

## WHY DO INTERNATIONAL PATIENTS COME BACK? AN S-O-R EXPLANATION OF SERVICE QUALITY, TRUST, AND SATISFACTION IN SAUDI HOSPITALS

### POR QUE OS PACIENTES INTERNACIONAIS RETORNAM? UMA EXPLICAÇÃO S-O-R SOBRE QUALIDADE DE SERVIÇO, CONFIANÇA E SATISFAÇÃO EM HOSPITAIS SAUDITAS

Article received on: 8/29/2025

Article accepted on: 11/28/2025

**Khalid Alruwaili\***

\*Azman Hashim International Business School, University Technology Malaysia, Kuala Lumpur, Malaysia  
[lr9l@hotmail.com](mailto:lr9l@hotmail.com)

**Basheer Al-haimi\***

\*Azman Hashim International Business School, University Technology Malaysia, Kuala Lumpur, Malaysia  
[basheeralhaimi88@gmail.com](mailto:basheeralhaimi88@gmail.com)

**Alfonso Infante-Moro\*\***

\*\*Department of Financial Economics, Accounting and Operations Management, University of Huelva, Spain  
[alfonso.infante@decd.uhu.es](mailto:alfonso.infante@decd.uhu.es)

**Salman Alenzi \***

\*Azman Hashim International Business School, University Technology Malaysia, Kuala Lumpur, Malaysia  
[Salenzi2020@gmail.com](mailto:Salenzi2020@gmail.com)

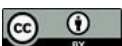
The authors declare that there is no conflict of interest

#### Abstract

Medical tourism has become an increasingly competitive global industry, prompting healthcare destinations to focus on service excellence and long-term patient retention. Using the Stimulus–Organism–Response (SOR) framework, this study examined how service quality (stimulus) affects revisit intentions in Saudi hospitals, with patient satisfaction and trust as organism factors. Service quality is defined as a second-order construct comprising key aspects of healthcare service delivery. A quantitative research approach was adopted, with data collected from international patients in Saudi hospitals, yielding 220 samples. The model was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that service quality has a strong, significant positive impact on both patient satisfaction and trust. Although satisfaction positively influences revisit intention, trust has an even greater effect, highlighting its vital role in shaping patients' future behaviors in healthcare settings with high perceived risk. The

#### Resumo

O turismo médico tornou-se uma indústria global cada vez mais competitiva, levando os destinos de saúde a se concentrarem na excelência do serviço e na retenção de pacientes a longo prazo. Utilizando a estrutura Estímulo-Organismo-Resposta (SOR), este estudo examinou como a qualidade do serviço (estímulo) afeta a intenção de retorno em hospitais sauditas, com a satisfação e a confiança do paciente como fatores do organismo. A qualidade do serviço é definida como um construto de segunda ordem que engloba aspectos-chave da prestação de serviços de saúde. Adotou-se uma abordagem de pesquisa quantitativa, com dados coletados de pacientes internacionais em hospitais sauditas, totalizando 220 amostras. O modelo foi analisado utilizando Modelagem de Equações Estruturais por Mínimos Quadrados Parciais (PLS-SEM). Os resultados mostram que a qualidade do serviço tem um forte e significativo impacto positivo tanto na satisfação quanto na confiança do paciente. Embora a satisfação



findings confirm the SOR-based mechanism in which service quality serves as a core stimulus, influencing patients' internal evaluations and subsequent willingness to revisit. This research contributes to the healthcare and medical tourism literature by empirically validating a comprehensive SOR-based model and emphasizing the importance of trust in maintaining patient relationships. In practice, these insights are valuable for healthcare policymakers and hospital managers in Saudi Arabia, especially in light of Saudi Vision 2030, by highlighting the need to improve service quality and to build trust to enhance patient loyalty and international competitiveness.

**Keywords:** Medical Tourism. Service Quality. Patient Satisfaction. Patient Trust. Revisit Intention. SOR Model. Saudi Healthcare.

*influencie positivamente a intenção de retorno, a confiança tem um efeito ainda maior, destacando seu papel vital na formação dos comportamentos futuros dos pacientes em ambientes de saúde com alto risco percebido. As descobertas confirmam o mecanismo baseado em SOR, no qual a qualidade do serviço serve como um estímulo central, influenciando as avaliações internas dos pacientes e a subsequente disposição para retornar. Esta pesquisa contribui para a literatura sobre saúde e turismo médico ao validar empiricamente um modelo abrangente baseado na relação entre serviço e paciente (SOR, na sigla em inglês) e enfatizar a importância da confiança na manutenção do relacionamento com o paciente. Na prática, essas informações são valiosas para formuladores de políticas de saúde e gestores hospitalares na Arábia Saudita, especialmente à luz da Visão Saudita 2030, ao destacar a necessidade de aprimorar a qualidade do serviço e construir confiança para aumentar a fidelização do paciente e a competitividade internacional.*

**Palavras-chave:** Turismo Médico. Qualidade do Serviço. Satisfação do Paciente. Confiança do Paciente. Intenção de Retorno. Modelo SOR. Sistema de Saúde Saudita.

## 1 INTRODUCTION

Medical tourism has experienced substantial global growth over the past few decades, as an increasing number of patients seek healthcare services beyond their national borders (Białk-Wolf, A., 2025) & (Arıcı & Güçer, 2018). This expansion has intensified competition among healthcare destinations, making it essential to understand the factors shaping patient decision-making and promoting long-term engagement (Alodhialah et al., 2024). Among these factors, service quality plays a pivotal role in influencing patient satisfaction, fostering trust, and ultimately determining revisit intentions (Al-Haimi, B. et al. 2024; Han & Hyun, 2014; Indaryani & Wulandari, 2023).

In this context, Saudi Arabia has emerged as a promising medical tourism destination, driven by ambitious healthcare reforms under Vision 2030 aimed at economic diversification and service excellence (Suleiman, A. K., & Ming, L. C. (2025). The Kingdom has made substantial investments in healthcare infrastructure and advanced medical technologies to attract international patients, while also offering a culturally

sensitive environment that aligns with Islamic values. The integration of Islamic medical practices and the promotion of wellness tourism further strengthen Saudi Arabia's positioning as a regional hub for medical tourism (Suleiman, A. K., & Ming, L. C. (2025).

Despite these developments, empirical research examining how the service quality of Saudi hospitals influences international patients' trust and satisfaction and whether these factors translate into revisit intention remains limited. Addressing this gap is critical, as sustaining competitiveness in medical tourism requires not only attracting patients but also fostering loyalty and repeat visits (Ghali et al., 2023; Wahyuningsih et al., 2023). Accordingly, this study adopts the Stimulus–Organism–Response (S-O-R) framework to explain how perceived service quality (stimulus) affects patient satisfaction and trust (organism), which in turn shape revisit intention (response) (Han et al., 2021; Ramazani et al., 2020).

Guided by this framework, the study seeks to address the following research questions: (1) How does service quality in Saudi hospitals influence satisfaction and trust among international patients? and (2) To what extent do satisfaction and trust affect international patients' intention to revisit Saudi healthcare providers?

## **2 LITERATURE REVIEW**

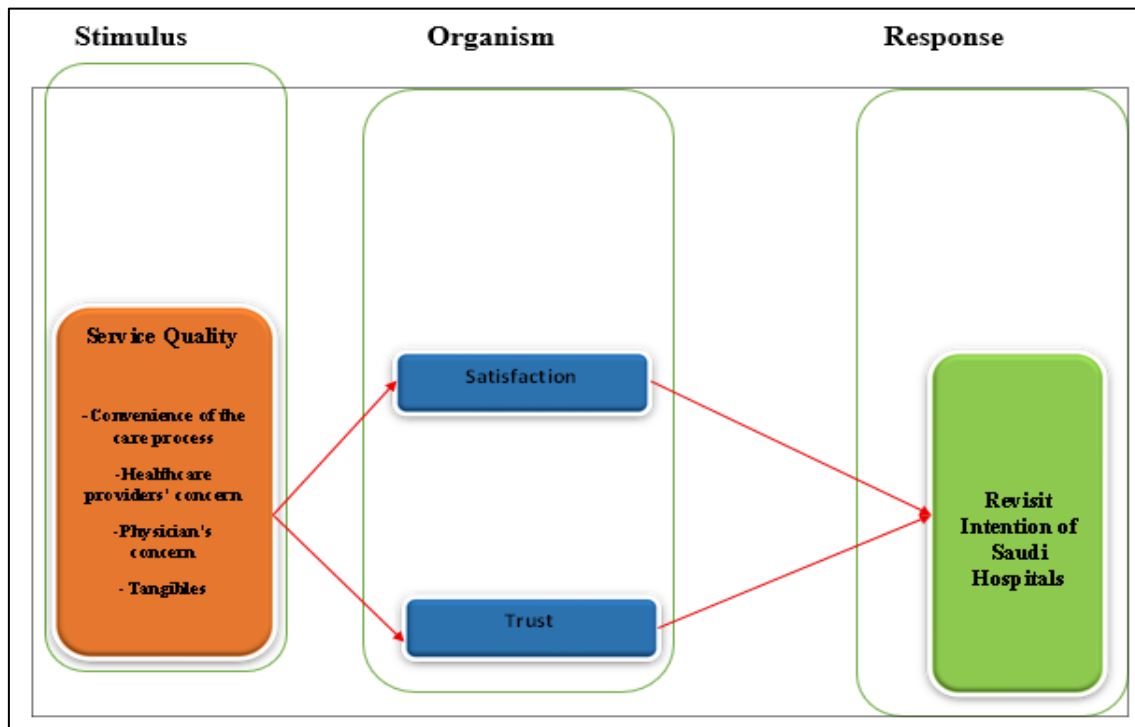
### **2.1 Underpinning theory**

The theoretical underpinning of this research draws heavily from established models in service marketing and consumer behavior, particularly the Stimulus-Organism-Response framework, which posits that environmental stimuli (S) influence an individual's internal states (O), subsequently leading to behavioral responses (R) (Indaryani & Wulandari, 2023). In this context, service quality acts as the stimulus, patient satisfaction and trust represent the internal organismic states, and revisit intention serves as the behavioral response. This S-O-R framework provides a robust lens through which to analyze the intricate dynamics within the healthcare sector, particularly concerning patient perceptions and subsequent actions. Previous research has extensively explored the individual components of this framework; however, a comprehensive understanding of their interplay within the unique cultural and developmental context of Saudi Arabia healthcare, particularly for international patients, remains underexplored

(Ajina, 2019). While existing literature has examined service quality, trust, and patient satisfaction across various healthcare settings (Aladwan et al., 2023; Chang et al., 2013), studies specifically investigating the S-O-R model among international patients in Saudi hospitals are limited. Therefore, this study aims to fill this gap by empirically investigating the mediating roles of satisfaction and trust in the relationship between service quality and revisit intention among international patients in Saudi Arabian hospitals. The following sections will elaborate on the theoretical foundations of service quality, patient satisfaction, trust, and revisit intention, culminating in the development of a conceptual model and hypotheses for empirical testing.

**Figure 1**

*Study framework*



## 2.2 Service quality and satisfaction

Service quality is widely conceptualized as a multidimensional construct reflecting the discrepancy between patients' expectations and their perceptions of the healthcare services they receive (Alrubaiee & Alkaa'ida, 2011). In the healthcare context, service quality extends beyond clinical outcomes to encompass both functional and experiential dimensions of care. Drawing on established healthcare quality frameworks,

this study conceptualizes service quality through four core dimensions: convenience of the care process, healthcare providers' concern, physicians' concern, and tangibles (Choi et al., 2004). These dimensions have been extensively adopted in healthcare quality assessments, including adaptations of the SERVQUAL and SERVPERF models, due to their ability to capture patients' holistic service experiences (Sharka et al., 2024).

The convenience of the care process reflects the ease with which patients can access and navigate healthcare services, including appointment scheduling, wait times, and administrative efficiency. Efficient and patient-friendly processes reduce uncertainty and frustration, thereby enhancing patients' overall service evaluations. Healthcare providers' concern emphasizes the empathy, responsiveness, and attentiveness demonstrated by medical staff, signaling a genuine commitment to patient well-being (Pervaiz et al., 2024). Physicians' concern focuses on the quality of doctor-patient interactions, particularly physicians' competence, communication effectiveness, and personalized care, which are critical determinants of patients' satisfaction in healthcare settings (Alrubaiee & Alkaa'ida, 2011). Additionally, tangibles, such as hospital facilities, medical equipment, and cleanliness, shape patients' first impressions and reinforce perceptions of professionalism and service excellence (Jaber-Chehayeb, 2023; Rahmatia et al., 2025).

Collectively, these dimensions form a comprehensive representation of service quality, which plays a decisive role in shaping patient satisfaction. Prior studies consistently demonstrate that higher perceived service quality leads to greater patient satisfaction, which in turn serves as a critical antecedent of patient loyalty, positive word-of-mouth, and revisit intention (Indaryani & Wulandari, 2023). This relationship is particularly salient for international patients in Saudi hospitals, where service encounters extend beyond medical treatment to include administrative efficiency, interpersonal care, and the physical healthcare environment. Based on this theoretical and empirical foundation, the following hypothesis is proposed:

H1: Service quality in Saudi hospitals has a positive influence on the satisfaction of international patients.

### 2.3 Service quality and trust

Service quality plays a pivotal role in shaping patient trust in healthcare settings, particularly among international patients who often face greater uncertainty when seeking medical services abroad. High-quality healthcare services, characterized by reliability, responsiveness, assurance, empathy, and tangible facilities, serve as critical signals of provider competence and credibility. Patients are more inclined to trust healthcare institutions that consistently deliver superior service experiences, which, in turn, enhances patient retention and long-term engagement (Banahene et al., 2021). Consequently, cultivating robust service quality is essential for establishing and sustaining patient trust within complex healthcare ecosystems (Mabini et al., 2024).

Prior empirical studies strongly support the positive linkage between service quality and patient trust. Research by (Tessema et al., 2024) demonstrates that improvements in service quality significantly enhance patients' trust in healthcare providers, reinforcing the centrality of service excellence in trust formation. Similarly, Al-Hilou and Suifan (2023) report that higher perceived service quality leads to increased patient trust, which is fundamental to achieving satisfactory healthcare experiences. In this relationship, patient satisfaction often acts as an underlying mechanism, whereby positive service encounters foster trust, elevate satisfaction levels, and ultimately encourage loyalty toward healthcare facilities (Al-Hilou & Suifan, 2023; Andreano & Pardede, 2023).

Beyond clinical outcomes, administrative and interpersonal dimensions of service quality, such as staff professionalism, procedural efficiency, and effective communication, play a decisive role in shaping patient trust. Evidence suggests that patients who perceive healthcare processes as well-organized and staff interactions as respectful and transparent report significantly higher levels of trust and satisfaction (Zahidah, S., & Al-haimi, B., 2024; Hussain, 2025; Rafi et al., 2020). This is particularly salient for international patients in Saudi hospitals, where trust is influenced not only by medical competence but also by culturally sensitive service delivery and efficient administrative support.

Based on the above theoretical and empirical evidence, this study proposes the following hypothesis:

H2: Service quality in Saudi hospitals has a positive influence on the trust of international patients.

## **2.4 Satisfaction and revisit intention**

Patient satisfaction has been consistently identified as a critical determinant of revisit intention in healthcare settings. Satisfied patients are more likely to return for future medical services and recommend healthcare institutions to others, highlighting the central role of patient-centric care in fostering long-term loyalty and organizational sustainability (Indaryani & Wulandari, 2023; Yuniarti & Hidayat, 2021). Positive healthcare experiences that meet or exceed patients' expectations enhance satisfaction, which in turn strengthens their intention to revisit the same facility for subsequent healthcare needs (Pramana et al., 2022; Zehra et al., 2025).

Empirical evidence further suggests that satisfaction emerges from patients' evaluations of service quality, including professional staff behavior, timely service delivery, and supportive interpersonal interactions. When these service encounters are perceived positively, patients exhibit higher satisfaction levels and stronger revisit intentions (Rosyida et al., 2025). Conversely, negative staff attitudes and poor service conduct undermine satisfaction and discourage future hospital visits, emphasizing the pivotal role of healthcare personnel in shaping patient experiences (Jalloh et al., 2023).

Based on this theoretical and empirical evidence, the following hypothesis is proposed:

H3: International Patient satisfaction has a positive effect on revisit intention in Saudi hospitals.

## **2.5 Trust and revisit intention**

Patient trust, defined as patients' confidence in the competence, integrity, and benevolence of healthcare providers, plays a pivotal role in shaping behavioral intentions in healthcare settings. When patients trust their healthcare providers, they perceive lower risk and greater reliability in the services they receive, which enhances their willingness to return for future care (Yuniarti & Hidayat, 2021). As a result, trust serves as a key

psychological mechanism underpinning patient loyalty and long-term engagement with healthcare institutions.

Consistent empirical evidence supports a positive relationship between patient trust and revisit intention. Prior studies demonstrate that trust not only directly influences patients' decisions to revisit healthcare facilities but also mediates the effects of service quality and patient satisfaction on retention outcomes (Banahene et al., 2021). Hidayat (2024) further highlights the central mediating role of trust in linking healthcare service quality and satisfaction with revisit intention, emphasizing its integrative function within healthcare relationship-building processes. Similarly, Hidayat and Handoyo (2025) report that improvements in service quality enhance patient satisfaction, which subsequently increases revisit intention through the development of patient trust.

The importance of trust is particularly evident in high-uncertainty contexts, such as public healthcare during the COVID-19 pandemic. Evidence from Saputri and Berlianto (2023) shows that higher levels of trust in healthcare institutions significantly increase patients' intentions to revisit, reinforcing trust as a critical driver of sustained patient behavior across diverse healthcare contexts.

Based on the above theoretical and empirical insights, the following hypothesis is proposed:

H4: Patient trust positively affects revisit intention.

### **3 METHODOLOGY**

#### **3.1 Research design**

This study employed a quantitative, cross-sectional research design to investigate how service quality influences patient satisfaction and trust. It also examined how satisfaction and trust affect patients' intention to revisit Saudi Arabian hospitals. A survey-based method was selected because it facilitates the systematic collection of standardized data from a large sample, allowing for statistical testing of the proposed hypotheses and relationships.

### 3.2 Sampling and data collection

Data was collected from international patients in Saudi Arabian public and private hospitals seeking medical care. A purposive sampling approach was used to ensure that respondents were relevant to the study context and represented the target population of potential and current users of these services. The survey was administered in person to make it easier for patients to complete, with the help of hospital nurses and staff. The data collection took place over 46 days, which aligns with recommended survey research practices and matches the durations used in previous studies (Akbar et al., 2025). A total of 220 valid responses were collected, exceeding the minimum sample size needed for structural equation modeling (SEM).

G\*Power was used to determine the minimum required sample size through a power analysis, a common method for ensuring reliable hypothesis testing (Hair et al., 2017; Ringle et al., 2018). Power analysis considers the model component with the most predictors, along with statistical power, effect size, and significance level (Hair et al., 2014). Following established guidelines, a minimum power level of 0.80 was chosen (Cohen, 1988). For a research model with 7 predictors, G\*Power indicated a minimum sample size of 103 respondents, which meets standards for multivariate analysis. This estimate aligns with prior recommendations suggesting sample sizes of 30 to 500 cases (Roscoe, 1975) and at least five observations per estimated parameter (Hair et al., 2006).

### 3.3 Instrument development

The survey instrument was developed using established and validated measurement scales adapted from prior literature, with minor contextual modifications to suit the international education services sector. All constructs were measured using a five-point Likert scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Service Quality (SQ) was operationalized as a multidimensional construct comprising four dimensions: *convenience of the care process* (5 items), healthcare providers' concern (5 items), physician's concern (5 items), and tangibles (4 items), adapted from Choi et al. (2004). Satisfaction was measured using five items adapted from Veasna et al. (2013). Trust was assessed using eight items, and revisit intention was measured using two items, both adapted from Mohd Isa et al. (2019).

### **3.4 Data analysis and results**

Data were first cleaned and prepared for statistical analysis. Descriptive statistics were conducted to profile the respondents. To assess the measurement model, reliability and validity tests were conducted, including Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE), as well as discriminant validity checks using the Fornell–Larcker criterion.

For hypothesis testing, correlation and regression analyses were employed to examine direct effects.

## **4 RESULTS**

The following subsections present the results of the analysis, including demographic profile and two-stage model assessment, comprising the measurement model and the structural model evaluation

### **4.1 Demographic profile of respondents**

The study included 220 respondents, mostly male, with most aged between 26 and 35 and 36 to 45 years. A slight majority received treatment at private hospitals, and nearly half had at least a bachelor's degree, indicating a relatively well-educated patient group. Most respondents reported moderate income levels, and the most common types of treatment were general check-ups and surgical procedures. More than half of the participants were uninsured, and among insured patients, insurance use was limited. The respondents represented a diverse mix of nationalities, mainly from Middle Eastern and nearby regions, reflecting the international patient base of Saudi hospitals. Regarding information sources, friends and family were the dominant influences, followed by physician referrals and hospital websites, while social media played a minimal role. This demographic diversity highlights Saudi Arabia's growing role as a regional healthcare and medical tourism hub and supports the broader relevance of the study's findings across different cultural settings.

## 4.2 Measurement model assessment

The measurement model was evaluated prior to structural model analysis following established PLS-SEM guidelines (Hair et al., 2021). Indicator reliability, internal consistency, convergent validity, and discriminant validity were examined (See Figure 4.1, Table 4.1, and 4.2).

Indicator reliability was assessed using outer loadings. Most indicators exceeded the recommended threshold of 0.60. Two items under the trust construct (TR2 and TR8) were removed due to low loadings. After item purification, all retained indicators demonstrated acceptable loadings ranging from 0.621 to 0.854, supporting item reliability.

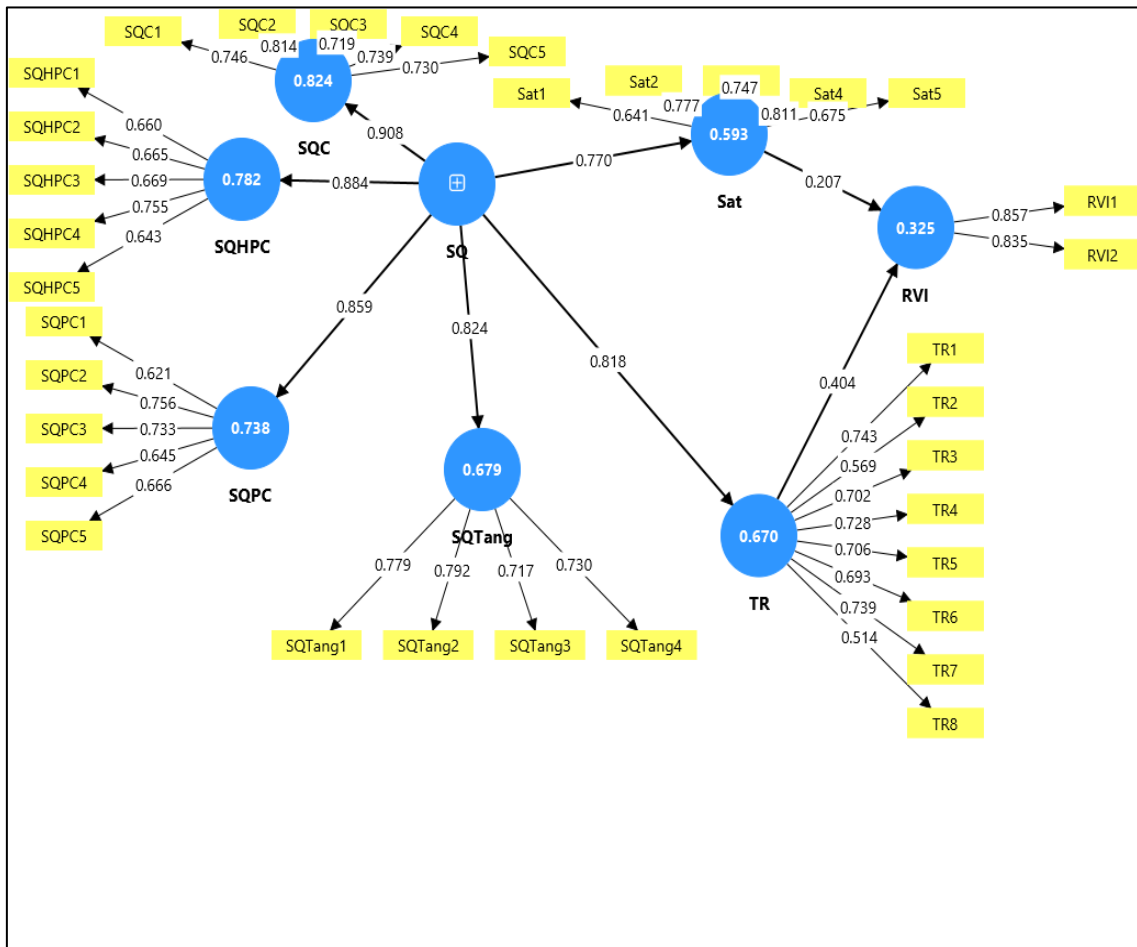
Internal consistency reliability was assessed using composite reliability (CR). All constructs exceeded the minimum threshold of 0.70. Notably, service quality, modeled as a second-order construct, achieved a CR of 0.843, while satisfaction, trust, and revisit intention recorded CR values between 0.834 and 0.873, indicating strong internal consistency.

Convergent validity was evaluated using the Average Variance Extracted (AVE). All constructs met the recommended AVE threshold of 0.50. Service quality recorded an AVE of 0.574, which is acceptable given its higher-order structure composed of multiple first-order dimensions. These results confirm adequate convergence of the measurement items.

Discriminant validity was established using the Fornell–Larcker criterion. As shown in Table 4.2, the square roots of the AVEs for each construct exceeded their inter-construct correlations, confirming that the constructs are empirically distinct and free from multicollinearity concerns.

Overall, the measurement model demonstrates satisfactory reliability and validity, supporting its suitability for subsequent structural model evaluation.

**Figure 2**  
*Measurements model*



**Table 1**  
*Measurements Model Results*

FIRST ORDER	SECOND ORDCER	LOADING	CR	AVE	
<b>REVISIT INTENTION</b>	<b>RV11</b>	0.854	0.834	0.716	
	<b>RV12</b>	0.838			
<b>CONVIVENCE CARE</b>	<b>Service Quality</b>	<b>SQC1</b>	0.746	0.843	0.574
		<b>SQC2</b>	0.814		
		<b>SQC3</b>	0.719		
		<b>SQC4</b>	0.739		
		<b>SQC5</b>	0.730		
<b>PROVIDER CONCERN</b>		<b>SQHPC1</b>	0.660		
		<b>SQHPC2</b>	0.665		
		<b>SQHPC3</b>	0.669		
		<b>SQHPC4</b>	0.755		
		<b>SQHPC5</b>	0.642		
<b>PHYSICIAN CONCERN</b>		<b>SQPC1</b>	0.621		
		<b>SQPC2</b>	0.756		
		<b>SQPC3</b>	0.733		
		<b>SQPC4</b>	0.645		
		<b>SQPC5</b>	0.666		
<b>TANGIBLES</b>		<b>SQTang1</b>	0.779		

<b>SATISFACTION</b>	<b>SQTang2</b>	0.792		
	<b>SQTang3</b>	0.717		
	<b>SQTang4</b>	0.730		
	<b>Sat1</b>	0.641	0.852	0.537
	<b>Sat2</b>	0.777		
	<b>Sat3</b>	0.747		
	<b>Sat4</b>	0.811		
	<b>Sat5</b>	0.675		
<b>TRUST</b>	<b>TR1</b>	0.743	0.873	0.535
	<b>TR2</b>	0.569**		
	<b>TR3</b>	0.702		
	<b>TR4</b>	0.728		
	<b>TR5</b>	0.706		
	<b>TR6</b>	0.693		
	<b>TR7</b>	0.739		
	<b>TR8</b>	0.514**		

Note: Items TR2 and TR8 were dropped due low loading

**Table 2**

*Discriminant validity*

	<b>RVI</b>	<b>SQ</b>	<b>SAT</b>	<b>TR</b>
<b>RVI</b>	0.805			
<b>SQ</b>	0.707	0.808		
<b>SAT</b>	0.765	0.835	0.869	
<b>TR</b>				

### 4.3 Structure model assessment

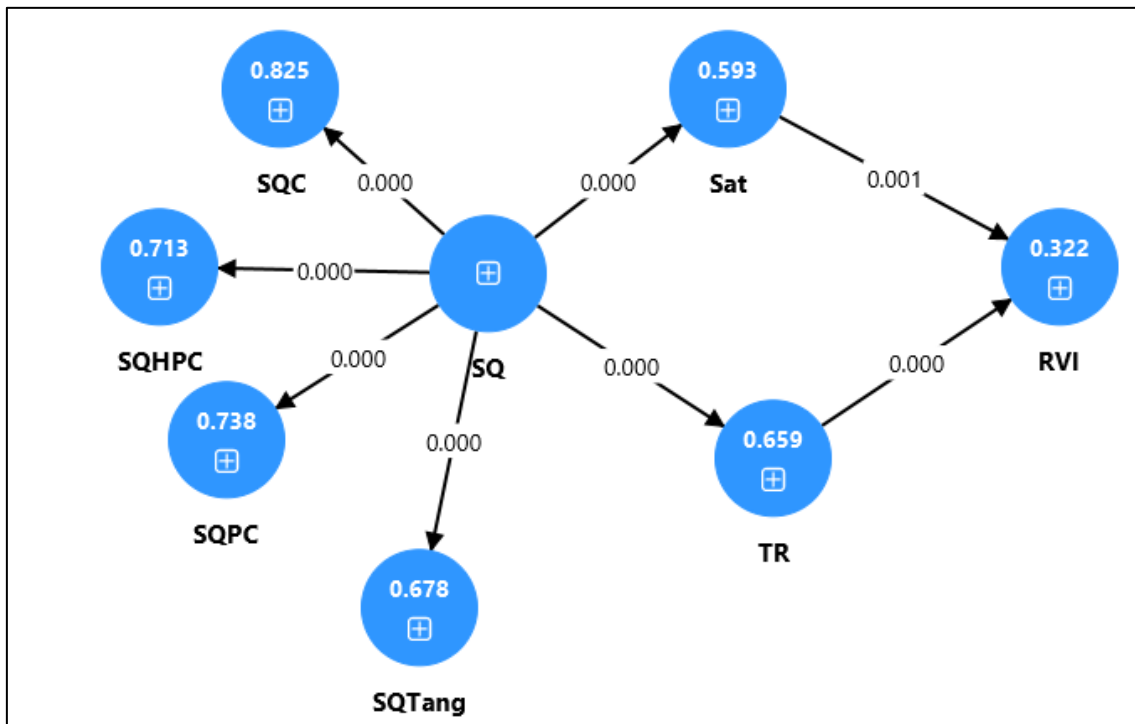
The structural model (Figure 4.2) was evaluated to examine the hypothesized relationships among service quality (SQ), patient satisfaction (Sat), patient trust (TR), and revisit intention (RVI). The assessment utilized standardized path coefficients ( $\beta$ ), t-values, and p-values derived from bootstrapping procedures. The results are shown in Table 4.3. The findings demonstrate that service quality has a strong and statistically significant positive impact on patient satisfaction ( $\beta = 0.770$ ,  $t = 25.031$ ,  $p < 0.001$ ), supporting H1. This result suggests that higher perceived service quality significantly boosts patients' satisfaction, underscoring the central role of service-related experiences in shaping positive healthcare evaluations.

Similarly, service quality has a strong positive effect on patient trust ( $\beta = 0.812$ ,  $t = 31.120$ ,  $p < 0.001$ ), thereby supporting H2. This robust relationship indicates that consistently providing high-quality healthcare services builds patients' confidence in healthcare providers' competence, integrity, and dependability. Regarding behavioral outcomes, patient satisfaction significantly and positively influences revisit intention ( $\beta$

= 0.218, t = 3.024, p = 0.001), affirming support for H3. This result shows that satisfied patients are more likely to return to the same healthcare facility for future care services.

Furthermore, patient trust showed a significant and statistically meaningful positive impact on revisit intention ( $\beta = 0.391$ , t = 5.518, p < 0.001), supporting H4. The strength of this effect suggests that trust is crucial in enhancing patients' likelihood to return, even more so than satisfaction alone. Overall, the results of the structural model indicate that service quality is a key driver of both satisfaction and trust, with trust being a particularly strong predictor of revisit intention. These findings emphasize the essential role of trust-building strategies in maintaining long-term patient relationships, especially in healthcare settings where perceived risk and uncertainty are common.

**Figure 3**  
*Structural Model Assessment*



**Table 3**  
*Hypotheses Testing*

Hypothesis	Relationship	Original sample (O)	Std.Dev	T value	P values
H3	Sat -> RVI	0.218	0.072	3.024	0.001
H1	SQ -> Sat	0.77	0.031	25.031	0.000
H2	SQ -> TR	0.812	0.026	31.12	0.000
H4	TR -> RVI	0.391	0.071	5.518	0.000

## 5 DISCUSSION

Based on the Stimulus–Organism–Response (SOR) model, this study examined how **service quality (stimulus)** influences **patient satisfaction and patient trust (organism)**, which in turn shape **revisit intention (response)** in the context of Saudi hospitals. The findings provide strong empirical support for the proposed SOR-based framework and offer important insights into the psychological mechanisms underlying patients' behavioral intentions in healthcare settings.

Consistent with the SOR logic, the results demonstrate that **service quality exerts a strong and significant positive effect on patient satisfaction**. High-quality service encounters function as external stimuli that positively influence patients' internal evaluations of healthcare experiences. This finding aligns with extensive prior research emphasizing service quality as a key antecedent of patient satisfaction. For example, Akthar et al. (2024) showed that perceived service quality significantly enhances patients' satisfaction and revisit intentions, underscoring the centrality of service excellence in healthcare outcomes. Similarly, Boateng (2019) highlighted that patient satisfaction represents a primary objective of healthcare systems, and improving service quality is essential for meeting and exceeding patient expectations. In the Saudi context, Alharbi (2023) further demonstrated that variations in perceived service quality across government and private hospitals significantly affect patient satisfaction, reinforcing the critical role of service quality in shaping patients' evaluative responses.

Beyond satisfaction, the findings reveal that **service quality has an even stronger effect on patient trust**, supporting the SOR perspective that external service stimuli strongly influence patients' psychological states. Trust formation in healthcare is particularly sensitive to service-related cues due to the high levels of perceived risk and information asymmetry. This result is consistent with prior studies indicating that positive perceptions of service quality enhance patients' trust in healthcare providers. Noviyani and Viwattanakulvanid (2024) found that high service quality strengthens patient trust, thereby improving satisfaction levels. Likewise, Gu et al. (2022) emphasized that service quality dimensions, particularly communication skills and provider competence, play a decisive role in shaping patient trust. Collectively, these studies, together with the present findings, suggest that superior service quality fosters trust by creating reliable, empathetic, and reassuring healthcare experiences.

The SOR framework further explains how these internal states translate into behavioral responses. The results confirm that **both patient satisfaction and patient trust positively influence revisit intention**, with trust exerting a stronger effect. This indicates that while satisfaction reflects a positive appraisal of prior experiences, trust represents a deeper relational bond that more powerfully drives future healthcare behavior. Supporting this interpretation, Ghali et al. (2023) demonstrated that service quality dimensions such as provider concern, significantly predict patient trust, which in turn influences behavioral intentions. Similarly, Sekar and Tan (2024) emphasized that incorporating trust as a mediating mechanism substantially increases patients' likelihood of revisiting healthcare facilities. Kristinawati et al. (2023) further corroborated that service quality and satisfaction contribute to patient loyalty primarily through the mediating role of trust.

Overall, the findings validate the SOR-based mechanism in healthcare services, where **service quality acts as a critical stimulus, satisfaction and trust function as key psychological responses, and revisit intention emerges as the behavioral outcome**. This study highlights trust as the most influential driver of revisit intention, suggesting that sustainable patient relationships depend not only on satisfying experiences but also on the development of long-term trust.

## 6 THEORETICAL AND PRACTICAL IMPLICATIONS

### 6.1 Theoretical implications

Grounded in the Stimulus–Organism–Response (SOR) framework, this study advances healthcare service literature by empirically demonstrating how service quality (stimulus) influences patient satisfaction and trust (organism), which subsequently drive revisit intention (response). The findings extend the application of the SOR model to hospital-based healthcare services by validating its explanatory power in high-involvement and high-risk service contexts.

By modeling service quality as a second-order construct, the study offers a holistic theoretical perspective on patients' service evaluations, integrating functional, interpersonal, and physical dimensions of care. Furthermore, the results clarify the distinct roles of satisfaction and trust, showing that trust is the stronger predictor of revisit

intention. This contributes to relationship-based theories by positioning trust as a central mechanism through which service experiences translate into sustained patient behavior.

## 6.2 Practical implications

The findings carry important implications for healthcare leaders and policymakers in Saudi Arabia, particularly in alignment with Saudi Vision 2030, which emphasizes healthcare quality, patient-centered care, and service sustainability. Enhancing service quality should be prioritized as a strategic driver of patient satisfaction and trust, supporting Vision 2030's objective of improving healthcare outcomes and patient experiences.

Given the pivotal role of trust in shaping revisit intention, hospitals should implement trust-building strategies, including transparent communication, consistent service delivery, culturally sensitive care, and ethical clinical practices. These initiatives directly support Vision 2030's healthcare transformation agenda, which seeks to strengthen public confidence in the healthcare system and improve service efficiency.

Finally, hospital performance evaluation systems should move beyond traditional satisfaction metrics to incorporate trust-based indicators, enabling more effective monitoring of long-term patient relationships. By strategically aligning service quality improvements with trust-building, Saudi hospitals can enhance patient loyalty, encourage repeat use, and strengthen their competitive positioning within a rapidly evolving healthcare ecosystem.

## 7 LIMITATIONS AND FUTURE DIRECTION

This study has several limitations that suggest directions for future research. First, the cross-sectional design limits causal inference. Future studies should employ longitudinal or experimental approaches to better capture how service quality perceptions, satisfaction, and trust evolve over time and influence revisit behavior.

Second, the study was conducted within the context of Saudi hospitals, which may limit generalizability. Future research could adopt comparative designs (e.g., public vs. private hospitals or cross-country studies) to enhance external validity, particularly in healthcare systems undergoing reform under Saudi Vision 2030.

From a theoretical perspective, while this study focused on service quality as the primary stimulus, future research may incorporate a limited set of additional stimulus variables, such as digital health service quality or hospital brand image, to reflect the ongoing digital and structural transformation of healthcare services.

At the organism level, future studies may extend the model by including perceived value or perceived risk alongside satisfaction and trust to more comprehensively capture patients' cognitive and emotional evaluations.

Future research is also encouraged to examine mediation and moderation effects. For example, trust may mediate the relationship between service quality and revisit intention, while health literacy or hospital type (public vs. private) may moderate key relationships within the model.

Addressing these limitations and selectively extending the SOR framework will allow future studies to develop more parsimonious yet theoretically robust explanations of patient behavior in evolving healthcare contexts.

## REFERENCES

- Ajina, A. S. (2019). The role of content marketing in enhancing customer loyalty: An empirical study on private hospitals in Saudi Arabia. *Innovative Marketing*, 15(3), 71. [https://doi.org/10.21511/im.15\(3\).2019.06](https://doi.org/10.21511/im.15(3).2019.06)
- Al-Hilou, M., & Suifan, T. (2023). The mediating effect of patient trust on the relationship between service quality and patient satisfaction. *International Journal of Health Care Quality Assurance*, 36(1/2), 1–16.
- Al-Haimi, B., Ali, F., & Hujainah, F. (2024). Digital Transformation in Healthcare: Impact on Organizations' Strategies, Future Landscape, and Required Skills. In *Navigating the Intersection of Business, Sustainability and Technology* (pp. 61-74). Singapore: Springer Nature Singapore.
- Aladwan, M., Salleh, H., Anuar, M., ALhwadi, H., & Almomani, I. (2021). Relationship among service quality, patient satisfaction and patient loyalty: Case study in Jordan Mafraq Hospital. *Linguistics and Culture Review*, 5(S3), 27–40. <https://doi.org/10.21744/lingcure.v5ns3.1368>
- Aladwan, M. A., Anuar, M. M., Aladwan, R. M., & Salleh, H. S. (2023). The effect of service quality, patient trust and hospital reputation on patient satisfaction in Jordanian public hospital. *WSEAS Transactions on Business and Economics*, 21, 410. <https://doi.org/10.37394/23207.2024.21.36>

- Alodhialah, A. M., Almutairi, A. A., & Almutairi, M. (2024). Key predictors of patient satisfaction and loyalty in Saudi healthcare facilities: A cross-sectional analysis. *Healthcare*, *12*(20), 2050. <https://doi.org/10.3390/healthcare12202050>
- Alrubaiee, L., & Alkaa'ida, F. (2011). The mediating effect of patient satisfaction in the patients' perceptions of healthcare quality–patient trust relationship. *International Journal of Marketing Studies*, *3*(1). <https://doi.org/10.5539/ijms.v3n1p103>.
- Andreano, P., & Pardede, R. (2023). Service quality and patient trust on patient loyalty mediated by patient satisfaction on inpatients. *Interdisciplinary Social Studies*, *2*(12), 2684–2692. <https://doi.org/10.55324/iss.v2i12.595>
- Arıci, N. Ç., & Güçer, E. (2018). The antecedents of revisit intention in medical businesses. *Journal of Business Research – Turk*, *10*(2), 740. <https://doi.org/10.20491/isarder.2018.453>.
- Akbar, M., Sankar, J. P., Ramayah, T., & Alkashami, M. (2025). Modeling artificial intelligence-enabled teaching continuance intentions in higher educational institutions using the expectation confirmation model (ECM). *Cogent Education*, *12*(1), 2479401.
- Akthar, N., Nayak, S., & P, Y. (2024). A cross-sectional study on exploring the antecedents of patient's revisit intention: Mediating role of trust in the hospital among patients in India. *F1000Research*, *12*, 75. <https://doi.org/10.12688/f1000research.128220.3>
- Alharbi, M. (2023). Patients' experience of service quality in government and private hospitals in the Qassim Region, Kingdom of Saudi Arabia. *Journal of Medicine and Life*, *16*(11), 1622–1627. <https://doi.org/10.25122/jml-2023-0184>
- Banahene, J., Dai, B., Kissi, J., & Antwi, M. O. (2021). Examine the extrinsic mechanism of service quality factors and its effect on patient retention in Ghanaian private hospitals, using trust and patient satisfaction as mediator. *International Journal of Scientific Research in Science and Technology*, 255. <https://doi.org/10.32628/ijrst207563>
- Boateng, J. (2019). Patients' satisfaction and its determinants in outpatient and inpatient departments of tertiary hospitals in Ghana: A literature review. *Texila International Journal of Management*, 149–160. <https://doi.org/10.21522/tijmg.2015.se.19.01.art015>
- Białk-Wolf, A. (2025). Developments in the medical tourism market in Poland from the perspective of international factors. *Worldwide Hospitality and Tourism Themes*, *17*(2), 261–272.
- Chang, C., Chen, S.-Y., & Lan, Y.-T. (2013). Service quality, trust, and patient satisfaction in interpersonal-based medical service encounters. *BMC Health Services Research*, *13*(1). <https://doi.org/10.1186/1472-6963-13-22>.

- Choi, K. S., Cho, W. H., Lee, S., Lee, H., & Kim, C. (2004). The relationships among quality, value, satisfaction and behavioral intention in health care provider choice: A South Korean study. *Journal of Business Research*, *57*(8), 913–921.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum.
- Ghali, Z., Garrouch, K., & Aljasser, A. (2023). Drivers of patients' behavioral intention toward public and private clinics' services. *Healthcare*, *11*(16), 2336. <https://doi.org/10.3390/healthcare11162336>.
- Gu, L., Tian, B., Xin, Y., Zhang, S., Li, J., & Sun, Z. (2022). Patient perception of doctor communication skills and patient trust in rural primary health care: The mediating role of health service quality. *BMC Primary Care*, *23*(1). <https://doi.org/10.1186/s12875-022-01826-4>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Los Angeles, CA: SAGE.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage.
- Han, H., & Hyun, S. S. (2014). Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tourism Management*, *46*, 20. <https://doi.org/10.1016/j.tourman.2014.06.003>
- Han, J., Zuo, Y., Law, R., Chen, S., & Zhang, M. (2021). Service quality in tourism public health: Trust, satisfaction, and loyalty. *Frontiers in Psychology*, *12*. <https://doi.org/10.3389/fpsyg.2021.731279>
- Hidayat, A. (2024). Exploring patient trust as a mediator in factors influencing inpatient revisit intention. *Journal of Science Innovare*, *7*(2), 045–050. <https://doi.org/10.33751/jsi.v7i2.12811>
- Hidayat, A., & Handoyo, S. (2025). The effect of service quality and patient satisfaction on revisit intentions of inpatients at Ciawi Regional Public Hospital mediated by patient trust. *JHSS (Journal of Humanities and Social Studies)*, *9*(2), 359–365. <https://doi.org/10.33751/jhss.v9i2.12086>
- Hussain, A. (2025). A cross-sectional study on the impact of administrative procedures and medical staff services on patient satisfaction with trust in public sector hospitals: The moderating role of e-health knowledge. *BMC Health Services Research*, *25*(1). <https://doi.org/10.1186/s12913-025-13383-4>
- Indaryani, L., & Wulandari, R. (2023). Effect of service quality and trust on revisiting interest toward customer satisfaction. *International Journal of Management Science and Application*, *1*(2), 68. <https://doi.org/10.58291/ijmsa.v1i2.74>

- Jaber-Chehayeb, R. (2023). Analyzing the mediating role of service quality in the relationship between service quality and patient satisfaction at Rafic Hariri University Hospital. *International Journal of Professional Business Review*, 8(11). <https://doi.org/10.26668/businessreview/2023.v8i11.3827>.
- Jalloh, A., Nwosu, L., & Baysan, S. (2023). Evaluation of waiting time and associated factors influencing patient satisfaction levels in an outpatient department: A case study of government hospital in Sierra Leone. *SEHS*, 23050015. <https://doi.org/10.69598/sehs.17.23050015>
- Kristinawati, F., Gunardi, W., & Fushen, F. (2023). The effect of service quality and patient satisfaction on patient loyalty mediated by patient trust at Rumah Indonesia Sehat (RIS) Hospital. *Morfai Journal*, 2(4), 701–717. <https://doi.org/10.54443/morfai.v2i4.630>.
- Mabini, S. P., Narsico, L. O., & Narsico, P. G. (2024). Service quality, patient satisfaction, and improvement indicators. *International Journal of Multidisciplinary Applied Business and Education Research*, 5(4), 1331. <https://doi.org/10.11594/ijmaber.05.04.18>
- Mohd Isa, S., Lim, G. S. S., & Chin, P. N. (2019). Patients' intent to revisit with trust as the mediating role: Lessons from Penang, Malaysia. *International Journal of Pharmaceutical and Healthcare Marketing*, 13(2), 140–159.
- Noviyani, A., & Viwattanakulvanid, P. (2024). Exploring patients' perspectives on healthcare service quality in outpatient settings at a public hospital in Palembang, Indonesia: A qualitative study. *Belitung Nursing Journal*, 10(6), 703–711. <https://doi.org/10.33546/bnj.3594>.
- Pervaiz, S., Javed, U., Rajput, A., Shafique, S., & Tasneem, R. (2024). Examining how and why service quality fosters patients' revisit intentions: Evidence from Pakistan. *International Journal of Pharmaceutical and Healthcare Marketing*, 18(3), 455. <https://doi.org/10.1108/ijphm-11-2021-0110>
- Pramana, L., Suryoputro, A., & Purnami, C. (2022). Factors affecting outpatients' intention to revisit health services at public health center in Demak District. *Jurnal Aisyah Jurnal Ilmu Kesehatan*, 7(2). <https://doi.org/10.30604/jika.v7i2.1049>.
- Rafi, T., Khalique, M., & Siddiqui, S. (2020). Hospital service quality and patient satisfaction: A moderating role of trustworthiness. *Journal of Accounting and Finance in Emerging Economies*, 6(1), 237–250. <https://doi.org/10.26710/jafee.v6i1.1081>
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2018). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617–1643.
- Rosyida, H. L., Suprpto, S. I., Dian, A., & Indasah, I. (2025). Building patient loyalty: The role of brand image and service quality in outpatient healthcare revisit behavior—A systematic review. *Journal of Applied Nursing and Health*, 7(1), 23. <https://doi.org/10.55018/janh.v7i1.272>

- Saputri, V., & Berlianto, M. (2023). Factors influencing patients' revisit intention to public health center during COVID-19 pandemic. *Jurnal Administrasi Kesehatan Indonesia*, 11(1), 57–66. <https://doi.org/10.20473/ijha.v11i1.2023.57-66>
- Sekar, H., & Tan, P. (2024). The relationship between hospital service quality and patient trust is mediated by patient satisfaction in patient loyalty at Hospital X. *Syntax Literate Jurnal Ilmiah Indonesia*, 9(7), 3808–3819. <https://doi.org/10.36418/syntax-literate.v9i7.16457>
- Rahmatia, S., Basri, M., Ismail, I., Adi, S., Nasrullah, N., & Ahmad, A. (2025). Service quality in hospital inpatient care: SERVQUAL model approach. *Health SA Gesondheid*, 30. <https://doi.org/10.4102/hsag.v30i0.3055>
- Ramazani, Y., Aref, M., & Shahtaghi, M. (2020). Customer care in medical tourism industry: Explaining the relationship between quality, satisfaction, trust and logical price. *Depiction of Health*, 11(1), 31. <https://doi.org/10.34172/doh.2020.04>
- Sharka, R., Sedayo, L., Morad, M., & Abuljadayel, J. (2024). Measuring the impact of dental service quality on revisit intention using an extended SERVQUAL model. *Frontiers in Oral Health*, 5. <https://doi.org/10.3389/froh.2024.1362659>
- Suleiman, A. K., & Ming, L. C. (2025). Transforming healthcare: Saudi Arabia's Vision 2030 healthcare model. *Journal of Pharmaceutical Policy and Practice*, 18(1), 2449051.
- Wahyuningsih, E., Mariyanti, T., & Hatta, Z. M. (2023). Patient satisfaction mediates the influence of trust, service quality and hospital sharia compliance on patient loyalty in Sharia hospitals in Riau province from an Islamic perspective. *International Journal of Research in Business and Social Science*, 12(9), 39. <https://doi.org/10.20525/ijrbs.v12i9.2988>
- Tessema, D. H., Nuhu, J. A., Obeng, H. A., & Assefa, H. (2024). The relationship between total quality management, patient satisfaction, service quality, and trust in the healthcare sector: The case of Ethiopian public hospitals. *Uluslararası Anadolu Sosyal Bilimler Dergisi*, 8(1), 164. <https://doi.org/10.47525/ulasbid.1402805>
- Veasna, S., Wu, W. Y., & Huang, C. H. (2013). The impact of destination source credibility on destination satisfaction: The mediating effects of destination attachment and destination image. *Tourism Management*, 36, 511–526.
- Yuniarti, Y., & Hidayat, A. (2021). The analysis of patients' revisits intention factors in sub-urban hospital. *International Journal of Research in Business and Social Science*, 10(4), 420. <https://doi.org/10.20525/ijrbs.v10i4.1232>
- Zahidah, S., & Al-haimi, B. (2024). Telemedicine: Transforming healthcare accessibility and quality with sustainable technological advancement. *Navigating the Intersection of Business, Sustainability and Technology*, 137-149.
- Zehra, S., Ranjan, J., & Shukla, M. (2025). Service quality in healthcare: Understanding the relationship between patient experience and healthcare outcomes. *International*

*Journal of Health Care Quality Assurance*, 38(4), 233.  
<https://doi.org/10.1108/ijhcqa-09-2024-0090>.

### **Authors' Contribution**

All authors contributed equally to the development of this article.

### **Data availability**

All datasets relevant to this study's findings are fully available within the article.

### **How to cite this article (APA)**

Alruwaili, K., Al-haimi, B., Infante-Moro, A., & Alenzi, S. (2026). WHY DO INTERNATIONAL PATIENTS COME BACK? AN S-O-R EXPLANATION OF SERVICE QUALITY, TRUST, AND SATISFACTION IN SAUDI HOSPITALS. *Veredas Do Direito*, 23(2), e234388. <https://doi.org/10.18623/rvd.v23.n2.4388>