

**THE EFFECT OF APPLYING ACCREDITATION STANDARDS ON
THE QUALITY OF HEALTH SERVICES AND THE EXTENT OF
PATIENT SATISFACTION AND HEALTH CARE WORKERS**

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1-INTRODUCTION

1-1- Research Background

Quality in health services is defined as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (Institute of Medicine, 2001). Quality incorporates several dimensions, including safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity (Donabedian, 2003). In recent years, the expectations of patients and society regarding healthcare services have evolved, and the focus has shifted toward providing not only medical care but also ensuring a satisfactory patient experience. This transition emphasizes the need for rigorous standards that healthcare providers must adhere to in order to maintain and improve quality.

Accreditation is a voluntary process whereby healthcare organizations are evaluated against established standards by an external body. It serves as a mark of quality and effectiveness, providing reassurance to patients and other stakeholders (ISO 9001:2015). Accrediting organizations like the Joint Commission International (JCI), the National Committee for Quality Assurance (NCQA), and local bodies in Saudi Arabia set benchmarks to evaluate healthcare institution performance.

Accreditation encompasses various aspects of healthcare service delivery, including organizational structure, management practices, facilities, clinical protocols, and patient services. Studies have shown that hospitals that pursue accreditation often demonstrate significant improvements in patient outcomes, including reduced mortality rates and improved patient satisfaction scores (Haq et al., 2011; Baker et al., 2014). Furthermore, adherence to accreditation standards can lead to better staff training and resource management and foster a culture of continuous improvement.

Saudi Arabia's healthcare system has undergone extensive reforms, particularly with the launch of Vision 2030 — a strategic framework designed to transform the country's economy and improve the quality of life for its citizens (Saudi Vision 2030, 2016). The healthcare sector is a critical component of this vision, as it aims to enhance service delivery and ensure that citizens receive high-quality care.

Historically, the Saudi health care system has been characterized by a dual structure consisting of both public and private sectors. The Ministry of Health (MOH) oversees public health services, while private hospitals and clinics provide complementary care (Almalki et al., 2011). Despite considerable investments in healthcare infrastructure, challenges persist, such as uneven distribution of healthcare services, a shortage of skilled healthcare professionals, and variable adherence to accreditation standards (Alshammari et al., 2020).

Patient satisfaction is increasingly recognized as a vital indicator of quality in healthcare services. It encompasses the perceptions and experiences patients have with healthcare providers and the entire healthcare process, from the initial point of contact to post-treatment follow-ups (Otani et al., 2020). High levels of patient satisfaction are associated with improved adherence to treatment regimens, faster

recovery times, and lower rates of hospitalization or emergency services utilization (Peters et al., 2020). Moreover, satisfied patients are more likely to return to the same healthcare provider and recommend the service to others, ultimately driving patient retention and hospital reputation (Johnston et al., 2016). Healthcare workers' morale and job satisfaction also play a crucial role in influencing patient satisfaction. Research indicates that when healthcare providers are satisfied with their work environment, they tend to provide better care, create positive patient experiences, and have lower turnover rates (McHugh & Ma, 2013). The application of accreditation standards in the healthcare sector is crucial for establishing a structured approach to enhancing service quality and patient satisfaction. Accreditation not only focuses on compliance with defined standards but also encourages evidence-based practices, regular performance evaluations, and continuous staff training (Ben Natan et al., 2014). By doing so, healthcare organizations can foster environments conducive to safe, effective, and patient-centered care.

Research has demonstrated that accreditation can significantly improve levels of patient and provider satisfaction by creating consistent protocols that ensure predictable and exemplary care (Almalki et al., 2011). In the context of Saudi Arabia, the benefits of accreditation are particularly relevant, as various healthcare facilities are striving to elevate their standards and results to align with national health goals. While there has been substantial research conducted on the impact of accreditation on healthcare service quality, there remains a scarcity of studies focused on the context of Saudi Arabia, where health service provision is influenced by cultural, social, and religious factors (Al-Ghadhban & Jalil, 2021). More specifically, while the theoretical benefits of accreditation are well-documented, empirical data examining the actual improvements in service quality and patient satisfaction within accredited Saudi facilities is limited. Understanding these dynamics is vital, as the successful implementation of accreditation standards tailored to local needs and expectations can yield significant improvements in the quality of health services and patient satisfaction in Saudi Arabia.

1-2- Research Problem

Despite substantial investments in healthcare and the implementation of various accreditation standards, the quality of health services in many Saudi Arabian hospitals continues to be uneven. Reports from the Ministry of Health indicate that not all hospitals are meeting accreditation requirements, leading to disparities in service delivery and patient experiences (Ministry of Health, Saudi Arabia, 2020). This inconsistency raises concerns about the effectiveness of the accreditation process in enhancing quality and satisfaction levels in the healthcare sector. Though there have been advances in healthcare delivery, many institutions still struggle to comply with accreditation standards due to several obstacles, including a lack of adequate training for healthcare personnel, insufficient understanding of accreditation's importance, and resource limitations (Alsolami et al., 2021). Furthermore, patient feedback mechanisms may not be effectively integrated into service improvement strategies at numerous facilities, potentially failing to capture essential data on patient experiences and satisfaction.

Current challenges related to patient satisfaction arise from a combination of systemic issues, including poor communication between healthcare providers and patients, limited access to resources, and inadequate response to patient needs (Alghamdi et al., 2020). A lack of understanding among patients regarding their rights and the services available can also lead to unrealistic expectations and poor satisfaction levels, thereby undermining efforts to improve service quality.

1-2-1- Research Questions

Given these challenges, it is essential to investigate the specific impact of applying accreditation standards on the quality of health services and the satisfaction of both patients and healthcare workers in Saudi Arabia. The study seeks to provide answers to the following research questions:

1. What is the impact of applying accreditation standards on the quality of health services provided and the extent of patient and health care workers satisfaction?
2. What is the appropriateness of applying accreditation standards to the quality of health services?
3. What is the degree of cooperation of workers with patients?
4. What are the accreditation standards applied in the Kingdom of Saudi Arabia?

Understanding the relationship between accreditation, quality of care, and patient satisfaction is critical for healthcare stakeholders, as it may help guide future policy and structural reforms necessary for enhancing service delivery. Given the established link between high-quality care and improved health outcomes, this research is vital for ensuring that Saudi Arabia's healthcare system can meet the expectations of its citizens and continue to advance under the goals outlined in Vision 2030.

Through comprehensive analysis and empirical investigation, this study aims to contribute to the existing body of knowledge by providing evidence-based insights into the impact of accreditation compliance on quality and satisfaction levels in Saudi healthcare facilities.

1-3- Aim & Objectives

The primary aim of this research is to investigate the impact of applying accreditation standards on the quality of health services and the extent of satisfaction among patients and health care workers in Riyadh, Saudi Arabia.

Secondary Objectives

1. Evaluate the current quality of health services provided in accredited hospitals in Riyadh.
2. Assess the level of patient satisfaction in relation to the accreditation standards applied.
3. Examine health care workers' satisfaction and cooperation with patients.
4. Identify the specific accreditation standards implemented in the Kingdom of Saudi Arabia and their relevance to service quality.

1-4- Research Significance

This study aims to enhance the understanding of how accreditation standards influence the quality of healthcare services and satisfaction levels within the context of Saudi Arabia. By systematically exploring the relationship between these factors, the research contributes to the existing body of literature that lacks empirical data on the subject, particularly in the Arab world (Al-Ghadhban & Jalil, 2021). This study provides a comprehensive analysis of the effectiveness of accreditation processes and how they can be optimized for better performance outcomes. The findings of this research have significant implications for healthcare policymakers in Saudi Arabia. By identifying effective accreditation practices that lead to improved health service quality and patient satisfaction, the study can inform future policies aimed at enhancing healthcare delivery. Furthermore, insights gained from the research can aid in developing targeted training programs for healthcare professionals, thereby fostering a culture of quality improvement within healthcare organizations. For healthcare providers, understanding the specific accreditation standards that yield positive outcomes can drive institutional changes that enhance service delivery. The study provides actionable recommendations on best practices in patient interaction and care processes, which can improve overall organizational performance. By highlighting the critical areas that contribute to patient satisfaction, hospitals and clinics can prioritize resource allocation effectively. The direct consequences of enhanced service quality on patient satisfaction are substantial. By focusing research efforts on this linkage, healthcare institutions are better equipped to foster environments where patients feel valued and understood. Additionally, improving healthcare workers' experiences through accreditation-driven changes can lead to higher job satisfaction rates, reduced turnover, and improved patient experiences (McHugh & Ma, 2013). This study serves as a springboard for future research exploring other factors influencing quality and satisfaction within the Saudi healthcare context. Future researchers may delve deeper into qualitative aspects, such as exploring patient narratives regarding their healthcare experiences, the role of cultural considerations in patient satisfaction, and comparative studies between accredited and non-accredited facilities.

1- LITERATURE REVIEW

The healthcare landscape globally is evolving, with increasing emphasis on delivering high-quality care standardized across healthcare institutions. One significant mechanism driving this transformation is healthcare accreditation. Accreditation serves not only as a quality assurance tool but also as a facilitator for improving patient satisfaction and safety. In Saudi Arabia, the implementation of accreditation standards across healthcare facilities has become paramount, necessitating a deep dive into existing literature to better understand its implications. This literature review critically evaluates the roles of accreditation in enhancing healthcare quality and patient experiences, while also exploring the specific challenges and opportunities present within the Saudi health system.

2-1- Understanding Healthcare Accreditation

Healthcare accreditation is defined as a formal evaluation process where healthcare organizations are assessed against predetermined criteria by an external body. This practice is founded on principles of accountability, quality assurance, and continuous improvement (Baker et al., 2018). The primary purpose is to foster higher quality of care and patient safety within healthcare settings.

The concept of healthcare accreditation can be traced back to the early 20th century, where it began as a voluntary program to improve hospital standards in the United States. Over the years, accreditation has expanded globally, adapting to various national healthcare frameworks and cultural contexts. The introduction of the Joint Commission International (JCI) and other bodies has standardised accreditation protocols while accommodating differing regional demands (Gonzalez et al., 2019).

Various models of accreditation exist worldwide, often distinguished by their methodological approaches and focus areas. For instance, ISO 9001 emphasizes a systematic quality management approach, while the Accreditation Canada model prioritizes safety and effectiveness. The CBAHI (Saudi Central Board for Accreditation of Healthcare Institutions) framework is tailored to align with both international standards and regional health service needs. CBAHI's standards encompass management systems, patient safety, and education of health professionals (Al-Omar et al., 2020).

Research underscores the multifaceted benefits of accreditation. It enhances credibility, encourages organizations to adhere to evidence-based practices, and fosters an environment of continuous improvement. A systematic review indicates that accredited institutions often report higher customer satisfaction rates and better clinical outcomes compared to non-accredited facilities (Dawes et al., 2018).

2-2- The Impact of Accreditation on Quality of Healthcare Services

The assessment of healthcare quality typically involves multiple dimensions. Donabedian's (1988) framework categorizes quality into three main components: structure, process, and outcomes.

Structural quality refers to the physical and organizational infrastructure of healthcare services, including facilities, staff qualifications, and equipment. Accreditation enhances structural quality by ensuring that healthcare institutions meet specific standards for human resources, technology, and overall environment (Fitzgerald et al., 2019). Schools and training programs for healthcare workers develop competencies and foster a culture of quality awareness. Process quality focuses on the mechanisms through which care is provided. Studies suggest that accredited organizations often demonstrate higher adherence to clinical guidelines and management protocols, enhancing the overall care process (Fathalizadeh et al., 2021). Additionally, the integration of continuous professional development and training programs among healthcare staff is a common result of accreditation, which leads to better care practices.

Outcome quality pertains to the results of healthcare practices, particularly regarding patient health and safety. A meta-analysis by Kearns et al. (2020) revealed that accredited hospitals are associated with lower

rates of adverse events, improved clinical outcomes, and higher overall patient satisfaction.

Empirical evidence supporting the impact of accreditation on healthcare quality is extensive. For instance, Baker et al. (2018) outlined those hospitals subjected to the accreditation process showed significant reductions in complication rates and hospital-acquired infections. Additionally, Fitzgerald et al. (2019) provided a compelling argument that quality improvement metrics uphold higher sustainability within accredited organizations due to their ongoing commitment to best practices.

Healthcare accreditation influences numerous performance metrics, including efficiency, patient safety, and clinical outcomes. The Leapfrog Group and HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) measures serve as useful tools in evaluating the quality of care in accredited institutions. Gonzalez et al. (2019) found that hospitals implementing accreditation processes consistently reported higher HCAHPS scores, reflecting improvements in patient experiences and satisfaction.

2-3- Patient Satisfaction as a Critical Quality Indicator

Patient satisfaction is increasingly recognized as a vital measure of healthcare quality. It encompasses various aspects of the healthcare experience, including provider communication, treatment effectiveness, facility environment, and overall care coordination (Donabedian, 1988). Higher levels of patient satisfaction often correlate with better clinical outcomes and adherence to treatment plans.

Numerous studies highlight the statistically significant relationship between healthcare accreditation and enhanced patient satisfaction. Alhassan et al. (2020) found that patients admitted to accredited facilities tended to report higher satisfaction scores, attributing this to better communication, patient empowerment, and involvement in their care decisions.

The influence of accreditation on patient satisfaction can be explained through several mechanisms:

- Accredited institutions often prioritize effective communication training for healthcare providers, leading to better patient-provider interactions (McHugh & Ma, 2013). Studies have demonstrated that effective communication enhances patients' understanding of treatment plans, thereby improving their experiences.
- Accredited hospitals are more likely to implement strict safety protocols, helping to increase patients' overall sense of safety during treatment (Baker et al., 2018). Enhanced safety awareness correlates with improved patient confidence in healthcare services, thereby increasing satisfaction levels.
- Hospitals focused on accreditation often adopt patient-centered care models, ensuring that care is tailored to meet individual patient needs and preferences. This focus on personalization fosters stronger relationships and trust between patients and healthcare professionals (Fathalizadeh et al., 2021).

2-4- Challenges to Implementing Accreditation in Healthcare

Saudi Arabia's healthcare landscape is characterized by a mixture of public and private care facilities. The Ministry of Health is responsible for maintaining healthcare standards, but the diversity of healthcare providers leads to variability in care quality (Al-Omar et al., 2020). The introduction of CBAHI has been a strategic response to enhance care service delivery through rigorous accreditation processes.

Despite its clear benefits, several challenges hinder the effective implementation of healthcare accreditation within Saudi Arabia:

- Traditional healthcare hierarchies may resist the collaborative and transparent practices required by accreditation frameworks. Alghamdi et al. (2020) note that cultural norms influence the openness to accept new systems that prioritize continuous quality improvement.
- Limited financial resources can restrict both public and private healthcare institutions from pursuing accreditation due to associated costs, including implementation training and maintenance of accreditation standards (Alsolami et al., 2021).
- A general lack of training on accreditation standards among healthcare workers can lead to misunderstandings about its importance and impact, resulting in reduced buy-in from staff members (Al-Ghadhban & Jalil, 2021).
- The absence of universally applicable guidelines and metrics for measuring quality and satisfaction can create inconsistencies in how accreditation is implemented and evaluated across institutions (Al-Omar et al., 2020). To address these challenges, targeted strategies may include:
 - Engaging healthcare leaders in driving a cultural shift towards valuing quality improvement can foster greater acceptance of accreditation standards (Alhassan et al., 2020).
 - Government and institutional policies that allocate necessary resources toward accreditation processes will significantly impact its uptake (Alsolami et al., 2021).
 - Enhancing educational programs on the significance of accreditation at both professional and educational levels can bridge knowledge gaps and improve compliance (Alghamdi et al., 2020).

The Vision 2030 initiative aims to revolutionize the Saudi healthcare system, emphasizing the need for improved quality standards, patient safety, and overall healthcare delivery. This vision presents a unique opportunity to integrate accreditation as a core component of healthcare reforms in Saudi Arabia (Al-Omar et al., 2020). Further studies are needed to evaluate the long-term impact of accreditation on service delivery and patient outcomes, particularly as the healthcare landscape evolves in response to new technologies and practices. Facilitating a comprehensive understanding of patient experiences and satisfaction is crucial in sustaining confidence in healthcare delivery.

2- METHODOLOGY

3-1- Study Design

This research employs a **descriptive-analytical approach** to explore the impact of accreditation standards on the quality of healthcare services in accredited hospitals in Riyadh, Saudi Arabia. Given that the study aims to assess current practices and their relationship to patient and healthcare worker satisfaction, this approach is appropriate for systematically capturing and analyzing existing data.

The descriptive aspect of the research allows for the characterization of the quality of services offered, while the analytical component facilitates exploration of relationships between variables such as accreditation standards and patient satisfaction. Utilizing both **primary and secondary data sources**, the research provides a comprehensive understanding of how effective accreditation practices translate into improved healthcare service delivery.

Furthermore, the study integrates a **mixed-methods approach** through the use of quantitative surveys complemented by qualitative analysis of existing literature, allowing for triangulation that enhances the validity of the findings.

3-2- Study Population and Sampling

The study community consists of **healthcare workers** and **patients** from various healthcare institutions in Riyadh, which seek to apply accreditation standards to achieve high-quality international healthcare services. The population is considered to be **unlimited** as it includes all healthcare workers (e.g., doctors, nurses, administrative staff) and patients attending accredited hospitals.

Because the study population is large and not easily enumerable, the sample size is determined using a formula for finite populations. The sample size needs to be sufficient to account for variability within the population and achieve reliable results.

Sample Size Determination

To calculate the minimum sample size, we apply the following formula for sample size determination:

$$n = \frac{Z^2 \cdot p \cdot (1 - p)}{e^2}$$

Where:

- n = required sample size
- Z = Z-value (1.96 for a 95% confidence level)
- p = estimated proportion of an attribute present in the population (0.5 is typically used as it gives the largest sample size)
- e = margin of error (0.05 is considered)

This results in:

$$n = \frac{(1.96^2) \cdot (0.5) \cdot (0.5)}{(0.05^2)} \approx 384$$

Given the unavailability of a finite population, a target of at least 400 participants (200 patients and 200 healthcare workers) are set to ensure sufficient representation and reliability of results.

3-3- Data Collection Tools

Data is collected through two structured **questionnaires** developed specifically for this study. The questionnaires aim to gather extensive demographic and service quality information from both healthcare workers and patients.

3-3-1- Questionnaire Development

The questionnaires were developed after a comprehensive review of the literature on healthcare quality and accreditation standards. They encompass both demographic factors and service quality indicators aligned with the study's objectives.

The study tool consists of two parts:

1. **Demographic Information:** The first part collects demographic data from respondents, such as:
 - Age
 - Gender
 - Marital status
 - Educational level
 - Professional role in healthcare (for healthcare workers)
2. **Quality of Service Assessment:** The second part comprises **25 items** designed to assess perceived service quality in accredited hospitals. The items are based on existing accreditation frameworks and previous studies that highlight essential quality attributes consistent with local and international standards. Each item is rated using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to capture the intensity of respondents' perceptions.

3-3-2- Survey Distribution

The surveys were distributed through **SurveyMonkey**, allowing for easy access and convenience for respondents. The link to the survey was shared via healthcare institutions, social media platforms, and email distributions to ensure a wide reach.

3-3-3- Data Collection Procedures

Data collection integrates both primary and secondary data sources:

- **Primary Data:** Primary data was collected from healthcare providers and patients using the developed questionnaires. Informed consent was obtained from all participants, ensuring their anonymity and confidentiality.
- **Secondary Data:** The research also involved a comprehensive literature review and desk survey regarding accreditation standards, service quality evaluations, and patient satisfaction studies in the Saudi context, which complement the primary data findings.

Study Sample

As previously noted, the study sample comprises two groups:

- **Patients (n=209):** This group includes individuals receiving care in accredited hospitals who complete a questionnaire focused on their experiences and satisfaction levels.
- **Healthcare Workers (n=179):** This group encompasses various staff roles within the hospitals, including doctors, nurses, and administrative personnel, and focus on their perceptions of quality and adherence to accreditation standards.

The respondents from both groups were targeted specifically based on the criteria of having experience within accredited healthcare settings.

3-4- Data Analysis

The collected data was analyzed using the **SPSS version 26** software, which enable the application of various statistical tests to ensure the reliability and validity of the questionnaire:

1. **Descriptive Statistics:** Frequencies and percentages were calculated to describe the demographic characteristics of the study population.
2. **Reliability Analysis:** The **Cronbach's alpha coefficient** was used to assess the internal consistency of the questionnaire, ensuring that the items effectively measure the same construct.
3. **Correlation Analysis:** The **Pearson correlation coefficient** determined the relationship between variables relevant to patient satisfaction and service quality.
4. **Mean and Standard Deviations:** These statistics were computed to summarize responses for each questionnaire item, facilitating a clearer understanding of trends and overall satisfaction levels.
5. **Hypothesis Testing:** A **One-Sample T-test** was conducted to assess whether mean satisfaction levels differ significantly from a predefined threshold, thereby allowing for the testing of research hypotheses.

3-5- Ethical Considerations

In embarking on this research, ethical approval was obtained from the institutional review board, ensuring

that the study adheres to ethical standards regarding human subjects. Informed consent was explicitly obtained from all participants, emphasizing voluntary participation, anonymity, and the ability to withdraw from the study at any point without any repercussions.

3- RESULTS

It will use a set of statistical methods to reach the research objectives as follows. For this purpose, a frequency analysis used for the sample members (Table 1), and the following results were obtained:

Table 1. Distribution of sample members.

Variables		Frequency	Percent %	
The quality of service in the hospital for patients	I give my consent to participate	No	1	0.48%
		Yes	208	99.52%
		Total	209	100.00%
	Did you get a health care service in an accredited facility? (Example of accreditation: Saud	No	46	22.01%
		Yes	163	77.99%
		Total	209	100.00%
	What age group do you belong to	Under 18	5	2.39%
		18-24	44	21.05%
		25-34	93	44.50%
		35-50	57	27.27%
		50+	10	4.78%
		Total	209	100.00%
What is your academic qualification?	Non	1	0.48%	
	High school	30	14.35%	
	Bachelor's	132	63.16%	
	Diploma	19	9.09%	
	Post graduate	24	11.48%	
	Total	209	100.00%	
The quality of service in the hospital for health care	I give my consent to participate	No	1	0.57%
		Yes	175	99.43%
		Total	176	100.00%
	Do you work in a healthcare accredited organization? (Example of accreditation: Saudi central board for accreditation of healthcare institutions CBAHI, Joint Commission International healthcare accreditation JCI)	No	19	10.80%
		Yes	157	89.20%
		Total	176	100.00%
	What age group do you belong to	18-24	17	9.66%
		25-34	98	55.68%
		35-50	56	31.82%
		50+	5	2.84%
		Total	176	100.00%
	What is your academic qualification?	High school	3	1.70%
Bachelor's		107	60.80%	
Diploma		23	13.07%	
Post graduate		43	24.43%	
Total		176	100.00%	

The quality of service in the hospital for patients:

The vast majority of patients consented to participate in the questionnaire on service quality in hospitals 208 (99.52%), and although one patient was not satisfied with the questionnaire, he also participated in 1 (0.48%). More than two thirds of patients received a health care service at an accredited facility 163 (77.99%), while the remaining 46 patients (22.01%) did not receive a health care service at an accredited facility.

Most of the patients were 93 (44.5%) for the age group 25-34, 57 (27.27 %) for the age group 35-50, while the number of patients did not exceed 5 (2.39%) for the age group under 18. More than half of the patients had bachelor's degrees 132 (63.16%), 30 (14.35%) high school, 24 (11.48%) postgraduate, 30 (14.35%) diploma, and the rest 3 (1.44%) other degrees, and 1 (0.48%) unknown.

The quality of service in the hospital for health care workers

The vast majority of health care workers consented to participate in the questionnaire on service quality in hospitals 175 (99.43%), and although one health care worker was not satisfied with the questionnaire, he also participated in 1 (0.57%). 157 (89.2%) of healthcare workers work in a healthcare accredited organization, while the remaining 19 (10.8%) healthcare workers do not work in a healthcare accredited organization. Most of the healthcare workers were 98 (55.68%) for the age group 25-34, 56 (31.82%) for the age group 35-50, while the number of healthcare workers did not exceed 5 (2.84%) for the age group over 50. More than half of the healthcare workers had bachelor's degrees 107 (60.8%), 43 (24.43%) postgraduate, 23 (13.07%) diploma, and the rest 3 (1.7%) high school.

Validity and Reliability

Validity is measured by calculating the Pearson correlation coefficient between the statements, their axis, and the questionnaire as a whole. Table 2 and 3 show the Pearson correlation values, which indicate the existence of a statistically significant correlation at a significance value of 0.05 between the statements and their axis, whether for questions directed to patients or healthcare workers, and this significant correlation confirms the validity of both questionnaires for the study.

Table 2. Validity of Pearson coefficient for patients.

Statements	Axis
I feel good to deal with this hospital	.816**
I don't intend to frequent this hospital on a regular basis in the future	-.382**
I feel happy every time I get service from this hospital	.825**
I find it easy to access the hospital's website on social media	.699**
In general, the service I get from this hospital is very satisfactory for me	.873**
I prefer this hospital over other hospitals	.798**
The services in the hospital are excellent	.828**
The hospital administration employees are familiar with work procedures	.805**
Employees are available during working hours	.824**
The staff direct my help to reach the level of excellent service	.829**
I feel the seriousness of the workers in completing the reception procedures and entering the hospital	.844**
I feel satisfied with the treatment I found in the hospital management and the nurses	.881**
The number of nurses and staff is sufficient to provide high quality services	.849**
There are no mistakes by staff and nurses in completing the transaction and providing the service	.788**
The service was provided to me in the hospital with high quality	.913**
The service in the hospital was delivered quickly, I did not expect	.767**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 3. Validity of Pearson coefficient for healthcare workers.

Statements	Axis
The hospital administration works on applying international and local accreditation standards	.721**
The hospital is fully aware of all developments in accreditation standards	.673**
The hospital has the latest medical devices and equipment	.691**
All financial facilities in the hospital are provided in a visible manner	.694**
The hospital staff has a good and attractive appearance	.688**
The hospital administration is keen to fulfil the promises it makes to patients on time	.793**
The hospital administration is keen to keep accurate and correct records	.647**
The patient is accurately informed of the date of providing and completing the health service	.727**
Hospital staff at the highest level of training and dealing	.774**
All hospital staff are always ready to provide the desired service to patients	.760**
Hospital staff not being preoccupied with promptly responding to patients' questions	.614**
Hospital staff are polite and have good manners	.637**
The hospital administration encourages workers to solve emergency problems for patients and respond to their inquiries	.646**
The hospital administration gives special attention to patients	.749**
Doctors in the hospital know the exact needs of patients	.720**
The hospital administration places the health of patients at the forefront of its concerns	.707**
Hospital working hours are suitable for all patients	.676**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

To ensure the reliability of the questionnaires, both Cronbach's alpha coefficient and stability coefficient were calculated for each of the two questionnaires (Table 4). For patients' questionnaire, the values were 0.95 and 0.976 for Cronbach's alpha coefficient and stability coefficient respectively. whereas for health care workers questionnaire, the values were 0.947 and 0.973 for Cronbach's alpha coefficient and stability coefficient respectively. All values are greater than 0.6 so that reveals the reliability of both questionnaires.

Table 4. Reliability of questionnaires

Questionnaire	Cronbach's alpha	Stability
The quality of service in the hospital for patients (n=209)	.952	.976
The quality of service in the hospital for health care workers (n=179)	.947	.973

Descriptive statistics

Patients' questionnaire

Arithmetic means and standard deviations were calculated for each statement and axis. Table 5 & 6 show that all values of arithmetic means and standard deviations were very high, this declared that all respondents were agree and strongly agree. For patients the highest mean was 3.92 with standard deviation 1.02 at statement "I find it easy to access the hospital's website on social media", and the lowest mean was 2.6 with standard deviation 1.13 at statement "I don't intend to frequent this hospital on a regular basis in the future" (Table 5).

Table 5. Arithmetic means and standard deviations of patients' questionnaire.

Statements	Mean	Standard Deviation
I feel good to deal with this hospital	3.83	.99
I don't intend to frequent this hospital on a regular basis in the future	2.60	1.13
I feel happy every time I get service from this hospital	3.77	1.00
I find it easy to access the hospital's website on social media	3.92	1.02
In general, the service I get from this hospital is very satisfactory for me	3.78	1.02
I prefer this hospital over other hospitals	3.67	1.13
The services in the hospital are excellent	3.74	1.04
The hospital administration employees are familiar with work procedures	3.77	1.01
Employees are available during working hours	3.89	.92
The staff direct my help to reach the level of excellent service	3.89	.94
I feel the seriousness of the workers in completing the reception procedures and entering the hospital	3.83	.98
I feel satisfied with the treatment I found in the hospital management and the nurses	3.82	.96
The number of nurses and staff is sufficient to provide high quality services	3.89	.92
There are no mistakes by staff and nurses in completing the transaction and providing the service	3.64	1.03
The service was provided to me in the hospital with high quality	3.78	1.02
The service in the hospital was delivered quickly, I did not expect	3.77	.97
The quality of service in the hospital for patients	3.83	.84

For healthcare workers the highest mean was 4.27 with standard deviation 0.7 at statement "The hospital administration places the health of patients at the forefront of its concerns", and the lowest mean was 3.64 with standard deviation 1.08 at statement "All financial facilities in the hospital are provided in a visible manner" (Table 6).

Table 6. Arithmetic means and standard deviations of healthcare workers' questionnaire.

Statements	Mean	Standard Deviation
The hospital administration works on applying international and local accreditation standards	4.25	.94
The hospital is fully aware of all developments in accreditation standards	4.24	.91
The hospital has the latest medical devices and equipment	4.18	.98
All financial facilities in the hospital are provided in a visible manner	3.64	1.08
The hospital staff has a good and attractive appearance	4.08	.86
The hospital administration is keen to fulfil the promises it makes to patients on time	3.80	.98
The hospital administration is keen to keep accurate and correct records	4.11	.95
The patient is accurately informed of the date of providing and completing the health service	3.89	1.00
Hospital staff at the highest level of training and dealing	3.96	.98
All hospital staff are always ready to provide the desired service to patients	4.08	1.04
Hospital staff not being preoccupied with promptly responding to patients' questions	3.86	.95
Hospital staff are polite and have good manners	4.26	.79
The hospital administration encourages workers to solve emergency problems for patients and respond to their inquiries	4.08	.91
The hospital administration gives special attention to patients	4.18	.81
Doctors in the hospital know the exact needs of patients	3.91	.92
The hospital administration places the health of patients at the forefront of its concerns	4.27	.70
Hospital working hours are suitable for all patients	3.72	1.21
The quality of service in the hospital for health care workers	4.05	.79

Hypothesis Test

In this section, two basic hypotheses were examined, by following a test one-sample t-test for each questionnaire and its axes, and based on the five-point Likert scale, the test value = 3.

First hypothesis

Null hypothesis **H0**: The mean of quality of service in the hospital for patients equals the specified mean value = 3.

Alternative hypothesis **H1**: The mean of quality of service in the hospital for patients is different from the specified mean value = 3.

The results from one sample t-test (table 7) show that the value of arithmetic mean of the quality of service in the hospital for patients (3.83) is more than test value = 3, and the p-value=0.000 is less than 0.05 ($t=14.408$, $df=208$), so the null hypotheses will be rejected, and the alternative hypotheses will be accepted. This means that the quality of service in the hospital was agreement and significantly for patients.

Table 7. One-Sample statistics for first hypothesis.

	One-Sample Statistics			
	N	Mean	Std. Deviation	Std. Error Mean
The quality of service in the hospital for patients	209	3.8325	.83533	.05778

	One-Sample Test					
	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
The quality of service in the hospital for patients					Lower	Upper
	14.408	208	.000	.83254	.7186	.9464

Second hypothesis

Null hypothesis **H0**: The mean of quality of service in the hospital for healthcare workers equals the specified mean value = 3.

Alternative hypothesis **H1**: The mean of quality of service in the hospital for healthcare workers is different from the specified mean value = 3.

The results from one sample t-test (table 8) show that the value of arithmetic mean of the quality of service in the hospital for healthcare workers (4.05) is more than test value = 3, and the p-value=0.000 is less than 0.05 ($t=17.523$, $df=175$), so the null hypotheses will be rejected, and the alternative hypotheses will be accepted. This means that the quality of service in the hospital was agreement and significantly for healthcare workers.

Table 8. One-Sample statistics for second hypothesis.

One-Sample Statistics						
		N	Mean	Std. Deviation	Std. Error Mean	
The quality of service in the hospital for healthcare workers		176	4.0455	.79151	.05966	

One-Sample Test						
		Test Value = 3				
The quality of service in the hospital for healthcare workers	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
	17.523	175	.000	1.04545	.9277	1.1632

Findings

We summarize the findings as follows:

- Most patients indicated the ease of accessing the hospital's website via social media, with an average of 3.92.
- Patients reported that the hospital staff is permanently during working hours with an average of 3.89.
- Most patients expressed the availability of nurses and a good qualified staff in the hospitals with an average of 3.83.
- Patients were satisfied with the services provided by the hospital, with an average of 3.77.
- Some patients did not want to repeat the experiment in some hospitals, with an average of 2.6.
- Healthcare workers indicated that hospitals prioritize patient health, with an average of 4.27.
- Health care workers consider the staff in most hospitals to be polite and have good experience, with an average of 4.26.
- The overall appearance of the hospital staff is gaining good traction towards healthcare workers with an average of 4.08.
- Healthcare workers indicated that most hospital administrations are keeping their promises to patients, with an average of 3.8.
- Hospital financial facilities and transactions are clear to health care workers with an average of 3.64.
- The quality of service in the hospital was agreement and significantly for patients.
- The quality of service in the hospital was agreement and significantly for healthcare workers.

4- DISCUSSION OF FINDINGS

The findings from the study present insightful observations on patient satisfaction and healthcare worker perceptions in the hospital environment. The data illustrates a blend of positive feedback regarding accessibility and staff interactions while highlighting areas requiring further attention and enhancement.

Below is a detailed discussion based on the findings you provided.

The high average score of 3.92 regarding the ease of accessing the hospital's website via social media underscores the increasing importance of digital platforms in modern healthcare. The ability of patients to access information through social media reflects effective digital marketing strategies employed by the hospital. It shows that the hospital recognizes the necessity of engaging with patients on platforms they frequently use, thus enhancing communication and outreach.

This digital accessibility allows for vital information dissemination, such as service availability, appointment bookings, and health information. Since many patients are turning to online resources to manage their health, the hospital's efforts in this domain are commendable. Future initiatives could explore expanding these digital resources, perhaps through dedicated apps or more interactive social media engagement. Hospitals could benefit from creating patient-centric content that provides valuable health education, major updates, and resources to empower their patients further.

Patients also rated hospital staff availability positively with an average score of 3.89, indicating that patients felt supported throughout their interactions. The consistent presence of hospital staff during working hours suggests that the hospital effectively maintains staffing levels, which is pivotal to ensuring a responsive patient experience.

Staff availability is closely tied to patient satisfaction, as responsive care can lead to improved health outcomes. When patients know they can reach out to staff readily, it fosters an environment of trust and reassurance. The hospital can build on this finding by ensuring that staff training includes customer service skills and emphasizes the importance of being approachable and helpful.

With an average score of 3.83, patients noted the availability of well-qualified nurses and staff, which speaks volumes about the hospital's commitment to hiring competent healthcare professionals. This finding reflects positively on the hospital's hiring strategies and training programs. Nurse staffing levels and the qualifications of medical professionals are crucial elements that directly influence both patient safety and satisfaction.

It is vital for hospitals to regularly assess the qualifications and ongoing training of their staff to ensure they remain updated with the latest medical practices and technologies. Continuous professional development can thus be a focus area for the hospital, enhancing both staff confidence and patient perceptions of care quality.

The average score of 3.77 related to general patient satisfaction with hospital services indicates that, while most patients reported favorable experiences, there may be specific areas needing improvement. It's important to investigate the aspects contributing to this score, particularly why some patients expressed dissatisfaction, as evidenced by the relatively low average score of 2.6 concerning their intent to repeat experiences in certain hospitals.

The score of 2.6 implies that a segment of patients may have negative past experiences that influence their

willingness to seek care at the same institution in the future. Identifying the reasons behind this sentiment is critical. Factors such as previous encounters with administrative challenges, delays in receiving care, or unsatisfactory interactions with medical staff could contribute to this negative perception.

Collecting qualitative data through patient interviews or surveys could provide deeper insights into the specifics behind their unwillingness to return. Moreover, addressing the causes of dissatisfaction through tailored improvement strategies could significantly bolster overall patient retention.

Healthcare workers reported impressively high scores regarding hospital prioritization of patient health, with an average of 4.27. This shows a strong alignment between the hospital's values and the experiences of both patients and staff, reflecting a shared commitment to patient-centric care. When healthcare workers feel that their institution prioritizes patient safety and health, it can lead to increased motivation and job satisfaction, ultimately benefiting patient care quality.

The findings also indicate that healthcare workers view the politeness and professionalism of staff favorably, with a score of 4.26 reflecting well on the hospital's culture of respect and care. The appearance of hospital staff, scoring an average of 4.08, may also contribute to patient perceptions of professionalism and trustworthiness, which are crucial in healthcare settings.

Healthcare organizations should continue to prioritize training that enhances communication and interpersonal skills and fosters a workplace culture promoting respect and professionalism. Creating an environment where both staff and patients feel comfortable and respected can lead to better health outcomes.

A score of 3.8 suggests that hospital administrations generally keep their promises to patients, which is an integral part of fostering trust within the patient-provider relationship. Reliability reinforces patient satisfaction, so ongoing efforts to ensure transparency in communication about care expectations and outcomes are essential.

Additionally, healthcare workers' perceptions of financial clarity (average of 3.64) indicate that there is room for improvement. Financial transparency is integral in today's healthcare environment, where costs can often feel opaque or convoluted for patients. Providing clear explanations regarding billing, insurance coverage, and out-of-pocket costs not only aids in patient satisfaction but could also enhance the institution's reputation in the community.

Both patients and healthcare workers agreed on the overall quality of the services provided in the hospital. This is a positive indicator, but it highlights the need for continuous monitoring and updating of service quality to meet evolving healthcare standards. It would be beneficial for the hospital to engage in regular quality assessments and solicit ongoing feedback from both patients and staff. This approach will ensure that services remain aligned with community needs and improve patient satisfaction over time.

5- CONCLUSION

The Kingdom of Saudi Arabia places significant emphasis on the healthcare sector, highlighting its importance as part of Vision 2030. This initiative aims to increase the number of hospitals and healthcare centers while boosting support for health insurance companies. Alongside these efforts, there has been a concerted push to enhance the quality of health services. This study evaluates the quality of services provided in hospitals, aiming to elevate the healthcare sector to its highest potential—encompassing hospitals, health centers, and the insurance sector—while ensuring high standards that satisfy patients and create a favorable environment for healthcare workers.

Recommendations

Further research is encouraged across various topics and fields, including:

1. Periodic evaluations of the quality of services offered in hospitals throughout the Kingdom.
2. Expanding quality assessments to encompass both private and public hospitals and healthcare centers across the Kingdom.
3. Gathering insights from healthcare workers, including doctors, nurses, and support staff.
4. Highlighting the challenges faced by the healthcare sector in the context of the COVID-19 pandemic.

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