



A SCIENTIFIC PAPER TITLED: THE RELATIONSHIP BETWEEN COMPREHENSIVE QUALITY STANDARDS AND THE PRODUCTIVITY OF HEALTH PERSONNEL IN THE GOVERNMENT HEALTH SECTOR IN THE KINGDOM OF SAUDI ARABIA

Khalid Shara Alrashidi^{1*}, Mohammed Muslih Alrashidi², Mansour Jalal Alnassar³, Abdulrahman Alhawah Alrashidi⁴, Sultan Ayed Al-Anazi⁵, Hala Saad Al-Shammari⁶, Sultan Obaid Al Rashidi⁷, Mohammed Jalal Alnassar⁸, Bijad Alhwah Al-Rashidi⁹, Mohrah Muteb J Al Rashedi¹⁰, Agab Meshal Eid Alotibi¹¹, Turki Obed Alresheedi¹², Enas Saleh Aldossari¹³, Fatimah Saleh Ali Almushtah¹⁴, Abdullah Turki Alresheedi¹⁵, Awad Nasser Alwadie¹⁶, Mada Ali Alarfaj¹⁷, Maram Hadi Mansi Alanzi¹⁸

summary

This research aims to understand the relationship between comprehensive quality standards and the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia. There are five main questions guiding this research:

First, how do comprehensive quality standards affect the performance of health personnel?

Secondly, what is the relationship between commitment to quality standards and the level of motivation of health personnel?

Third, how is job satisfaction among health personnel related to the implementation of comprehensive quality standards?

Fourth, what are the perceived challenges and benefits to implementing quality standards effectively?

Finally, what are the proposed strategies to enhance the effectiveness of quality standards and improve the productivity of health personnel?

The general objective of the study includes assessing the impact of quality standards on the performance of health personnel, examining the relationship between adherence to these standards and the level of motivation of personnel, exploring the correlation of job satisfaction with the implementation of quality standards, identifying challenges and assistance to implement them effectively, and proposing strategies to enhance the effectiveness of quality standards and improve the productivity of health personnel.

Validity and reliability tests were performed, including calculation of internal consistency using Pearson's correlation coefficient. A pilot sample of health personnel was also used to confirm internal validity. The results show encouraging internal validity, which contributes to the success of the overall study.

Overall, this research seeks to provide useful insights into how quality standards affect the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia and provide recommendations to enhance the effectiveness of those standards to improve outcomes.

^{1*}Nursing Technician, Al-Iman General Hospital, Ministry of Health, Kingdom of Saudi Arabia. khaloody21@hotmail.com

²Radiology Technician, Al-Rawda General Hospital, Ministry of Health, Kingdom of Saudi Arabia. k2h3m4@gmail.com

³Senior Pharmacist, Rafai Al-Jamsh Hospital, Ministry of Health, Kingdom of Saudi Arabia. Alnassar.mansour@hotmail.com

⁴Pharmacy Technician, Rafai Al-Jamsh Hospital, Ministry of Health, Kingdom of Saudi Arabia. Ph_da7oomy@hotmail.com

⁵Nursing Technician, Al-Iman General Hospital, Ministry of Health, Kingdom of Saudi Arabia. saltan12345521@gmail.com

⁶Nursing Specialist, Aradah Mental Health Hospital in Hail, Ministry of Health, Kingdom of Saudi Arabia. hlicad345@gmail.com

⁷Health Management Specialist, Al-Qwayiyah Hospital, Ministry of Health, Kingdom of Saudi Arabia. Mr.sultan1408@gmail.com

⁸Senior Physical Therapist, Al-Iman General Hospital, Ministry of Health, Kingdom of Saudi Arabia. Pt_malnassar@hotmail.com

⁹Nursing Technician, Rafai Al-Jamsh Hospital, Ministry of Health, Kingdom of Saudi Arabia. bijad-123@hotmail.com

¹⁰Epidemiology Technician, Al-Dawadmi Hospital, Ministry of Health, Kingdom of Saudi Arabia. mohrahmu@gmail.com

¹¹Nursing Technician, Al-Iman General Hospital, Ministry of Health, Kingdom of Saudi Arabia. abofiy77@gmail.com

¹²Medical Devices Technician, Al-Rawda General Hospital, Ministry of Health, Kingdom of Saudi Arabia. Al7ob21@hotmail.com

¹³specialist of Health administration, Dhahran Aljanob hospital, Ministry of Health, Kingdom of Saudi Arabia. enassaleh170@gmail.com

¹⁴Nursing technician, Internal Audit Unit at Asir, Ministry of Health, Kingdom of Saudi Arabia. Falmushtah@moh.gov.sa

¹⁵physical Therapist, Dawadmi General Hospital, Ministry of Health, Kingdom of Saudi Arabia. abdull.t1991@gmail.com

¹⁶Specialist of Health Administration, Dhahran Aljanob Hospital, Ministry of Health, Kingdom of Saudi Arabia. eas-555@hotmail.com

¹⁷Nursing Technician, Al Khaldiya Health Center, First Health Assembly, Ministry of Health, Kingdom of Saudi Arabia. Madoshali92@gmail.com

¹⁸Healthy Assistant, Al Khalidiya Health Center, Ministry of Health, Kingdom of Saudi Arabia. mramhadi77@gmail.com

***Corresponding Author:** Khalid Shara Alrashidi

*Nursing Technician, Al-Iman General Hospital, Ministry of Health, Kingdom of Saudi Arabia. khaloody21@hotmail.com

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introduction

In recent years, the Kingdom of Saudi Arabia has made significant strides in enhancing the quality of healthcare services provided to its citizens. One of the key strategies adopted by the government to achieve this goal is the implementation of comprehensive quality standards in the health sector. These quality standards serve as a benchmark for measuring the performance and effectiveness of healthcare services, with the ultimate aim of improving patient outcomes and ensuring the delivery of high-quality care(BUS ÉIREANN (2000

At the heart of the healthcare system are the health personnel who play a crucial role in delivering services and interacting directly with patients. The productivity of health personnel is a key determinant of the overall efficiency and effectiveness of the healthcare system. By ensuring that health personnel adhere to comprehensive quality standards, the government aims to not only enhance the quality of care provided but also boost the productivity and performance of health personnel in the government health sector.

The relationship between comprehensive quality standards and the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia is a topic of increasing importance and interest. Understanding how these quality standards impact the performance and productivity of health personnel is essential for policymakers, healthcare administrators, and healthcare providers to make informed decisions and implement effective strategies to improve the quality of healthcare services in the kingdom

(Brunetti, 1996)

This study aims to explore and analyze the intricate relationship between comprehensive quality standards and the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia. By examining the impact of quality standards on the performance, motivation, and job satisfaction of health personnel, this research seeks to provide valuable insights and recommendations for enhancing the quality of healthcare services and optimizing the productivity of health personnel in the kingdom)

(Osman,2009)

the study Problem

Study Problem:

Despite the implementation of comprehensive quality standards in the healthcare sector of the Kingdom of Saudi Arabia, there remains a gap in understanding how these standards affect the productivity of health personnel in the government health sector. This knowledge gap hinders the

ability of policymakers, healthcare administrators, and healthcare providers to effectively optimize the performance of health personnel and improve the quality of healthcare services.

Study questions

1. How do comprehensive quality standards influence the performance of health personnel in the government health sector of Saudi Arabia?
2. What is the relationship between adherence to quality standards and the motivation of health personnel?
3. How does job satisfaction among health personnel correlate with the implementation of comprehensive quality standards?
4. What are the perceived barriers and facilitators to the effective implementation of quality standards among health personnel in Saudi Arabia?
5. What strategies can be recommended to enhance the effectiveness of quality standards and improve the productivity of health personnel in the government health sector of the Kingdom of Saudi Arabia?

Objectives of the Study:

1. To assess the impact of comprehensive quality standards on the performance of health personnel in the government health sector of the Kingdom of Saudi Arabia.
2. To examine the relationship between adherence to quality standards and the motivation levels of health personnel.
3. To investigate the correlation between job satisfaction among health personnel and the implementation of comprehensive quality standards.
4. To identify the barriers and facilitators to the effective implementation of quality standards among health personnel in Saudi Arabia.
5. To propose strategies aimed at enhancing the effectiveness of quality standards and improving the productivity of health personnel in the government health sector of the Kingdom of Saudi Arabia.

Study Limitations:

1. The study's findings may be limited by the availability and accuracy of data related to the productivity, performance, motivation, and job satisfaction of health personnel.
2. There may be challenges in generalizing the results of the study beyond the government health sector in Saudi Arabia due to contextual differences.

3. The study may face limitations in capturing the perspectives of all relevant stakeholders, including policymakers, healthcare administrators, and healthcare providers.
4. External factors such as changes in healthcare policies or economic conditions could influence the outcomes of the study.
5. The study's scope may be constrained by time and resource limitations, potentially impacting the depth of analysis and the comprehensiveness of recommendations.

Previous studies

-Study (Salama, 1999): entitled: "Total Quality Management in the Health Services Sector in Jordan" Master's Thesis - Case Study - University of Jordan, which aimed to study the extent of applying comprehensive quality management in hospitals, and focused On quality management in the public health sector, The study questions focused on explaining the difference between the expected administrative services for hospital workers and the actual administrative services provided to them, as well as the difference between the expected services for consumers and the actual services provided to them, and the obstacles that prevent the application of these principles. approach to comprehensive quality management in hospitals. The study found that there were significant differences There is statistical significance between employees' expectations and the services provided to them in the areas of support and satisfaction of senior management, appreciation of male and female employees, training them, building teams and their participation, as well as the presence of statistically significant differences between the expected services for beneficiaries and the actual services. The introduction presented to them, and I concluded that there are differences between the possibility of applying the concept of total quality management Among each of the following factors: the continuous change of leadership, the ambiguity of the subject of training and performance evaluation, the multiplicity of consumers and their different levels, the weakness of the financial and information system and the absence of an ideal model. The study recommended the necessity of deepening awareness of the concept of quality among administrative leaders in Jordanian public health sector institutions, increasing it, hospitals' commitment to it, paying attention to employees and paying attention to the external consumer, and increasing financial allocations and spending on my work. Applying the concept of quality management, and conducting field surveys to identify the needs of consumers (consumers) and

measure The extent of their satisfaction with hospital services.

-Study (Paul Kunst, 2000): entitled: "Quality and performance management in hospitals - a search for success factors", Maastricht Economic Innovation Institute - Maastricht University - Netherlands, which was conducted on several public and private European university hospitals in Spain, Britain and the Netherlands. Da, which aimed to Identifying the success factors for outstanding quality and performance and their mutual relationships, the study showed that there is a positive relationship between quality management and the quality perceived by service users, but to a limited degree related to performance. The study showed that progress in management It leads to better performance in hospitals, and indicates the effect of efficiency. On cost, and the quality perceived by patients indicates effectiveness

Study (Al-Omar, 2000): entitled: "The extent of application of comprehensive quality management in hospitals in the city of Riyadh from the point of view of nursing practitioners," King Saud University - Riyadh - Saudi Arabia. The study aimed to identify the principles of quality management Comprehensive method applied in Saudi government, military and educational hospitals. Special, as well as identifying the factors influencing the extent of application of the principles of comprehensive quality management in these hospitals from the point of view of the nursing staff working in the hospitals. The results of the study indicated that the extent of application of comprehensive quality management in a general way Or is it fundamentally linked, first and foremost, to the principle of the quality system, then to the principle of constructive decision-making? on information, and the principle of second-class consumer satisfaction. The study recommended the need for Saudi hospitals to work more to spread the culture of quality and commitment to it, apply the concept of quality management in all hospital units and departments, and consolidate a culture and the principles of quality in the thoughts and values of its employees, and focusing on the consumer through conducting surveys And studies, and measuring external consumer satisfaction.

Study (Boubagira, 2006): Titled: "The Role of Total Quality Management in Improving Health Services" A case study of the University Hospital in Blida, Algeria. The study aimed to try to determine the requirements for applying total quality management in in health organizations, as well as presenting a proposed model for applying

factors Comprehensive quality management in the health services sector (in government hospitals affiliated with the Ministry of Health) can be used to continuously improve health services in the health sector, while extracting solutions for the institution in the health sector to raise the quality of its services. He explained. The results of the study indicate that the absence of a culture of change is considered a major obstacle for the university hospital. Blida in applying comprehensive quality management, and the lack of training and training of workers hinders the application of the principles of total quality management. The employees of the University Hospital in Blida also suffer from a deficiency in understanding the meaning of quality in health services and comprehensive quality management. Blida, the smaller budget size of the university hospital in Blida and the annual debts it suffers from prevent them from applying the principles Total quality management. The study recommended obliging employees to record the results of their work to identify the reasons for the discrepancy in performance, try to find solutions to them, and provide the appropriate atmosphere for their improvement. Reconsidering the distribution of Blida's university hospital expenses in line with the application of comprehensive quality management there, and finding new sources of funding. Because applying the principles of comprehensive quality management requires a huge budget. Raising the training budget and the scientific research budget with the aim of developing and raising the health and medical level and improving the quality of services at the University Hospital of Blida. Establishing cells to monitor quality and quality, that is, what are called quality rings. In order to discover problems and find solutions to them through these teams, it is preferable for them to be in every department or ward in the hospital and to be a problem for different categories of users. Allocating significant amounts of money to training and formation, by increasing the share of each in the expenditure budget. The administration must also work to develop and evaluate research and development efforts, within the framework of internal cultural work. It includes all the annexes of the University Hospital of Blida, and the holding of courses, forums, and study days from Party of the University Hospital of Blida to sensitize users to the importance of applying comprehensive quality management, and to introduce the culture of change and the culture of quality into their minds

Study (Obaid, 2010) entitled: "The reality of change management and its impact on the performance of employees in the Palestinian Ministry of Health/Case study of Al-Shifa Medical

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Complex: This study aimed to identify the reality of change management in the Palestinian Ministry of Health, and its impact on the performance of workers, through A case study of Al-Shifa Medical Complex. The researcher addressed three areas of change: change in the organizational structure, change in technology, and change in individuals. The researcher designed a questionnaire for the purpose of collecting primary data, and the researcher used Second, the stratified random sample. In collecting primary data, the population was divided The study was divided into four categories (doctor, technician, nursing, and administrator), and 1003 questionnaires were distributed to the sample members, and they were retrieved.

288 questionnaires, and 3 questionnaires were excluded due to their invalidity, so the number of questionnaires suitable for analysis was 582, representing 59% of the study sample. The spss statistical package was used to analyze the data. The study reached a set of results, the most important of which were: The change in the organizational structure was not clearly defined, due to changes in the organizational structure for goals that serve the personal interests of a specific group, and the change in technology to It was not clear, and it did not reduce the effort, time, or speed in Achievement; As there is no comprehensive plan that specifies what technology is required, and there is a positive relationship between the areas of change in (organizational structure, technology, and individuals) and the performance of employees at a significance level of = 50.0, there are no differences between the answers of the respondent About the reality of change management and its impact on the performance of employees in The Palestinian Ministry of Health is attributed (to age, job, and educational qualification). The study recommended that the change in the organizational structure be compatible with work requirements, and after careful study of the internal and external environment, it is necessary Determine the authority and responsibility of each department and function so that there is no overlap in powers and It is necessary for management to deal with employees positively and pay attention to human relations by appreciating the effort made by employees, and creating an incentive system to encourage employees.

Study methodology

The researchers in this study adopted a descriptive-analytical approach, utilizing a survey questionnaire to gather the opinions of the study community, comprised of all healthcare workers at Al-Noor Specialist Hospital in Mecca. This

methodology was chosen because it aligns with the nature of the study and is considered one of the most suitable methods for descriptive research, given its flexibility and ease of application, allowing the researchers to achieve the study's objectives effectively.

Study participants

The study participants comprised all healthcare workers at Al-Noor Specialist Hospital in Mecca, including physicians, nurses, allied health professionals, administrative staff, and support staff. These individuals were chosen as they represent a diverse range of roles within the healthcare setting, providing valuable insights into the impact of comprehensive quality standards on various aspects of healthcare delivery and personnel productivity.

The study sample

The study sample consisted of a representative subset of healthcare workers from Al-Noor Specialist Hospital in Mecca. A systematic sampling method was employed to select participants from different departments and professional backgrounds, ensuring a diverse representation within the sample. This approach aimed to capture a broad spectrum of perspectives and experiences related to the implementation of comprehensive quality standards and their effects on personnel productivity in the healthcare setting.

Study Tool and Design Stages:

Under the title "The relationship between comprehensive quality standards and the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia," the questionnaire was meticulously developed and validated. Collaboration with experts in healthcare management and psychology ensured the content validity of the questionnaire items.

Following the collaboration, the questionnaire underwent validation by a group of healthcare professionals at Al-Noor Specialist Hospital in Mecca, Saudi Arabia. Their feedback led to adjustments and refinements to ensure the questionnaire's relevance and comprehensiveness.

The questionnaire consists of two main sections

1. Demographic Information: This section collects participants' demographic data, including age, gender, educational background, years of experience in the healthcare sector, and job role
2. Impact Assessment: The second section explores the relationship between comprehensive quality standards and health personnel productivity. It includes Likert-scale items and open-ended questions to gather quantitative and qualitative data on various aspects of job performance affected by quality standards. Through rigorous review and validation processes, the questionnaire achieved content validity. Feedback from experts and healthcare professionals at Al-Noor Specialist Hospital was integral to refining the questionnaire and ensuring its readiness for data collection

Results

Validity and Reliability Tests:

Internal Consistency Reliability Calculation:

After building the study tool and ensuring its apparent validity by presenting it to a group of specialized and experienced arbitrators, Pearson's Coefficient Correlation was calculated to verify the validity of the internal consistency between the statements of each goal and the total score for the belonging axis.

The questionnaire was administered to a pilot sample of 30 healthcare staff to confirm internal reliability, with researchers calculating correlation coefficients to assess the internal validity of the study tool, as the following tables show:

Table (1): Correlation coefficients of items in the first axis with the total score.

Statement number	r	Statement number	r
1	0.771**	11	0.627**
2	0.707**	12	0.496**
3	0.895**	13	0.621**
4	0.636**	14	0.540**
5	0.508**	15	0.669**
6	0.694**	16	0.590**
7	0.689**	17	0.576**
8	0.516**	18	0.825**
9	0.768**	19	0.624**
10	0.622**	20	0.844**

** : p value <0.001

It is clear from the previous table that all of the statements are significant at the 0.01 level, as the values of the dimensional correlation coefficients ranged between (0.425 - 0.844), which are good correlation coefficients, and this gives an indication of high internal consistency coefficients as well. It indicates high validity indicators that can be trusted in applying the current study tool.

Reliability of the study tool:

As for measuring the reliability of the questionnaire, we used Cronbach's alpha coefficient, and the following table shows the reliability axes of the study tool as follows:

Table (2): Cronbach's alpha coefficient reliability coefficient for the total score of the questionnaire

	No. of statements	Cronbach's alpha
comprehensive quality standards questionnaire	20	0.941

The table showed that the Cronbach's alpha reliability coefficient for the total score of the questionnaire was (0.941), which is a high reliability coefficient suitable for the study.

Application Method of the Study Tool:

After collecting the study data, the researchers reviewed it in preparation for inputting it into the computer for statistical analysis. Subsequently, they transcribed it onto appropriate tables, provided commentary, and linked it to previous studies. Responses were given five levels: strongly agree (5

points), agree (4 points), neutral (3 points), disagree (2 points), and strongly disagree (1 point). To determine the length of the pentavalent scale cells used in the study Phrases, the range (5-1=4) was calculated and divided by the number of questionnaire cells to obtain the correct cell length (4/5=0.80). This value was then added to the lowest value on the scale (or the beginning of the scale, which is one) to determine the upper limit of the cell. The following table illustrates the method for correcting the Likert pentavalent scale.

Table (3): Method for correcting the scale.

Scale	The weight	The average arithmetic mean value ranges
Strongly Disagree	1	From 1 to less than 1.80
Disagree	2	From 1.81 to less than 2.60
Neutral	3	From 2.61 to less than 3.40
Agree	4	From 3.41 to 4.20
Strongly agree	5	From 4.21 to 5.

Table (4): Socio demographic characteristics of the studied participants

Sociodemographic variables	Cases (n=385)	
	No.	%
Age category (years)		
Less than 25 years	69	17.9%
From 26 to 35 years	125	32.5%
From 36 to 47 years	140	36.4%
More than 47 years	51	13.2%
Gander		
Male	210	54.5%
Female	175	45.5%
Marital status		
single	125	32.5%
married	140	36.4%
absolute	120	31.1%
Job		
doctor	64	16.6%
pharmaceutical	74	19.2%
specialist	59	15.3%
Technical	70	18.2%

nurse	84	21.8%
Administrative	34	8.8%
Educational status		
Diploma or less	92	23.9%
Bachelor's	176	45.7%
Postgraduate studies (PhD - Master)	117	30.4%
Years of experience		
1 – 5 years	67	17.4%
6 – 10 years	176	45.7%
11 - 15 years	117	30.4%
16 – 25 years	25	6.5%

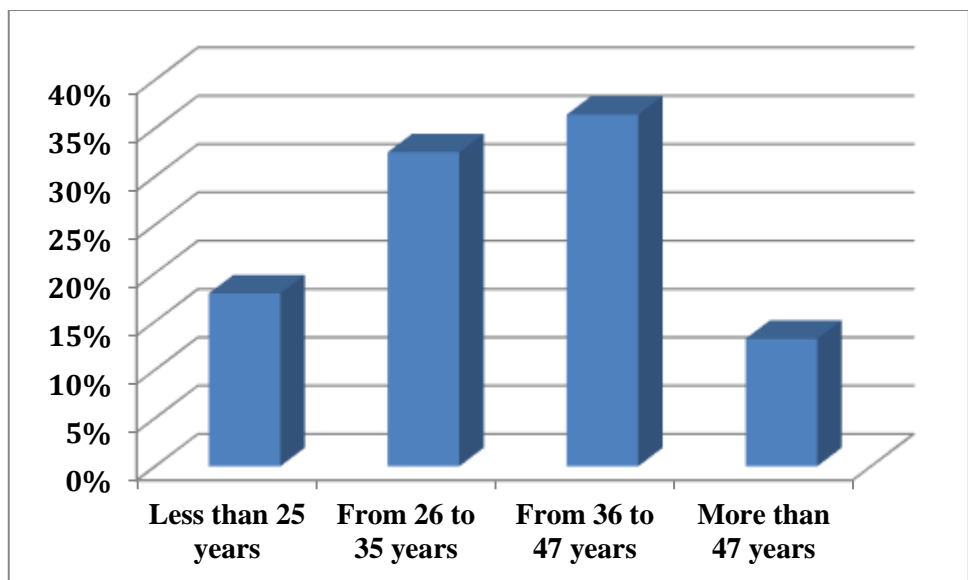


Fig (1): Age distribution among the studied participants

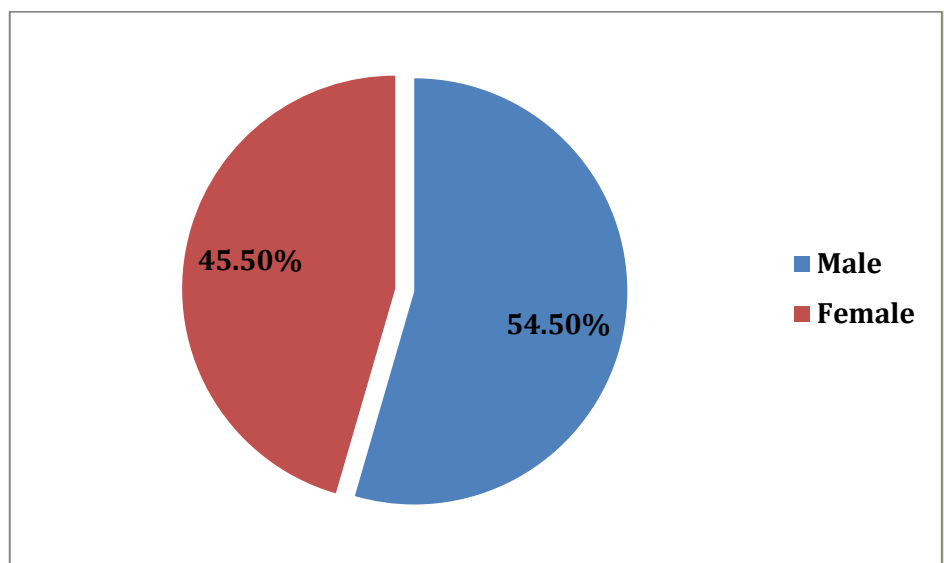


Fig (2): gender distribution among the studied participants

Table (1) & Figure (1-3) showed that 36.4% and 32.5 % of the studied participants were aged 36 -47 years and 26-35 years respectively. Regarding to the gender, near to half (54.5%) were males and 45.5% were females. 45.7% of the studied

participants were bachelor's while only %23.9 was diploma or less. As regard to years of experience, 45.7% of the studied participants worked from 6 – 10 years Secondly: Results Related to the Axes of the Questionnaire:

Table (5): response of the studied participants regarding to Questionnaire

No		Cases (n=385)			
		Mean	SD	Category	Rank
1-	The presence of comprehensive quality standards affects the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia	4.21	0.77	Strongly agree	9
2-	Health personnel adhere to quality standards in performing their duties correctly	4.01	0.85	Agree	17
3-	You believe that investing in improving quality standards positively affects the effectiveness and efficiency of health services	3.91	0.80	Agree	20
4-	There is a link between the level of application of quality standards and the level of patients' satisfaction with the health services provided	4.02	0.68	Agree	16
5-	Health personnel can better achieve their goals by adopting quality standards	4.13	0.79	Agree	11
6-	There is sufficient training on quality standards for health personnel in the Kingdom of Saudi Arabia	4.01	0.73	Agree	17
7-	The administration is committed to applying quality standards in human resources management in the health sector	3.95	0.76	Agree	19
8-	Attention to quality standards affects the level of job satisfaction of health personnel	4.22	0.915	Strongly Agree	8
9-	Having a rewards system based on achieving quality standards encourages health personnel to perform better	4.18	0.96	Agree	10
10-	The effective use of quality management techniques affects the productivity of health personnel	4.25	0.96	Strongly agree	5
11-	There are external factors that affect the ability to achieve quality standards in the health sector	4.10	0.98	Agree	12
12-	The presence of financial incentive based on achieving quality standards affects the performance of health personnel	4.24	0.91	Strongly Agree	6
13-	Technical guidance and guidance plays an important role in applying quality standards in the health sector	4.60	0.24	Strongly agree	1
14-	Providing adequate financial resources contributes to achieving quality standards in the health sector	4.45	0.51	Strongly agree	2
15-	There is excessive pressure that affects the ability of health personnel to achieve quality standards	4.09	0.943	Agree	13
16-	There is a gap in knowledge between quality standards and their actual application in the Kingdom of Saudi Arabia	4.08	0.85	Agree	15
17-	Improving quality standards can reduce medical error rates and unwanted health complications	4.08	0.80	Agree	14
18-	The relationship between quality standards and the productivity of health personnel differs according to medical specialties?	4.37	0.88	Strongly agree	4
19-	Administrative and organizational systems have a role in achieving quality standards in the health sector	4.40	0.95	Strongly agree	3
20-	There is a need to develop new strategies to enhance the application of quality standards in the health sector in the Kingdom of Saudi Arabia	4.23	0.51	Strongly agree	7
Total score		4.36	0.87	Strongly agree	

From the results shown in Table (5), it is evident that there is variation in the agreement among the study participants regarding the comprehensive quality standards and the productivity of health

personnel in the government health sector in the Kingdom of Saudi Arabia. The participants' agreement averages ranged from (3.91 to 4.60), falling into the fourth and fifth category of the

Likert scale, indicating agreement to strongly agree with the study tool. This demonstrates consistency in agreement among the study participants regarding the dimensions of comprehensive quality standards and the productivity of health personnel in the government health sector in the Kingdom of Saudi Arabia

- Phrase (13): Technical guidance and guidance plays an important role in applying quality standards in the health sector ranked first with an average agreement of (4.6)
- Phrase (14): Providing adequate financial resources contributes to achieving quality standards in the health sector ranked second with an average agreement of (4.45)
- Phrase (19): Administrative and organizational systems have a role in achieving quality standards in the health sector ranked third with an average agreement of (4.403)
- Phrase (18): The relationship between quality standards and the productivity of health personnel differs according to medical specialties? ranked fourth with an average agreement of (4.37)
- Phrase (10): The effective use of quality management techniques affects the productivity of health personnel ranked fifth with an average agreement of (4.25)
- Phrase (12): The presence of financial incentive based on achieving quality standards affects the performance of health personnel ranked sixth with an average agreement of (4.24)
- Phrase (20): There is a need to develop new strategies to enhance the application of quality standards in the health sector in the Kingdom of Saudi Arabia ranked seventh with an average agreement of (4.23)

And finally Phrase (2): Health personnel adhere to quality standards in performing their duties correctly with an average agreement of (4.015) , phrase (7): The administration is committed to applying quality standards in human resources management in the health sector with an average agreement of (3.955) and last rank came to phrase (3): You believe that investing in improving quality standards positively affects the effectiveness and efficiency of health services with an average agreement of (3.91)

Discussion:

The application method of the study tool demonstrates a meticulous approach to data collection and analysis, ensuring accuracy and reliability in the research findings. By utilizing a Likert pentavalent scale, researchers provided

respondents with a range of options, allowing for nuanced and detailed feedback on each aspect under investigation. The scale's construction involved calculating the appropriate cell length to accurately represent the responses, reflecting a thoughtful consideration of measurement precision.

The use of five response levels, ranging from strongly agree to strongly disagree, allows for a comprehensive assessment of participants' attitudes and perceptions. This granularity enhances the validity of the data collected, enabling researchers to capture subtle variations in opinion among respondents. Additionally, by linking responses to previous studies and providing commentary, researchers contextualize the findings within existing literature, enriching the study's contribution to the field.

The method for correcting the Likert pentavalent scale exemplifies the researchers' commitment to methodological rigor. By calculating the cell length based on the scale's range and dividing it by the number of questionnaire cells, researchers ensure consistency and uniformity in response interpretation. This meticulous approach minimizes the potential for ambiguity or misinterpretation, enhancing the reliability of the study's results.

Overall, the application method of the study tool underscores the importance of rigorous data collection and analysis techniques in research. By employing a systematic approach to scale construction and data transcription, researchers uphold standards of accuracy and precision, ultimately strengthening the credibility and validity of the study's findings.

reference

1. BUS ÉIREANN (2000) Total Quality Management the Irish times Business Eleventh edition
2. Kumar, m (2005) Total quality management as the basis for organizational transformation of Indian Railways: a study in action research' Southern Cross University Lismore, NSW.
3. Nasser Akeil Kadasah 2014 Towards TQM in Service Organizations: Measuring Customer Satisfaction of Saudi Electricity Company Services Faculty of Economics & Administration King Abdulaziz University, Jeddah, Saudi Arabia Saif Faleh Al-Khedran Faculty of Economics & Administration King Abdulaziz University, Jeddah, Saudi Arabia AUGUST
4. Abdulaziz University, Jeddah, Saudi Arabia AUGUST
5. Osman, (2009) "Total Quality Management in the Malaysian.

6. Automobile Industry Faculty of Business Management, Universiti Teknologi MARA, Selangor, Malaysia international business research Vol. 2, No. 1 P. 203-209
7. Brunetti, Wayne.H. (1996) the seven keys to the company's progress, Editions Dunod, Paris, 28.
8. Carolyn green. Ragolousky, Yun & jacher moehr. Health care performance City, Jean Francois "Issues and terms of implementation of quality assurance in residential care,