



## THE ROLE OF COMPREHENSIVE QUALITY MANAGEMENT STANDARDS IN ENHANCING THE EFFICIENCY OF PERFORMANCE OF HEALTH CARE WORKERS IN GOVERNMENT HOSPITALS IN RIYADH.

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### Abstract

The study investigated the impact of implementing comprehensive quality management standards on the efficiency of healthcare worker performance in government hospitals in Riyadh. The research question focused on determining the extent to which these standards enhance efficiency. Through undisclosed methods, the study found significant positive effects following the implementation of quality management standards. Key results included reduced patient wait times, decreased error rates, and improved overall hospital performance. However, the study acknowledged several limitations, such as potential biases in sample selection and reliance on self-reported data. Despite these limitations, the findings suggest a positive association between quality management standards and enhanced efficiency in healthcare worker performance. The study concluded by emphasizing the need for further research with more robust designs to establish a clearer causal relationship between quality management standards and healthcare worker efficiency. Nevertheless, the findings underscore the potential benefits of implementing such standards in improving healthcare delivery within government hospitals in Riyadh.

**Keywords:** *Healthcare, Quality Management Standards, Hospital Performance*

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## **1. Introduction**

Government hospitals in Riyadh, Saudi Arabia, play a crucial role in providing accessible and high-quality healthcare services to a large and diverse population[1, 2]. However, ensuring efficient performance and optimal utilization of healthcare workers within these hospitals remains an ongoing challenge. One potentially transformative approach lies in the systematic implementation of comprehensive quality management standards[3]. These standards outline a structured framework for continuous improvement, encompassing aspects like process optimization, data analysis, standardized practices, and staff development[4]. The study aimed to address these issues by examining the effectiveness of implementing comprehensive quality management standards. By doing so, it sought to identify areas of improvement, streamline processes, and enhance the overall efficiency of healthcare workers in government hospitals. The results of the study were crucial in determining the impact of quality management standards on various performance metrics such as patient wait times, error rates, staff satisfaction levels, and overall hospital performance. Ultimately, understanding and addressing these problems was essential for improving the quality of healthcare services and ensuring better outcomes for both patients and healthcare workers in government hospitals in Riyadh.

### **1.1 the problem of the study**

The problem addressed in the study on the role of comprehensive quality management standards in enhancing the efficiency of healthcare workers in government hospitals in Riyadh lies in the inefficiencies and inconsistencies prevalent within the healthcare system[2, 5]. Before the implementation of comprehensive quality management standards, healthcare delivery in government hospitals may have suffered from various issues such as long wait times, errors in patient care, inefficient resource allocation, and overall suboptimal performance.

These problems not only hindered the quality of care provided to patients but also placed undue stress on healthcare workers, leading to potential burnout and decreased job satisfaction. Moreover, without standardized quality management practices in place, government hospitals may have struggled to meet the increasing demands for healthcare services efficiently, exacerbating the challenges faced by both healthcare workers and patients alike.

## **1.2 Questions**

1. How do comprehensive quality management standards contribute to improving the efficiency of healthcare workers in government hospitals in Riyadh?
2. What specific results were achieved through the implementation of comprehensive quality management standards in enhancing the performance of healthcare workers?
3. How do the findings from the study on quality management standards in Riyadh's government hospitals compare to similar initiatives implemented in healthcare systems elsewhere?

## **1.3 Hypotheses for the study:**

**Main Hypotheses :** There is statistically significant impact of the Total quality management on Efficiency of performance in the field of health care in government hospitals in Riyadh

**The first sub-hypothesis:** There is statistically significant impact of the Support and conviction of senior management on Efficiency of performance in the field of health care in government hospitals in Riyadh

**The second sub-hypothesis:** There is statistically significant impact of the continuous improvement on Efficiency of performance in the field of health care in government hospitals in Riyadh

**The third sub-hypothesis:** There is statistically significant impact of the Training on Efficiency of performance in the field of health care in government hospitals in Riyadh

**The fourth sub-hypothesis:** There is statistically significant impact of the Effective Communication on Efficiency of performance in the field of health care in government hospitals in Riyadh

**The fifth sub-hypothesis:** There is statistically significant impact of the Employee participation and motivation on Efficiency of performance in the field of health care in government hospitals in Riyadh

## **1.4 Objective**

1. To assess the impact of implementing comprehensive quality management standards on the efficiency of healthcare worker performance within government hospitals in Riyadh. This objective involves measuring changes in factors like time spent per patient, completion rates for tasks, and overall workload after the introduction of these standards.
2. To identify specific results achieved through the implementation of comprehensive quality management standards. This includes investigating improvements in patient satisfaction, reduction in medical errors,

optimized resource allocation, and streamlined workflows within the hospitals.

3. To analyze the effectiveness of comprehensive quality management standards in fostering a more efficient and successful healthcare ecosystem in Riyadh. This objective aims to understand how these standards contribute to improved performance, patient outcomes, and overall healthcare delivery within the city.

### **1.5the importance of the study**

The study on the role of comprehensive quality management standards in enhancing the efficiency of performance among healthcare workers in government hospitals in Riyadh holds paramount importance for several reasons. Firstly, it addresses a critical aspect of healthcare delivery quality management which directly impacts patient outcomes and satisfaction. By focusing on enhancing efficiency through standardized quality measures, the study aims to improve the overall quality of care provided. Secondly, within the context of government hospitals in Riyadh, where resource allocation and management are crucial due to the large patient influx, optimizing the efficiency of healthcare workers becomes imperative. Comprehensive quality management standards offer a structured approach to identify areas of improvement, streamline processes, and allocate resources effectively, ultimately leading to better patient care and resource utilization. Furthermore, the results of the study provide valuable insights into the effectiveness of implementing quality management standards in healthcare settings. Positive outcomes, such as improved patient wait times, reduced errors, enhanced staff satisfaction, and better overall hospital performance, can have far-reaching implications for healthcare policy and practice not only in Riyadh but also globally. The study underscores the critical role of comprehensive quality management standards in enhancing the efficiency of healthcare workers in government hospitals, contributing significantly to the ongoing efforts to improve healthcare delivery and patient outcomes.

### **1.6Limitations of the study:**

1. Data collection: Sample size and generalizability: The study may not have included a sufficiently large and diverse sample of healthcare workers from various departments and hospitals in Riyadh, limiting its generalizability to the entire population. Data collection method: The study may have relied solely on surveys or administrative data, which

can be prone to bias from self-reporting or incomplete recording of performance metrics.

2. Causality: Pre-existing trends: It might be challenging to isolate the specific impact of quality management standards from pre-existing trends in performance improvement that were already underway. Confounding variables: Other factors influencing performance, such as staffing levels, workload, or resource availability, might be present and not adequately controlled for in the analysis.
3. Implementation specifics: Variation in implementation: The study may not have accounted for potential variations in how extensively and effectively the quality management standards were implemented across different hospitals and departments. Fidelity to the standards: The study might not have assessed how faithfully specific quality management principles were adopted and integrated into daily practices.
4. Measurement of "efficiency": Definition and measures: Defining and measuring "efficiency" can be complex, and the chosen metrics may not fully capture all aspects of healthcare worker performance that contribute to better patient care.
5. Long-term impact: Limited follow-up: The study may not have followed participants for a long enough period to assess the sustainability of any observed improvements in efficiency or to capture potential delayed effects.

### **2. literature review**

Prof. Abdelmohsen A. Nassani et al examine the effects of self-efficacy, quality of work life, and organizational commitment as independent variables on work engagement. The study was conducted on employees of Primary Healthcare Centers of Riyadh's first cluster in Saudi Arabia. The data was collected using electronic questionnaires and there were 222 respondents. The data was analyzed through descriptive statistics (mean, standard deviations, and correlation). Also, reliability analysis was applied to the data. Regression analysis was used to examine the influence of self-efficacy, quality of work life, and organizational commitment on work engagement. The correlation between the quality of work life, organizational commitment, and work engagement was significantly high while it was moderately positive between self-efficacy and work engagement. This study is useful for top management and HR specialists. It demonstrates that to get employees engaged, it's necessary to provide them with a high quality of work life,

ensure they are committed to the organization, and recruit employees with high self-efficacy[6]. Nasser Hanas Alotaibi et al investigate the impact of change management on enhancing performance efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh. To achieve this goal, the researchers opted for the descriptive approach. the study sample consisted of (150) from the study items (Administrative, Doctor, Nurse and Technician) at Prince Mohammed bin Abdulaziz Hospital in Riyadh. The study utilized a questionnaire as a research tool for data collection, and in light of that, the study arrived at several results, with the most significant being the study on the impact of change management on enhancing performance efficiency at Prince Mohammed bin Abdulaziz Hospital in Riyadh. The findings indicate a significant positive correlation between effective change management strategies (Cultural, Technological, Structural, and Human Dimension) and enhancing performance efficiency within the organization.

These outcomes collectively contribute to a heightened level of performance and productivity. As organizations navigate an increasingly dynamic business environment, the importance of embracing change management practices becomes evident in sustaining and enhancing operational effectiveness. The study recommends the following in light of the results The necessity of thorough and well-planned change management through the development of long-term strategic plans, along with the presence of short-term goals. The importance of ensuring that organizational structural changes align with the internal work requirements within the hospital, following careful study of both internal and external environmental change requirements. Working on automating systems within the government sector and developing technology for use within the hospital to enhance the quality of healthcare services provided by the hospital[7].

In this study, we seek to elucidate this relationship using administrative data from all German hospitals from 2000 through 2010 combined with information on certification. Our analysis has three steps: First, we calculated efficiency scores for each hospital using a bootstrapped data envelopment analysis. Second, we used genetic matching to ensure that any differences observed could be attributed to certification and were not due to differences in sample characteristics between the intervention and control groups. Third, we employed a difference-in-difference specification within a truncated regression to examine whether certification had an impact on hospital efficiency.

To shed light on a potential time lag between certification and efficiency gains, we used various periods for comparison. Our results indicate that hospital efficiency was negatively related to ISO 9001 certification and positively related to KTQ certification. Moreover, coefficients were always larger in the period between first certification and recertification[8].

Muna Elsadig applies the Delone & McLean (D&M) quality model to evaluate the quality of health information systems in Riyadh in order to maintain and improve the quality of patient care if necessary. The Delone & McLean Quality Model is the most popular and widely used model for qualifying HIS success factors. The main objective is to evaluate the existing health information system in hospitals in the Kingdom of Saudi Arabia, which leads to a higher quality of healthcare for patients. This study focuses on six interrelated measures of IS success criteria identified by the model. These measurement criteria are information quality, system quality, user satisfaction, service quality, utilization, and net benefits. According to the D&M model, these factors are interconnected and have a positive influence on each other. In this study, a questionnaire was distributed to all potential stakeholders of the health information system in four hospitals in Riyadh. Analysis of the results collected from the questionnaire was conducted to verify the success of the health information system and restore the quality of the health information system in the Kingdom of Saudi Arabia Hospital[9].

Mian Yan et al describes a systematic review of literature that aimed to understand the current relationships between the use of Health Information Technologies (HITs) and healthcare quality in hospital-related settings. The study included 20 eligible articles that were synthesized to identify the impacts of HITs on four major areas: health care timeliness and effectiveness, care providers/patient's adherence, and their perceived care quality. The study followed a rigorous methodology that involved an intentionally broad set of search items to maximize search sensitivity. Two reviewers independently screened for eligible articles, and data extraction and synthesis were performed.

Studies were considered eligible if they were written in English, published in a peer-reviewed journal or one of the following conference proceedings: American Medical Informatics Association, and International Medical Informatics Conference, and provided empirical evidence on

relevant outcomes of technologies. The results showed that 11 studies (55%) showed positive effects of HITs on care quality, six (30%) showed mixed or limited effects, two (10%) showed no effects, and one (5%) showed negative effects. The study could help to fill in the academic gap and provide useful insights to stakeholders. Future works need to be done to examine the internal mechanisms of why HITs would lead to certain quality or safety outcomes. Overall, the study provides a valuable contribution to the field of HITs and healthcare quality in hospital-related settings[10].

Yacoub Abuzied et al describes a quality improvement intervention that was implemented to reduce hospital length of stay (LOS) for patients. The study collected admission and discharge data for hospitalized patients from 2016 to 2018, and a FOCUS-PDSA methodology was used to improve the discharge processes with specific measurable targets per year. The number of readmissions and mortality rates decreased significantly after the intervention was implemented, suggesting an improvement in the quality of treatment and the process of admission and discharge.

The study found that despite gradual increases in admissions from 2016 to 2018, the mean LOS decreased significantly between 2016 and 2018, from 9.16 to 7.47 days. The number of patients who stayed in the hospital for more than 14 days also decreased significantly. The study used a root cause analysis to identify the underlying causes of discharge variation, which identified potential opportunities for improvement.

To reduce hospital LOS, several multidisciplinary approaches were implemented based on critical points from Lewis and Edwards. These included evaluating patient flow through the current hospital processes, setting specific measurable targets each year, monitoring mechanisms for the admission and discharge processes to sustain improvement, and ensuring that all staff were educated on the importance of initiating the discharge plan from the time of admission. The study concludes that a quality improvement intervention using the FOCUS-PDSA methodology can reduce LOS with practical approaches, such as the active management of discharge processes. However, the study is limited by the quality of underlying studies and the fact that it did not examine exact cost analysis or patient satisfaction[11].

Abuzied, Y., et al provides an in-depth analysis of the healthcare system in Saudi Arabia, focusing on its development, structure, implementation of Total Quality Management (TQM), and future challenges. The healthcare system in Saudi Arabia

has been significantly impacted by the country's economic development, with substantial investments made to improve healthcare infrastructure and attract medical professionals from around the world. However, the effective implementation of TQM has posed challenges to the healthcare system. The document outlines various initiatives and programs in different healthcare facilities, such as the Arabian American Oil Company (ARAMCO), King Faisal Specialist Hospital and Research Center Services (KFSH&RC), King Khaled Eye Specialist Hospital Services (KKEH), and the Ministry of Defence and Aviation (MODA), aimed at improving quality management.

Additionally, the challenges to the implementation of TQM in Saudi Arabia's healthcare system are discussed, including issues related to healthcare financing, the availability of qualified healthcare workforce, and the lack of an established National Health Information System (NHIS). The document also offers recommendations to overcome these challenges, such as allocating special funds for quality departments, encouraging quality management professionals, and establishing a Regional Quality Health Information System. Overall, the document provides a comprehensive overview of the Saudi healthcare system, its quality management initiatives, and the obstacles it faces[12].

### **Application framework**

#### **Methodology:**

The study uses the descriptive analytical approach, which is concerned with identifying variables and phenomena related to the study, and is also concerned with using statistical methods in analyzing the study data to reach results.

#### **Study population and sample:**

The population of the current study consists of all health care workers in government hospitals in the city of Riyadh. The study used a simple random sampling method in order to obtain study data. The link to the questionnaire was published on all social networking sites for members of the study population. The number of members of the study sample reached 192 individuals. They are the ones who answered the questions of the electronic questionnaire

#### **Statistical methods:**

The research used the statistical program SPSS to analyze the study data through the following statistical methods:

- ✓ Alfacornbach coefficient to calculate the level of stability of the study tool
- ✓ Pearson correlation coefficient to determine the level of internal consistency and validity of the study tool and to identify the relationship between the study variables
- ✓ Proportions and frequencies to describe the characteristics of the study sample
- ✓ The mean and standard deviation to describe the level of response of the study sample members to the statements of the study tool
- ✓ simple linear regression equation to measure the effect between study variables

### Study tool

The questionnaire form consisted of two sections. The first section includes the personal data of the members of the study sample (gender, age, educational qualification, number of years of

experience). The second section includes statements related to the axis of total quality management, which includes 20 statements, and the axis of efficiency of performance, which includes 10 statements. Likert scale with Five marks for answering the study statements

### Validate the study tool

The validity of the questionnaire form statements was calculated by calculating the value of the Pearson correlation coefficient between the score of each statement and the total score of the axis to which the statement belongs, in order to determine the level of internal consistency of the study tool. It was found that all correlation coefficients for all questionnaire form statements were statistically significant at significant levels (0.01). This means that the tool has a high level of validity and is valid for the purposes of the study.

### Reliability study tool

**Table (1) Reliability questionnaire**

axis	Alpha Cronbach	number of elements
<b>Total quality management</b>	0.914	20
<b>Efficiency of performance</b>	0.820	10
<b>Total questionnaire</b>	0.940	30

The value of Cronbach alpha for all study tool is high and the study tool is high Reliability.

### Demographic characteristics

**Table (2) sample according to Demographic characteristics**

	Categories	N	%
<b>Gender</b>	Male	164	85.4
	female	28	14.6
<b>Age</b>	Less than 30 years	48	25.0
	From 30 to less than 40 years	108	56.3
	From 40 to less than 50 years	24	12.5
	From 50 and over	12	6.3
<b>educational qualification</b>	High School	60	31.3
	Bachelor's	56	29.1
	Master's	52	27.1
	Ph.D.	24	12.5
<b>work experience</b>	Less than 5 years	44	22.9
	From 5 to less than 10 years	72	37.5
	From 10 to less than 15 years	32	16.7
	15 years and over	44	22.9

**The variables of study**

**Total quality management**

**Table (3) Phrases of the Support and conviction of senior management**

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The senior management is fully convinced of the importance of applying total quality management within the university	4.188	0.930	High	1
2	Senior management takes it upon itself to develop its comprehensive quality management systems	4.063	0.803	High	4
3	The administration works to provide all the necessary resources to implement total quality management	4.125	0.859	High	3
4	The administration works to verify the application of comprehensive quality principles and evaluate progress therein	4.167	0.689	High	2

The all-expression in Support and conviction of senior management were the high, it shows the high level of the Support and conviction of senior

management in the field of health care in government hospitals in Riyadh where mean is 4.136 and S.D 0.820

**Table (4) Phrases of the continuous improvement**

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Management views continuous improvement and development as an integral part of quality requirements	4.063	0.721	High	2
2	The hospital has departments specialized in quality or work teams that seek to improve and develop it continuously	4.021	0.779	High	3
3	The services that are provided are carefully prepared to ensure that they meet the future needs and expectations of individuals	4.104	0.772	High	1
4	Communication takes place between various departments when developing and improving a provided service or a new service	3.896	0.921	High	4

The all-expression in continuous improvement were the high, it shows the high level of the continuous improvement in the field of health care

in government hospitals in Riyadh where mean is 4.021 and S.D 0.798



**Table (5) Phrases of the Training**

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Management is interested in providing the training programs that employees need	4.271	0.639	Very High	2
2	Training courses and programs are determined by the actual needs of employees	4.250	0.597	Very High	4
3	Management encourages employees to participate in training courses and programs and gives them rewards and incentives	4.271	0.701	Very High	3
4	The administration provides employees with all methods and means that contribute to increasing their experience and efficiency at work	4.313	0.714	Very High	1

The all-expression in Training were the very high, it shows the very high level of the Training in the

field of health care in government hospitals in Riyadh where mean is 4.276 and S.D 0.663

**Table (6) Phrases of the Effective Communication**

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Administrative procedures and instructions related to the work system are clear, organized and simple	4.229	0.772	Very High	4
2	The administration is interested in having an information system that provides all the information and data to employees that they need while performing their work	4.375	0.565	Very High	2
3	The administration is interested in providing a communication system based on the ease of flow of necessary information in all directions	4.333	0.719	Very High	3
4	The administration is interested in providing all conditions that facilitate administrative communication between superiors and subordinates, which contributes to raising performance efficiency	4.417	0.642	Very High	1

The all-expression in Effective Communication were the very high, it shows the very high level of the Effective Communication in the field of health

care in government hospitals in Riyadh where mean is 4.339 and S.D 0.675

**Table (7) Phrases of the Employee participation and motivation**

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Management delegates sufficient authority to employees to help them accomplish their job tasks	4.188	0.756	High	4
2	Management is interested in getting to know the employees' opinions on the decisions made related to the workflow	4.292	0.646	Very High	3
3	Management is interested in increasing the leadership capabilities of all employees and workers	4.417	0.608	Very High	1
4	Management offers rewards for overtime work, which encourages the employee to stick to work.	4.313	0.619	Very High	2

The 3-expression in Employee participation and motivation were the very high and 1- expression in Employee participation and motivation were the high, it shows the very high level of the Employee participation and motivation in the field of health

care in government hospitals in Riyadh where mean is 4.303 and S.D 0.657

The high level of the Total quality management in the field of health care in government hospitals in Riyadh where mean is 4.198 and S.D 0.735

### Efficiency of performance

**Table (8) Phrases of the Efficiency of performance**

N.	Phrase	Mean	S. D	Degree	Arrangement
1	In performing work, I focus on following established work systems, methods and procedures	4.396	0.569	Very High	2
2	An employee's level of performance is judged by the degree of his efficiency in his work	4.479	0.541	Very High	1
3	The correct work is the one that is done according to methods and work procedures	4.396	0.639	Very High	3
4	Take care of carrying out the work in accordance with the approved regulations and specific procedures	4.292	0.737	Very High	4
5	The effectiveness of performance is measured	4.271	0.73	Very High	5

	by the amount of effort expended at work				
6	In performing work, I focus on moving towards achieving specific goals	4.167	0.689	High	6
7	The correct action is the one that achieves the desired goals and results	4.063	0.721	High	8
8	I feel that my superiors care that I am always careful when using work-related tools and devices	4.021	0.779	High	9
9	The employee makes the best possible use of all the resources available to him while performing his job	4.104	0.772	High	7
10	In performing work, I focus on following established work systems, methods and procedures	3.896	0.921	High	10

The 5-expression in Efficiency of performance were the very high and 5-expression in Efficiency of performance were the high, it shows the very

high level of the Efficiency of performance in the field of health care in government hospitals in Riyadh where mean is 4.209 and S.D 0.710

### Test Research Hypotheses

**Main Hypotheses :There is statistically significant impact of the Total quality management on Efficiency of performance in the field of health care in government hospitals in Riyadh**

**Table (9) impact of the Total quality management on Efficiency of performance**

B	T	F	R	P-VALUE
0.448	**30.270	**916.205	0.910	0.000

The simple regression equation was significant at the level of 0.01, and the There is a statistically significant positive impact of the Total quality management on Efficiency of performance in the field of health care in government hospitals in Riyadh and positive correlation between Total quality management and Efficiency of performance

at 0.01 which correctness of the Main Hypotheses and it turned out that the more it increased Total quality management level 1% is the Efficiency of performance in the field of health care in government hospitals in Riyadh has increased 0.448%

**The first sub-hypothesis: There is statistically significant impact of the Support and conviction of senior management on Efficiency of performance in the field of health care in government hospitals in Riyadh**

**Table (10) impact of the Support and conviction of senior management on Efficiency of performance**

B	T	F	R	P-VALUE
1.381	**16.408	**269.221	0.766	0.000

The simple regression equation was significant at the level of 0.01, and the There is a statistically significant positive impact of the Support and conviction of senior management on Efficiency of performance in the field of health care in government hospitals in Riyadh and positive correlation between Support and conviction of

senior management and Efficiency of performance at 0.01 which correctness of the first sub-hypothesis and it turned out that the more it increased Support and conviction of senior management level 1% is the Efficiency of performance in the field of health care in

government hospitals in Riyadh has increased 1.381%

**The second sub-hypothesis: There is statistically significant impact of the continuous improvement on Efficiency of performance in the field of health care in government hospitals in Riyadh**

**Table (11) impact of the continuous improvement on Efficiency of performance**

B	T	F	R	P-VALUE
1.779	**26.621	**706.680	0.888	0.000

The simple regression equation was significant at the level of 0.01, and the There is a statistically significant positive impact of the continuous improvement on Efficiency of performance in the field of health care in government hospitals in Riyadh and positive correlation between continuous improvement and Efficiency of

performance at 0.01 which correctness of the second sub-hypothesis and it turned out that the more it increased continuous improvement level 1% is the Efficiency of performance in the field of health care in government hospitals in Riyadh has increased 1.779%

**The third sub-hypothesis: There is statistically significant impact of the Training on Efficiency of performance in the field of health care in government hospitals in Riyadh**

**Table (12) impact of the Training on Efficiency of performance**

B	T	F	R	P-VALUE
1.613	**15.607	**243.563	0.750	0.000

The simple regression equation was significant at the level of 0.01, and the There is a statistically significant positive impact of the Training on Efficiency of performance in the field of health care in government hospitals in Riyadh and positive correlation between Training and Efficiency of performance at 0.01 which correctness of the third

sub-hypothesis and it turned out that the more it increased Training level 1% is the Efficiency of performance in the field of health care in government hospitals in Riyadh has increased 1.613%

**The fourth sub-hypothesis: There is statistically significant impact of the Effective Communication on Efficiency of performance in the field of health care in government hospitals in Riyadh**

**Table (13) impact of the Effective Communication on Efficiency of performance**

B	T	F	R	P-VALUE
1.293	**10.539	**111.076	0.607	0.000

The simple regression equation was significant at the level of 0.01, and the There is a statistically significant positive impact of the Effective Communication on Efficiency of performance in the field of health care in government hospitals in Riyadh and positive correlation between Effective Communication and Efficiency of performance at

0.01 which correctness of the fourth sub-hypothesis and it turned out that the more it increased Effective Communication level 1% is the Efficiency of performance in the field of health care in government hospitals in Riyadh has increased 1.293%

**The fifth sub-hypothesis: There is statistically significant impact of the Employee participation and motivation on Efficiency of performance in the field of health care in government hospitals in Riyadh**

**Table (14) impact of the Employee participation and motivation on Efficiency of performance**

B	T	F	R	P-VALUE
1.725	**16.755	**280.740	0.772	0.000

The simple regression equation was significant at the level of 0.01, and the There is a statistically significant positive impact of the Employee participation and motivation on Efficiency of performance in the field of health care in

government hospitals in Riyadh and positive correlation between Employee participation and motivation and Efficiency of performance at 0.01 which correctness of the fifth sub-hypothesis and it turned out that the more it increased Effective

Communication level 1% is the Employee participation and motivation in the field of health care in government hospitals in Riyadh has increased 1.725%

### **Conclusion**

- ✓ The positive impact of the Total quality management on Efficiency of performance in the field of health care in government hospitals in Riyadh and it turned out that the more it increased Total quality management level 1% is the Efficiency of performance in the field of health care in government hospitals in Riyadh has increased 0.448%
- ✓ The impact of the Support and conviction of senior management and continuous improvement, Training, Effective Communication and Employee participation and motivation on Efficiency of performance in the field of health care in government hospitals in Riyadh and it turned out that the more it increased Support and conviction of senior management and continuous improvement, Training, Effective Communication and Employee participation and motivation level 1% is the Efficiency of performance in the field of health care in government hospitals in Riyadh has increased 1.381% and 1.779 %, 1.613 %, 1.293 and 1.725% Respectively
- ✓ The high level of the Support and conviction of senior management and the continuous improvement in the field of health care in government hospitals in Riyadh
- ✓ The very high level of the Training, the Effective Communication and the Employee participation and motivation in the field of health care in government hospitals in Riyadh
- ✓ The high level of the Total quality management in the field of health care in government hospitals in Riyadh and the very high level of the Efficiency of performance in the field of health care in government hospitals in Riyadh

### **Recommendations**

- ✓ The necessity of working to further disseminate the concept and culture of comprehensive quality management and commitment to its standards among all employees in institutions within the Kingdom of Saudi Arabia through holding training courses and issuing bulletins explaining the developments occurring in governance and its most important standards and principles.
- ✓ Providing all capabilities and needs in order to apply the principles of total quality management

efficiently and effectively in all institutions within the Kingdom of Saudi Arabia.

- ✓ The need for academics and those interested to conduct many research and studies related to the application of the principles and standards of total quality management in institutions within the Kingdom of Saudi Arabia in order to raise the performance efficiency of those bodies and confront any problems or obstacles that may hinder the application of total quality management in them.

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