SNV) Institutions. Journal of Humanities and Social Sciences, (31), 357-368.
- 2. Al-Tamimi, W., Issa, S.A.H. (2014). Applying Total Quality Management to Improve Employee Performance: A Field Study on Private Algerian Hospitals. University of

- Sharjah Journal for Humanities and Social Sciences, 11(1), 31-70.
- 3. Khurubi, F.A.M., Younis, J., Abbas, N. (2021). The Impact of Implementing Total Quality Management on Performance in Hospitals: A Case Study of a Private Hospital in South Lebanon. Scientific Journal for Scientific Publishing, (31), 437-453.
- 4. Abbas, A.A.A. (2019). The Impact of Employees' Perception in the Government Health Sector on the Importance of Implementing Total Quality Management Principles in Achieving Goals: A Field Study in Wadi Dawasir, Saudi Arabia. Arab Administrative Journal, 39(1), 93-111.
- 5. Awadah, M.H. (2018). The Impact of Applying Total Quality Management on the Performance of Employees: A Case Study of the Governmental University Hospital of Nabiha Bree. Master's thesis, Faculty of Law, Political and Administrative Sciences, Lebanese University, Lebanon.
- 6. Awadeh, M.H. (2018). The Impact of Applying Total Quality Management on the Performance of Employees: A Case Study of the Governmental University Hospital of Nabiha Bree. Master's thesis, Faculty of Law, Political Science, and Administrative Sciences, Lebanese University.
- 7. Kuwadik, H. (2021). The Effectiveness of Total Quality Management in Achieving Quality Healthcare Services for Beneficiaries (Presentation of International Experiences of Leading Healthcare Institutions). Sha'la Journal of Economic Studies, 5(2), 267-284.
- 8. Mohammed, O.A.A., Abu Nseib, A.G. (2017). The Impact of Applying Total Quality Management Principles on the Performance of Employees in the Sudanese Telecommunications Company Khartoum. Doctoral thesis, Graduate College, Sudan University of Science and Technology, Sudan.
- 9. Abukhadera, K.M.S., Onbaşıoğlub, D.Ç. (2021). The effects of total quality management practices on employee performance and the effect of training as a moderating variable. Uncertain Supply Chain Management, (9), 521-528.
- Abbas, M., Abdul, R. (2019). The Effect of Training on Improving the Quality of Medical Services in Saudi Arabia's Hospitals. Practical Study on King Abdullah Hospital-Bisha Province. Arab Journal of Sciences & Research Publishing, (3), 20-40.