# The Effect of Service Quality on Patient Satisfaction at King Faisal Hospital in Saudi Arabia

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#### Abstract

The healthcare sector offers medical services to those in need of medical attention. Clinics, hospitals, and community health services are all part of the health services sector. One healthcare facility crucial to enhancing the general state of public health is the hospital. In the healthcare sector, achieving patient satisfaction depends heavily on service quality. As a result of the growing degree of competition, hospitals are becoming more conscious of how important it is to give their patients the highest caliber of care. Aim: to investigate the impact of Service Quality (SQ) on Patient Satisfaction (PSAT). Methodology: a quantitative cross-sectional correlational study, a convenience sample of 380 in-patients receiving treatment at a governmental hospital, King Faisal Hospital in Saudi Arabia. Data was collected by using two questionnaires: Service Quality (SQ) and patient satisfaction (PSAT) with data analysis conducted using Amoss26 and SPSS26. Conclusion: The findings revealed Service Quality (SQ) positively influenced patient satisfaction. Limitation: Since there are fewer studies on Service Quality (SQ) in the healthcare sector than in manufacturing industries, this research substantially contributes to existing literature and merits additional study. Furthermore, this research offers significant perspectives for managers in the healthcare industry about strategic planning and decision-making procedures.

Keywords: Patient Satisfaction; Service Quality.

# Introduction

The healthcare sector offers medical services to those in need of medical attention. Clinics, hospitals, and community health services are all part of the health services sector. One healthcare facility crucial to enhancing the general state of public health is the hospital. In the healthcare sector, achieving patient satisfaction depends heavily on service quality. As a result of the growing degree of competition, hospitals

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are becoming more conscious of how important it is to give their patients the highest caliber of care. According to Permenkes Number 43 of 2016, a hospital's operations depend heavily on the quality of its services. According to Maqsood et al. (2017), service quality is a broad term that can be defined as the significant discrepancy between patient observations and expectations of facilities and the actual actions of services received by clients provided by the hospital at a specific period it impacts client or patient satisfaction (Karsana, W., & Murhadi, W. R.,2021).

A high level of service quality will encourage customers to make additional service requests. Customer loyalty will result from service quality that lives up to expectations. Customers will have a definite preference for this service over those of other organizations that provide the same service. Patient satisfaction will be impacted by high-quality services. A key factor in determining the caliber of hospital services is patient satisfaction. Customer satisfaction can be viewed as a factor in a patient's assessment of the service's effectiveness (Ismail & Yunan, 2016).

A trustworthy instrument for organizing, carrying out, and assessing the hospital service system is patient satisfaction, which is also a gauge of the caliber of care services. The degree of perfection of health services is referred to as quality, and it might, on the one hand, result in patient satisfaction based on the population's average level of contentment. However, its execution processes adhere to professional service standards and the established code of ethics. Patient satisfaction is impacted by high-quality hospital treatments (Karsana, W., & Murhadi, W. R.,2021& Alabbas et al. 2024).

The research aim is to examine the effect of Service Quality on Patient Satisfaction. According to certain research, customer satisfaction is significantly improved by high-quality services. Related research has shown that the banking, hotel, and catering services sectors were all positively impacted by service quality (DAM, S. M., & DAM, T. C. 2021). SQ research has attracted the attention of both scholars and practitioners, leading to a substantial body of work, but research in the healthcare industry is lacking (Sabella et al., 2014& Tessema et al., 2024& Alabbas et al., 2024).

Prior research has mostly concentrated on SQ and PSAT. Nevertheless, despite the increased focus on healthcare quality, these studies have frequently ignored the healthcare sector in favor of the manufacturing sector (Agyapong et al., 2018& Tessema et al., 2024& Alabbas et al., 2024). Moreover, previous studies have mostly examined the direct relationship between total TQM and service quality, ignoring the potential for SQ to affect PSAT. There is a shortage of comprehensive studies on the use of SQ in the healthcare systems of Saudi Arabia and other developing countries.

According to Alshrbaji et al. (2022), The research is crucial since it looks at significant aspects of highquality healthcare. It provides crucial information about the interactions between SQ, and PSAT in the context of King Faisal Hospital. Gaining insight into these connections could enhance patient satisfaction, healthcare delivery, and patients' confidence in healthcare organizations. Furthermore, this study may lead to recommendations for policies that reduce a wide range of risk factors. These factors include demographics, population behaviors, socioeconomic status, education, and geographic location (Wasihun et al., 2023: Pratama, et al., 2024; Tessema et al., 2024& Alabbas et al., 2024). By implementing these factors' policy recommendations, Saudi healthcare issues can be lessened.

# Literature Review

# **Quality Service**

According to Koros et al., 2020, service quality is the discrepancy between a patient's expectations and their assessment of the services they received. This method assesses the discrepancy between what clients expect and what they encounter. Four elements of the service quality scale—tangibles, responsiveness, empathy, and reliability can be used to evaluate the service performance component (Zeithaml et al., 1996). Schneider & White (2004) assert that the SERVQUAL scale needs to be updated to be used in all initial state scenarios. Customers' perceptions of the services they receive are referred to as service quality (Koros et al., 2020).

Additionally, a service's quality is evaluated by how well it satisfies the client's demands and expectations; the higher the degree of satisfaction, the better the fit, claim (Abror et al. 2020&Pratama, et al., 2024).

#### **Patient Satisfaction**

Hospitals today are very different from those of the past, where attempts to guarantee the security and comfort of Hospitalized patients are governed by rules and laws. Advanced technology-using hospitals have been widespread around the world, including in Saudia Arabia, and have been serving a large patient population for many years. Saudia Arabia's health sector is expanding quickly, resulting in significant Competition. For healthcare organizations to thrive, they must draw in and keep Clients. Consumers are essential to an organization's existence and prosperity (Pratama et al., 2024& Alabbas et al., 2024).

The expression of a client's enjoyment or disappointment following a comparison of opinions regarding the effectiveness or outcomes of a good or service is known as patient satisfaction. The patient is satisfied if the goods or service lives up to expectations; if not, they are dissatisfied. A key component of health services is patient satisfaction. The degree of a person's perceived state, which arises from comparing the actual outcome or appearance with their expectations, is known as satisfaction. Attitudes and knowledge on the caliber of health services, service procedures, and service systems might be used to interpret this patient satisfaction as contentment with access to healthcare services (Almomani, R et al., 2020&&Pratama et al., 2024& Alabbas et al., 2024).

Customer satisfaction is the number of customers, or percentage of all consumers, whose reported experience with an organization, its products, or its services exceeds predefined satisfaction criteria. Patient satisfaction is a key metric for assessing health in the healthcare industry. Studies have indicated that a patient's degree of enjoyment influences how quickly they recover. The quality of the service and product should be such that it successfully meets the needs and expectations of the patients (Duggirala & Rajendran, 2008; Salleh & Ghazali, 2018; Nazri et al., 2022 & Tessema et al., 2024& Alabbas et al., 2024).

# Hypothesis Development

#### The relationship between Perceived service quality and Patient Satisfaction

Profitability is impacted because patients are more inclined to switch providers if they feel their care is inadequate. Satisfied patients are more likely to spread the news about the institute. A reliable measure of customer satisfaction is service quality, per Suhail and Srinivasulu's (2021) research. Customer satisfaction and service quality were found to be significantly and favorably correlated in another study by Titing & Sudarnice (2022). The study by Amin and Nasharudin (2013) demonstrates that service quality has a substantial impact on patient satisfaction. Various findings from other research indicate that service quality significantly improves patient satisfaction (Maqsood et al., 2017). Customers will have faith in an organization that provides the best possible service (Pratama et al., 2024). Consequently, the following theories are developed based on the examination of the body of available literature:

H1: Service quality (SQ) significantly impacts patient satisfaction (PSAT).

# Methodology

#### Research design

A quantitative, cross-sectional, correlation research. Based on Spector, P. E. (2019), The nature of causal inference from a philosophy of science perspective is used to illustrate how cross-sectional designs can provide evidence for relationships among variables and can be used to rule out many potential alternative explanations for those relationships.

# Research technique

The research technique was a non-probability convenience sampling Technique. A convenience sampling technique is a way of selecting participants or clinical cases from the target population based on accessibility in the area (e.g., a hospital), medical records database, website, or consumer membership (Stratton, S. J., 2021).

#### Research setting

Current research was conducted in the western region of Saudi Arabia in a general hospital In Makkah City affiliated with the Ministry of Health (MOH). The hospital was King Faisal Hospital (KFH).

#### Sample size

The sample size was evaluated using a power analysis of 380 in-patients at King Faisal Hospital in Saudi Arabia male and female patients older than eighteen. According to Kemal Ö. (2020), For advancements to occur, study results must be processed precisely, at this point, biostatistics is crucial for gathering reliable data, conducting objective comparisons, and accurately interpreting the results. It is crucial to perform power analysis in scientific research to appropriately evaluate the results. It is possible to show whether or not the results are significant by using power analysis to determine how many samples should be included in the study.

#### Data collection

The structured English version of the questionnaire was translated by an expert translator into the Arabic language to be consistent with the current setting. The expert translator used a translating and back-translating technique to maintain the instrument's validity and measure what needed to be measured. The structured English version of the questionaries was distributed to patients through a convenience sampling approach with a consent form attached to the questionaries which requested the respondent's willingness to participate in answering the questions. The response rate was 83%.

#### Data analysis method

Structural equation modeling (SEM) in AMOS version 26 was used to analyze questionnaire data to test the study hypothesis. Before any statistical analysis, individual components were categorized and a construct was created. In this research, SEM was used to evaluate the study framework using SPSS statistics and SPSS Amos software following the completion of Composite reliability and Cronbach Alpha average variance extracted (AVE). (CR).

Forza & Filippini (1998) state that a suitable sample size for the SEM method is greater

than 100 observations, however, 50–400 observations are just as appropriate. As a result, the research sample size (n = 380) meets the criteria for SEM analysis.

#### Measurement

Data collection for this research includes two tools as the following:

The first tool for Service quality (SQ). The questionnaire was adapted by the researcher based on Parasuraman et al. (1991) and Anabila et al. (2020). It includes five dimensions which cover 15 items. These items included three each for assurance, empathy, reliability, responsiveness, and tangibility. The scoring system of the tool was measured with a five- points Likert scale ranging from (1= Strongly Dissatisfied), (2= Dissatisfied), (3=Neutral), (4=Satisfied) to (5= Strongly Satisfied).

The second tool for patient satisfaction (PSAT). The questionnaire was adapted by the researcher based on (Nguyen et al., 2021) and includes five items. Schneider & White (2004) assert that the SERVQUAL scale needs to be updated to be used in all circumstances. Leninkumar, (2017) provided the customer satisfaction metrics, with a minor modification added to the SERVQUAL scale to consider local perspectives. Paul and Meesala (2018) declare that the items were modified in response to suggestions from experts in the sector. The scoring system of the tool was measured with a five- points Likert scale ranging from (1= Strongly Dissatisfied), (2= Dissatisfied), (3=Neutral), (4=Satisfied) to (5= Strongly Satisfied).

# **Result And Discussion**

# Measurement model assessment

The validity and reliability of the research model were examined using Amos (see Table 1). Convergent validity was examined using the average variance extracted (AVE) and outer loadings. Cronbach's alpha ( $\alpha$ ), composite reliability (CR), and internal consistency were evaluated. The factor loadings were higher than the 0.70 cutoff, as seen in Table 1. Additionally, Cronbach's alpha is above 0.70, and CR is within an acceptable range above 0.70 (Hair et al., 2017). As a result, the data is reliable and internally consistent. In addition, there is no problem with convergent validity because the AVE value is a desirable number greater than 0.50 (Dash and Paul, 2021). The items' high reliability was demonstrated by the fact that the factor loadings likewise surpassed the permissible limit of 0.6 (Ringle & Sarstedt 2021). Refer to Table 1 and Graph 1.

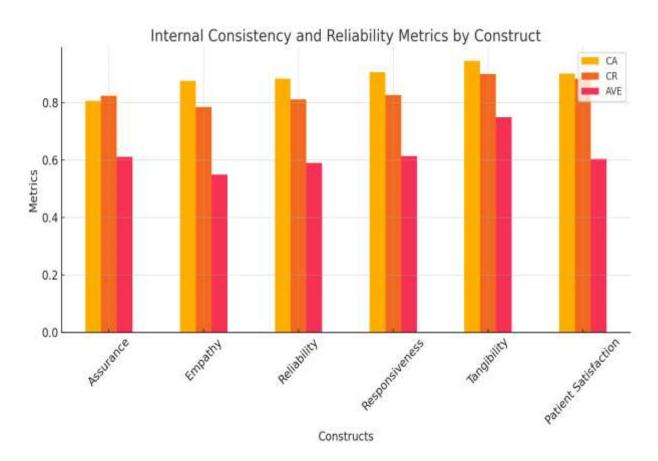
Constructs	CA	Items	Factor Loading	CR	AVE
Assurance	0.806	ASS1	0.783	0.824	0.611
		ASS2	0.823		
		ASS3	0.736		
Empathy	0.875	EMP1	0.707	0.784	0.549
		EMP2	0.724		
		EMP3	0.789		
Reliability	0.883	REL1	0.733	0.811	0.589
		REL2	0.808		
		REL3	0.761		
Responsiveness	0.906	RES1	0.807	0.826	0.613
		RES2	0.787		
		RES3	0.754		
Tangibility	0.945	TAN1	0.895	0.900	0.749
		TAN1	0.878		
		TAN1	0.822		
Patient Satisfaction	0.901	SAT1	0.786	0.883	0.603
		SAT2	0.784		
		SAT3	0.770		
		SAT4	0.775		
		SAT5	0.766		

Table1. Internal Consistency and Reliability

N=380. CA, Cronbach's alpha; CR, Composite reliability; AVE, Average variance extracted.

# Graph1. Internal Consistency and Reliability Metrics by Construct

The following chart represents the values of Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) for each construct:



# Hypothesis testing

When two-sided significance tests are used in a hypothesis test, the symbol \*\*\* indicates that the hypothesis is accepted at the 0.001 level.

Hypotheses	Path	β	S.E.	t-value	P-Value	Decision
H1	SQ→PSAT	0.35	0.200	3.890	***	Supported

N=380. β, Standardized coefficient; S.E, Standardized estimate

There was statistical significance in the path coefficient of SQ $\rightarrow$ PSAT ( $\beta = 0.35$ , t-value = 3.890, P = 0.001). It was discovered that SQ has a major effect on the PSAT. This result is in line with earlier studies conducted by Agyapong et al. (2018). The hypothesis is thus validated. Refer to

Hypothesis Testing Results

Hypotheses

Figure 1: Hypothesis Testing Results

# Conclusions

The effect of SQ on PSAT was evaluated in the research. The healthcare sector benefits from SQ since it increases patient service delivery's efficacy and efficiency. SQ increases the organization's competitiveness and adds value. The findings of the study have significant ramifications for Saudi public hospital administrators. Any society's health is greatly influenced by its healthcare system. Therefore, it should be a top priority to implement SQ concepts to boost effectiveness and efficiency. PSAT mediates the relationship between inpatient satisfaction and the quality of services received by patients. The service organization should include these factors in its strategic planning and decision-making to improve customer satisfaction.

# Limitation and Future Research Direction

First, future research should be conducted in other geographical areas for the generalizability of the findings. Second, the data gathered from patients who were admitted, managers, and staff may be used in future studies. Third, the study's sample size was insufficient; perhaps future researchers will be able to do the study with a larger sample size.

# Theoretical and practical implication

Because there are fewer studies on SQ in the healthcare industry than in the manufacturing sector, it significantly expands on what has previously been written and stimulates further research. Few of the

studies examined the connection between SQ and PSAT, as far as the researchers are aware. Furthermore, more study is required in developing nations so that scholars can concentrate on this field. Additionally, this study has significant management ramifications for healthcare administrators who might want to consider and utilize the factors discussed in this paper when formulating strategic plans and choices. This study has a significant impact on managers' ability to increase PSAT through the use of SQ concepts and to perform better in a competitive and dynamic environment in the healthcare sector.

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