

# Integration of Service Quality and Sustainability on Revisit Intention

## *Integrasi Kualitas Layanan dan Keberlanjutan terhadap Niat Kunjungan Ulang*

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### **ABSTRACT**

**Background:** Hospital service quality played an important role in improving patient satisfaction and loyalty. However, sustainability, particularly the triple bottom line, became a new challenge in modern hospital management. Several studies demonstrated significant influences of service quality and sustainability on patients' intentions to revisit, yet studies that systematically integrated both aspects, especially in specialist hospitals, remained limited.

**Objective:** This study aimed to examine the relationship between service quality dimensions and sustainability in relation to patient satisfaction and revisit intention, as well as to formulate future research agendas concerning sustainable healthcare services.

**Methods:** Literature was collected using the PRISMA method from the Scopus and Google Scholar databases, covering publications from 2019 to 2025.

**Results:** The analysis indicated that most of the reviewed literature employed the PLS-SEM method to examine the relationship between service quality and patient satisfaction. The findings consistently showed that service quality dimensions affected patient satisfaction, while sustainability dimensions contributed significantly to service perception and patients' revisit intention. However, studies examining the integration of service quality and the triple bottom line remained scarce.

**Conclusion:** The integration of service quality and sustainability emerged as an important aspect in improving service quality and patient retention. This study provided direction for future research and hospital practices aiming to develop value-oriented service systems with long-term and operational sustainability.

**Keywords:** patient satisfaction; service quality; hospital management; revisit intention

### **ABSTRAK**

**Latar Belakang:** Kualitas pelayanan rumah sakit berperan penting dalam peningkatan kepuasan dan loyalitas pasien. Namun disisi keberlanjutan terutama triple bottom line menjadi tantangan baru dalam manajemen rumah sakit modern. Beberapa penelitian menunjukkan pengaruh signifikan pada kualitas pelayanan dan keberlanjutan terhadap niat pasien untuk berkunjung kembali, namun kajian yang mengintegrasikan keduanya secara sistematis, terutama pada rumah sakit spesialis.

**Tujuan:** Penelitian bertujuan meneliti keterkaitan antara dimensi kualitas pelayanan dengan keberlanjutan terhadap kepuasan pasien dan niat pasien untuk kembali, serta merumuskan agenda penelitian di masa depan terkait layanan kesehatan keberlanjutan.

**Metode:** Pengumpulan literatur menggunakan metode PRISMA dari database Scopus dan Google Scholar dengan rentang publikasi 2019-2025.

**Hasil:** Analisis menunjukkan sebagian besar literatur menggunakan metode PLS-SEM untuk menguji hubungan antara kualitas layanan dengan kepuasan pasien. Temuan konsisten menunjukkan dimensi service quality mempengaruhi kepuasan, sedangkan dimensi keberlanjutan berkontribusi signifikan terhadap persepsi layanan dan niat kunjungan kembali pasien. Namun literatur yang meneliti antara service quality dengan triple bottom line masih jarang ditemukan.

**Kesimpulan:** Integrasi antara kualitas layanan dengan keberlanjutan menjadi aspek penting dalam peningkatan mutu layanan serta retensi pasien. Penelitian ini memberikan arah bagi penelitian dan praktik rumah sakit yang ingin mengembangkan sistem pelayanan berorientasi nilai jangka panjang dan keberlanjutan operasional.

**Kata Kunci:** kepuasan pasien; kualitas pelayanan; manajemen rumah sakit; niat kunjungan ulang

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## INTRODUCTION

Hospital service quality played a vital role in increasing patient satisfaction and loyalty (Anfal, 2020). High-quality service depicted the extent to which hospitals could consistently meet patient needs and expectations through aspects of responsiveness, reliability, assurance, empathy, and tangible evidence (Nugraha et al., 2018).

Current global challenges required hospitals not only to focus on medical services but also to consider sustainability aspects (Ramadhani et al., 2021). Sustainability in the context of hospital management referred to the integration of economic, social, and environmental attributes—called the *triple bottom line*—into hospital operations comprehensively (Harared & Rahadian, 2019).

Based on Law No. 44 of 2009 concerning Hospitals, health services constituted a right of every citizen guaranteed by the 1945 Constitution. Therefore, hospitals were required to provide quality and affordable services. To ensure quality, access, and protection of the rights and obligations of the public in obtaining services, hospital regulation through adequate legislation was needed (Fitriana & Pratiwi, 2018).

Pambudi (2021) stated that service quality was an effort offered by service providers to consumers, which was essentially *intangible* and did not result in physical ownership. Consumers preferred hospitals that could meet their expectations of quality services. Patient satisfaction became a vital factor for hospitals as it could maintain business sustainability.

Patient satisfaction was often influenced by service quality, cost, and convenience (Laila & Paramarta, 2024). Feelings of pleasure or disappointment were formed within consumers through perceptions of product quality, price, and location (Anfal, 2020). Consumer satisfaction was a perception that emerged

when hospital performance could meet patient expectations. Consumers felt satisfied if their expectations were met, and even more pleased if those expectations were exceeded (Cesariana et al., 2022).

Sustainability encompassed the *triple bottom line* consisting of economic, social, and environmental dimensions. The environmental dimension focused on hospital design that considered environmental aspects and efficient resource management (Maranggi & Bachtiar, 2024). The economic dimension focused on efficient quality management systems to minimize medical errors and maintenance costs. Meanwhile, the social dimension focused on improving patient safety and service satisfaction. Hospitals that adopted sustainability principles could improve service quality through resource efficiency, waste management, and implementation of environmentally friendly technology (Harared & Rahadian, 2019).

Patient satisfaction played a crucial role in determining patients' intention to return to use hospital services. Return intention was influenced by service quality, medical staff attitudes, service time efficiency, and hospital facility comfort (Basalamah & Ahri, 2021). Revisit intention could be seen from four indicators: continuing to choose the same service when needed, being reluctant to switch to other service providers, being willing to provide recommendations to others, and showing strong commitment (Helmi & Ratnasih, 2022).

Sustainability reports increasingly became a primary focus for hospitals. Hospital objectives were no longer centered solely on financial optimization but also on the hospital's role in society. This concept developed as a response to societal expectations for corporate contributions to social and environmental welfare (Syaharani & Oktavia, 2024).

Hospital operational activities could cause environmental damage such as air pollution from medical waste incinerator emissions, water and liquid waste pollution, medical waste disposal, high plastic waste production, and ecosystem disruption due to infrastructure development. These negative impacts became public concerns (Ramadhani et al., 2021). Concern for the environment as a hospital's social responsibility became a major concern for various parties. If hospital leaders did not manage this aspect well, the hospital's image would be disrupted (Agung et al., 2022).

Hospital service quality played a vital role in shaping patient satisfaction and loyalty. Previous research showed that the five dimensions of service quality had a significant influence on patient satisfaction (Salim, 2020). However, most of these studies only focused on functional aspects of service and had not yet examined how sustainability principles played a role in improving hospital quality and competitiveness. The *triple bottom line* was a foundation that could be used by hospitals to implement sustainability (Hadjri & Perizade, 2020).

There was still a research gap regarding the integration of service quality with sustainability in influencing patient satisfaction and patients' intention to return to use hospital services. Most previous research studied these two concepts separately—service quality was only linked to patient satisfaction, while sustainability was more discussed in the context of hospital management and resource efficiency. The integration of these two aspects in one analytical framework would explain how sustainability could strengthen the relationship between service quality and patient loyalty. This research had novelty in attempting to examine the relationship between service quality and sustainability dimensions on patient satisfaction and return intention.

Based on the conditions that had been explained, this research aimed to systematically examine the relationship between service quality and sustainability dimensions on patient satisfaction and patients' intention to return to use hospital services. This research was expected to provide theoretical contributions by expanding understanding of sustainable health service management, as well as practical contributions as a basis for hospital policymakers in designing service quality improvement strategies aligned with long-term sustainability principles.

## MATERIALS AND METHODS

This study employed a systematic review method using the PRISMA (Preferred Reporting Items for Systematic Review and Meta Analysis) approach. PICO was structured from Population, Intervention, Comparison, and Outcome. The population studied in this research was hospital healthcare services, both general and specialist, which prioritized patient experience as service users.

The intervention was the implementation of service quality dimensions referring to SERVQUAL and sustainability dimensions, namely the triple bottom line consisting of economic, social, and environmental aspects. The articles analyzed were English-language articles that were freely accessible, in the form of full reviews and research articles with a limitation period of 2019-2025.

This study had exclusion criteria that included articles that did not research the hospital service context directly, journals that did not include main variables such as service quality, sustainability, and patient satisfaction, studies with purely qualitative or descriptive narrative methods without statistical analysis testing relationships between variables, and articles that were not available in full text or were only presented as abstracts. The keywords used for article searches were service quality,

sustainability, patient satisfaction, revisit intention, and healthcare.

Literature searches were conducted using Scopus, PubMed, as well as manual searches using Google Scholar. Literature searches using the keywords (service quality OR SERVQUAL) AND (patient satisfaction) yielded 795 articles, which were then followed by adding the keywords AND (sustainability) AND (revisit intention) AND (healthcare OR healthcare facility). Twenty-five articles were obtained from PubMed, 9 articles from Scopus, and 3 articles from Google Scholar.

The total number of articles obtained was 37 articles, with 21 articles examining service quality and patient satisfaction. From the total of all these articles, there were no duplicates, and finally 8 articles discussing service quality in the healthcare field were selected, therefore these 8 articles were subsequently reviewed in more detail.

Data extraction was conducted using a standard extraction form that included author, year of publication, country of study, study design, sample and sample size, measurement instruments for service quality and sustainability, analysis

method, main findings, and limitations. The following presents the synthesis table of the literature review. This table contains the design, sample, and methods to facilitate understanding, summarizing all articles used for the literature study. This table provided a brief overview of the authors, methodology, and samples used in each study.

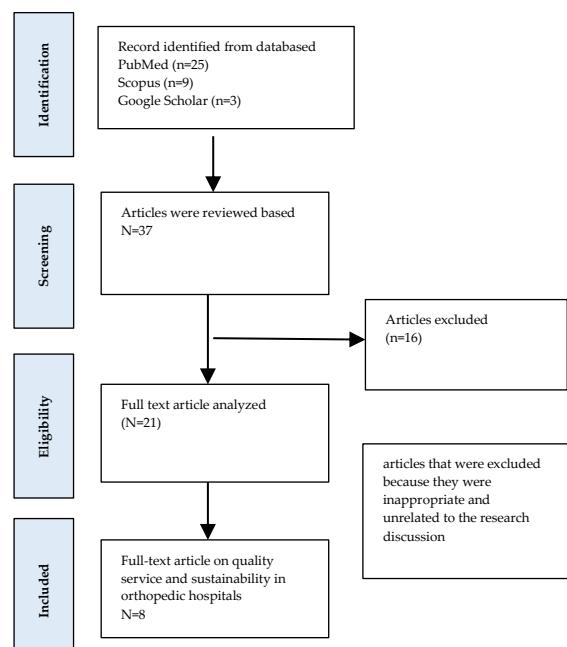


Figure 2. PRISMA Flow Diagram

Table 1. Synthesis of literature review

No.	Author (Year)	Design	Sample	Methods
1	(Abou Elseoud, 2023)	Quantitative and survey	470 respondents (outpatients)	Stepwise multiple regression, one-way ANOVA, and Pearson correlation coefficient
2	(Hamze & Mahmood, 2025)	Quantitative	498 survey respondents (patients and companions in 35 private hospitals)	Pearson correlation and simple linear regression (SPSS)
3	(Saifullah et al., 2024)	Descriptive cross-sectional	221 valid respondents (healthcare service practitioners / family physician consultants)	<i>Structural Equation Modeling</i> (SEM) with SmartPLS
4	(Sudirman et al., 2024)	Cross-sectional study	97 inpatients	<i>Structural Equation Modeling</i> (SEM) with SmartPLS
5	(Khan et al., 2022)	Pilot study / questionnaire survey	641 patients (in 18 private hospitals)	Fuzzy logic (using MATLAB R2013a)

6	(Gupta et al., 2023)	Literature review and questionnaire	25 healthcare organizations (respondents were employees/staff)	<i>Analytical Hierarchy Process</i> (AHP) and sensitivity analysis
7	(Wiogo, 2025)	Quantitative approach	261 respondents (patients)	<i>Partial Least Squares Structural Equation Modeling</i> (PLS-SEM) with SmartPLS
8	(Santoso et al., 2024)	Cross-sectional study / survey	120 patients (outpatient cardiology and internal medicine clinics)	<i>Structural Equation Modeling</i> (SEM)

## RESULT AND DISCUSSION

From the review of eight articles that met the inclusion criteria, almost all articles used a quantitative approach. Six articles employed the *Partial Least Squares Structural Equation Modeling* (PLS-SEM) method, while the other two articles used the *Analytical Hierarchy Process* (AHP) and *Fuzzy Inference System* (FIS) methods, respectively.

The PLS-SEM method was chosen for its ability to measure complex relationships among latent variables such as service quality, sustainability, patient satisfaction, and revisit intention. These eight articles demonstrated that satisfaction was a crucial component in patient loyalty, identifying *patient satisfaction* as the primary mediating variable between *service quality* and *revisit intention*.

The diverse methodological choices reflected different research objectives. The PLS-SEM method was more frequently used due to its reliable capability in modeling and predicting complex causal relationships, particularly those involving latent variables and mediation effects.

In contrast, the AHP method was not a causal prediction tool, but rather a decision-making method. AHP was used to identify and rank several priority factors such as economic, social, and environmental factors in developing conceptual models.

Meanwhile, FIS was specifically chosen to address the uncertainty and *imprecise* (fuzzy) nature of human perception. Patient satisfaction was often expressed in qualitative language such as

"good" or "quite satisfied". *Fuzzy logic* enabled analysis and ranking of facilities based on uncertain linguistic data.

From an economic perspective, the study presented by [Wiogo & Pattyranie \(2025\)](#) showed that *perceived value*, namely "reasonable price", significantly influenced customer satisfaction. This satisfaction, rooted in the perception of economic value, was a strong predictor of revisit intention.

From a social perspective, several factors such as social context and community as well as patient trust proved crucial. When patients built trust and felt strong community support from healthcare services, patient satisfaction increased, which directly enhanced loyalty and patient revisit intention.

Meanwhile, the environmental aspect described by Gupta et al. (2023) was identified as the highest priority with significant impact. Several factors such as medical waste management, sanitation, and environmentally friendly facilities contributed to hospital environment development. Sudirman et al. (2024) research also presented similar findings—this environmental development significantly improved service quality and patient satisfaction, which subsequently influenced increased *revisit intention*.

From the systematic review of eight scientific articles that met the inclusion criteria, it was found that most studies investigated the relationship between service quality and patient revisit intention. All of this literature also expanded the perspective by incorporating sustainability aspects, either through explicit or implicit

influence. The majority of articles used a quantitative approach with *Structural Equation Modeling* (SEM) structural models and mediation approaches, as well as *SERVQUAL*-based measurement schemes.

#### A. Service Quality as a Determinant of Revisit Intention

All reviewed articles consistently demonstrated that service quality dimensions (*SERVQUAL*) positively influenced patient satisfaction and impacted patients' intention to return (*revisit intention*). The *empathy* and *responsiveness* dimensions were the two indicators that most frequently served as primary determinants of satisfaction.

[Abou \(2023\)](#) stated that the provision of high-quality services in public hospitals in the Kingdom of Bahrain from the patients' perspective aligned with Bahrain Vision 2030. To measure service quality, this study employed a quantitative approach with a questionnaire designed according to the *service quality* (*SERVQUAL*) model.

Overall, quality service provided a strong and positive effect on patients' overall satisfaction assessment in the public hospitals studied. The research findings showed a "moderate" category in several dimensions, particularly the *empathy* dimension and patient satisfaction, which indicated the need for evaluation and improvement ([Abou, 2023](#)).

[Santoso \(2024\)](#) found that although service quality did not directly influence *Health Related Quality of Life* (HRQL) and *revisit intention*, this variable proved to have a significant indirect effect through patient satisfaction and trust. This article demonstrated that healthcare service interactions needed to consider emotional, psychological, and trust aspects as mediators that ultimately influenced patient loyalty.

[Wiogo \(2025\)](#) conducted research at a primary health clinic using a quantitative approach based on *Structural Equation Modeling* (SEM). This study found that service quality and *perceived value* significantly influenced patient satisfaction, which then contributed to the intention to return to use clinic services. The most dominant dimensions in the model were *reliability* and *assurance*, indicating that medical staff reliability and patients' confidence in clinic competence were vital in forming revisit intention.

The findings from the eight studies that were discussed were presented in Table 2. This thematic synthesis was created to review the main differences in research results. This table compared each study based on findings regarding direct effects, the role of indirect effects (mediation), and focus on sustainability as a research construct.

Table 2. Thematic Synthesis

No.	Author (Year)	Findings on Direct Effects	Findings on Indirect Effects (Mediation)	Integration of the Sustainability Concept
1	<a href="#">Abou Elseoud, 2023</a>	Found to be significant. Service quality dimensions (especially responsiveness, assurance, tangibles, and reliability) positively and significantly affect overall patient satisfaction.	Not explicitly tested.	Yes (Conceptually). This study is classified as "Healthcare Quality Sustainability."

## Integration of Service Quality...

2	(Hamze & Mahmood, 2025)	Found to be significant. Service quality has a statistically significant correlation and effect on enterprise sustainability.	Not tested.	Yes (As the Main Dependent Variable). Uses "Enterprise Sustainability" as the main dependent variable influenced by service quality.
3	(Saifullah et al., 2024)	Found to be significant. The model confirms several direct effect paths, such as Professionalism (PI), Quality (QFO), and Quality (QFO), Employee Wellbeing (EWA).	Found to be significant. The model is a sequential causal chain, in which intermediary variables (for example, QFO, EWA, CIA) mediate the relationships between the preceding and subsequent variables.	Yes (As the Final Dependent Variable). Uses "Sustainable Development" as the final outcome variable in the causal chain model.
4	(Sudirman et al., 2024)	Found to be significant (Partially). Social context and environmental development have a direct effect on service quality. Service quality also has a direct effect on patient satisfaction.	Found to be significant. Service quality significantly mediates the relationship between "social context & environmental development" and "patient satisfaction."	Not explicitly mentioned as a research construct.
5	(Khan et al., 2022)	(Not tested as a causal relationship). This study uses fuzzy logic to rank the priority of dimensions (including MWD) for improvement and sustainability, rather than testing regression hypotheses.	Not tested.	Yes (As a Service Quality Dimension). Integrates "Medical Waste Disposal" (MWD) as one of the nine service quality dimensions evaluated.
6	(Gupta et al., 2023)	(Not applicable). This study uses AHP to rank the priority of sustainability factors, rather than to test causal (effect) relationships.	Not applicable.	Yes (As the Main Focus of the Study). Develops a "Sustainable Healthcare Model" based on three pillars: environmental, social, and economic.
7	(Wiogo, 2025)	Found to be significant. All direct-effect hypotheses (H1-H5) are supported, including Service Quality, Customer Satisfaction, and Customer Satisfaction, Revisit Intention.	Found to be significant (Implicitly). Customer satisfaction functions as a significant mediator between Service Quality/Perceived Value and Revisit Intention.	Not explicitly mentioned as a research construct.
8	(Santoso et al., 2024)	Mixed findings. Rejected for Service Quality, HRQL and Revisit Intention. Accepted for Service Quality, Patient Satisfaction and Patient Trust.	Found to be significant. Patient satisfaction positively mediates the relationships between HRQL Service Quality and Service Quality, and Revisit Intention.	Not explicitly mentioned as a research construct.

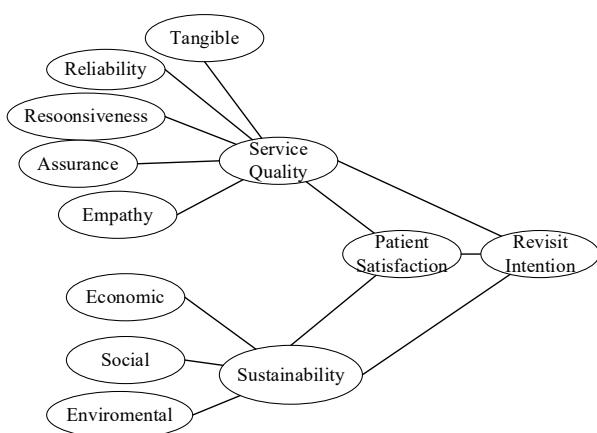
### B. Satisfaction and Trust as Mediators in the Relationship between Service Quality and Revisit Intention

Patient satisfaction and trust consistently emerged as mediating roles in several articles. In the context of public

hospital services, [Santoso \(2024\)](#) stated that high service quality did not directly increase patients' intention to return. Positive experiences that generated satisfaction and trust in the healthcare institution were required. Thus, emotional and psychological aspects became vital factors in forming long-term relationships between patients and service providers.

[Sudirman \(2024\)](#) examined broader dimensions by reviewing social factors (Social Determinants of Health / SDoH) such as social context, community development, and living environment. This article confirmed that social factors—particularly social context and environmental development—significantly influenced perceived service quality. This impacted the level of satisfaction and patients' intention to return to the hospital.

The following was the conceptual model of this study, which could be seen in Figure 1. This model visualized the role of patient satisfaction as a mediating variable between service quality and revisit intention.



**Figure 1. Context diagram of the relationships between service quality, sustainability, patient satisfaction, and revisit intention variables**

Based on the conceptual model in Figure 1, service quality was positioned to influence patients' revisit intentions both directly and indirectly through patient satisfaction. Satisfaction acted as a

mediator that connected the perception of service quality to patient behavior in choosing hospital services again in the future.

Meanwhile, sustainability played an important role in strengthening this relationship through the triple bottom line, namely economic, social, and environmental dimensions. Each dimension reflected cost efficiency and service quality, the hospital's social responsibility to the community, and the hospital's commitment to environmentally friendly waste and resource management. This triple bottom line had the potential to increase patient trust and satisfaction as it demonstrated the hospital's long-term commitment to service sustainability.

Patient satisfaction itself also had an influence on patients' intention to return. Patients' positive experiences became the foundation for the formation of loyalty and sustainable service preferences. Thus, this model confirmed that the hospital's success in designing a sustainable and quality service system had a direct impact on maintaining patient loyalty in the long term.

### C. Integration of Sustainability Dimensions in Service Quality Models

The sustainability dimension became a very vital center of attention in several articles that had been found, both from a systematic and strategic perspective. [Abou \(2023\)](#) showed that public hospitals in Bahrain were able to realize high-quality healthcare services sustainably, which they could implement through a managerial approach that focused on long-term programs, investment in staff training, and utilization of digital technology. This demonstrated a direct relationship between service quality, internal efficiency, and organizational sustainability.

[Gupta \(2023\)](#) stated that a sustainable model based on Analytical Hierarchy Process (AHP) prioritized environmental aspects as the main dimension, followed by

economic and social aspects. These findings confirmed that hospitals that prioritized environmental sustainability were better able to maintain service quality in the long term. Medical waste management, energy efficiency, and water conservation became vital indicators in the context of this research.

#### **D. Primary Care and Community-Based Services: Alternative Sustainability Approaches**

In the context of primary care, community-based approaches and long-term relationships became very vital and needed to be considered. [Saifullah \(2024\)](#) stated that family physician services in Pakistan showed that dimensions such as professionalism, collaboration, and empathy were very vital and needed to be considered further to form sustainable services. Not only that, this article also explained the interrelated relationship between service quality and the welfare of medical personnel and community participation, focusing on service quality that must mutually reinforce hospital management and patients. Services that had a family-based foundation created deep trust and continuously recurring relationships, which naturally and long-term encouraged patients' intention to return.

The research model in this article showed a clear pathway toward sustainability. The vital point was community involvement which proved to have the most significant impact on achieving sustainable development of family physician services. This community involvement practice specifically included active participation of doctors in community campaigns and policy advocacy that would benefit patients widely. Thus, this article showed that strong integration of primary care with active community involvement was no longer an option, but a core strategy to

ensure healthcare services that were not only quality but also sustainable for the long term ([Saifullah et al., 2024](#)).

#### **E. Organizational Sustainability: Strategic Assets Through Patient Loyalty**

In the context of modern healthcare system development, hospital organizational sustainability was no longer only determined by financial factors, operational efficiency, or the ability to meet technical accreditation standards ([Pongtambing et al., 2024](#)). Instead, sustainability now increasingly depended on the hospital's ability to form and maintain sustainable relationships with its patients, with the most vital indicator being patient loyalty.

Patient loyalty was not only the result of momentary satisfaction, but rather the result of consistent, empathetic, and valuable service experiences, which gradually built trust in the hospital ([Sari & Ardiwirastuti, 2020](#)). From the perspective of competitiveness and digitalization of healthcare services today, loyalty had evolved into an intangible strategic asset that could determine the hospital's sustainability, both in terms of reputation, revenue sustainability, and long-term competitiveness.

[Hamze \(2025\)](#) stated organizational sustainability (enterprise sustainable) as a very vital strategic asset, which was inherently related to the ability of an organization, especially hospitals, to maintain patient loyalty. This relationship was built on the foundation of service quality. Quality services became a crucial foundation in realizing the hospital's strategic goals, as they could generate added value and competitive advantages that strengthened its position. In the service sector such as healthcare, service providers must have high quality to achieve patient satisfaction. This patient satisfaction was the main step to achieve loyalty, where positive evaluations of service quality

could make consumers loyal to service providers and increase their likelihood of returning to use the services that had been provided.

Organizational sustainability that encompassed economic, social, and environmental dimensions enabled companies to improve operational performance and competitiveness. From an economic perspective, sustainability ensured profitability and effective use of resources. From a social perspective, sustainability improved community welfare and management satisfaction, including patients and employees. With the achievement of sustainability goals, organizations not only survived in the long term but also built a good and strong reputation (Hamze & Mahmood, 2025).

Khan (2022) had presented a comprehensive conceptual framework regarding how strategically designed service quality that focused on sustainability could strengthen the foundation of hospital organizational sustainability. The integration of service quality dimensions into sustainability principles became the main focus of this research, not only on environmental dimensions, but also social and economic dimensions, all of which had a direct impact on patient loyalty and hospital stability.

Sustainable service quality could not be built only through clinical interventions or technology, but through systematic engineering of the entire patient experience, from registration administration, waiting time, interaction with medical personnel, to post-care services. The strong positive perception that ultimately became the basis for forming long-term loyalty was the result of effective, reliable, and responsive services to patient needs (Khan et al., 2022).

High medical quality would not have an effect if it had inefficient services or repeatedly disappointing services that

would weaken patient perception. Effective and efficient services that met patient expectations could increase trust and strengthen patient loyalty. Organizational sustainability would not succeed without creating long-term relationships based on trust and satisfaction. Therefore, service quality must be considered as a means of long-term social investment, not just a temporary performance measurement tool (Khan et al., 2022).

A strategic asset that was more valuable than just a satisfaction indicator was a form of result from service experiences that matched patient expectations and were sustainable. Loyalty greatly helped hospitals in navigating system uncertainties such as policy changes, financing developments, and competitive pressures with support from stable and loyal patients. Hospitals that successfully combined sustainability values into the service quality system had higher resilience to major external changes. Therefore, this made loyalty not just an output of services, but also a strategic defense mechanism that would continue to maintain hospital organizational sustainability in the long term (Khan et al., 2022).

Therefore, understanding how service quality contributed to patient loyalty, and how that loyalty became part of supporting hospital sustainability structurally and functionally, became the main focus of this discussion. The following section reviewed the relationship between service quality, patient satisfaction and trust, and its implications for hospital sustainability based on the findings of the reviewed literature.

## CONCLUSION

This systematic review confirmed the importance of integrating service quality and sustainability as the foundation for developing modern healthcare services

oriented toward the long term. The service approach not only emphasized technical aspects but also social, economic, and environmental values, which strengthened the hospital's ability to build more meaningful and sustainable relationships with patients. The sustainability perspective provided a strategic framework for hospitals to create

humanistic, adaptive, and responsive service experiences to changing patient needs and healthcare industry challenges. Thus, this research encouraged the development of healthcare service models that not only improved operational efficiency but also strengthened trust, loyalty, and organizational sustainability as a whole.

## REFERENCES

Abou Elseoud, M. S. (2023). An analysis of healthcare quality sustainability in public hospitals. *International Journal of Emerging Trends in Health Sciences*, 7(1), 1–11. <https://doi.org/10.18844/ijeths.v7i1.9222>

Agung, S., Srihastuti, E., & Athori, A. (2022). Pengaruh Penerapan Akuntansi Lingkungan Terhadap Kinerja Lingkungan Rumah Sakit Umum Daerah Kabupaten Kediri. *JCA (Jurnal Cendekia Akuntansi)*, 3(1), 9. <https://doi.org/10.32503/akuntansi.v3i1.2656>

Anfal, A. (2020). Pengaruh Kualitas Pelayanan Dan Citra Rumah Sakit Terhadap Tingkat Kepuasan Pasien Rawat Inap Rumah Sakit Umum Sundari Medan Tahun 2018. *Excellent Midwifery Journal*, 3(2), 1–19. <https://doi.org/10.55541/emj.v3i2.130>

Basalamah, K., & Ahri, R. A. (2021). The Influence of Image and Service Quality on Patient Satisfaction and Retention at the Regional General Hospital of Makassar City Pengaruh Citra dan Kualitas Layanan Terhadap Kepuasan dan Minat Kembali Pasien pada Rumah Sakit Umum Daerah Kota Makassar. *An Idea Health Journal*, 1(02), 81–91.

Cesariana, C., Juliansyah, F., & Fitriyani, R. (2022). Model Keputusan Pembelian Melalui Kepuasan Konsumen Pada Marketplace: Kualitas Produk Dan Kualitas Pelayanan (Literature Review Manajemen Pemasaran). *Jurnal Manajemen Pendidikan Dan Ilmu Sosial*, 3(1), 211–224. <https://doi.org/10.38035/jmpis.v3i1.867>

Fitriana, Y., & Pratiwi, K. (2018). Pelaksanaan Patient Safety Di Rumah Sakit Umum Daerah Dan Rumah Sakit Umum Swasta Bantul Berdasarkan Ketentuan Undang-Undang Nomor 44 Tahun 2009 Tentang Rumah Sakit. *Jurnal Kebidanan*, 7(1), 28. <https://doi.org/10.26714/jk.7.1.2018.28-39>

Gupta, H., Garg, S., & Gupta, U. (2023). Development of Sustainable Healthcare Model for the Hospitals in Northern India. *Jurnal Administrasi Kesehatan Indonesia*, 11(1), 131–144. <https://doi.org/10.20473/jaki.v11i1.2023.131-144>

Hadjri, M. I., & Perizade, B. (2020). Green Human Resource Management dan Kinerja Lingkungan: Studi Kasus pada Rumah Sakit di Kota Palembang. *Jurnal Inovasi Bisnis* 8, 8, 182–192.

Hamze, M. M., & Mahmood, O. K. (2025). The Impact of Service Quality on Enterprise Sustainability Patients Perspective. *Journal of Zankoy Sulaimani*, January.

Harared, B., & Rahadian, Y. (2019). Strategi Keberlanjutan (Sustainability) Pada Rumah Sakit Khusus Mata X. *Jurnal Riset Akuntansi dan Keuangan*, 7(2), 367–378.

<https://doi.org/10.17509/jrak.v7i2.17030>

Helmi, Y., & Ratnasih, C. (2022). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pasien Pada Rumah Sakit Provinsi NTB:(Studi Kasus Pada Poli Orthopedi). *Prosiding Seminar Nasional* ..., 46–52.  
<https://prosiding.borobudur.ac.id/index.php/1/article/view/8%0Ahttps://prosiding.borobudur.ac.id/index.php/1/article/download/8/5>

Khan, M. S., Hafiz, A., Khadar, S. D. A., & Fahad, M. (2022). Sustainability in the Service Quality of Healthcare Facilities. *International Journal of Social Ecology and Sustainable Development*, 13(5).  
<https://doi.org/10.4018/IJSESD.313962>

Laila, F. N., & Paramarta, V. (2024). Jurnal Kesehatan Ilmiah Indonesia ( Indonesian Health Scientific Journal ) Pengaruh Kualitas Pelayanan Pada Kepuasan Pasien Dan Konsekuensinya Terhadap Loyalitas di Rumah Sakit 1Universitas Sangga Buana Bandung Jurnal Kesehatan Ilmiah Indonesia ( Indonesi. *Jurnal Kesehatan Ilmiah Indonesia*, 9(2).

Maranggi, O., & Bachtiar, A. (2024). Analisa Mutu Pelayanan Rumah Sakit Terhadap Kepuasan dan Loyalitas Pasien. *Jurnal Ilmu Sosial dan Pendidikan*, 4(6).

Nugraha, K. S. W., Suryaningsih, I. B., & Paramita, C. (2018). Pengaruh Elemen-Elemen Healthcare Service Quality (Hcsq) Terhadap Kepuasan Pasien Rumah Sakit Bina Sehat Jember. *Bisma*, 12(3), 323.  
<https://doi.org/10.19184/bisma.v12i3.9002>

Pambudi, N. A. (2021). Pengaruh Kualitas Pelayanan Terhadap Revisit Intention Dengan Kepuasan Dan Kepercayaanpasien Sebagai Variabel Intervening (Studi Pada Pasien Rawat Inap Di Rsu Permata Medika Kebumen). *Gastronomía ecuatoriana y turismo local.*, 1(69), 5–24.  
<http://eprints.universitasputrabangsa.ac.id/id/eprint/613/>

Pongtambing, Y. S., Acantha, E., & Sampetoding, M. (2024). Transformasi Digital pada Layanan Kesehatan Berkelanjutan di Indonesia Digital Transformation of Sustainable Health Care in Indonesia. *SainsTech Innovation Journal*, 6(November 2023).

Ramadhani, R., Rasyid, E. R., & Fontanella, A. (2021). Motivasi Pengungkapan Tanggung Jawab Sosial dan Lingkungan. *Jurnal Akuntansi Kompetif*, 4(2), 105–117.  
<https://ejournal.kompetif.com/index.php/akuntansikompetif/article/view/667>

Saifullah, Ma, Z., Li, M., Maqbool, M. Q., & Chen, F. (2024). Family physician service quality and sustainability: a roadmap for Pakistan's healthcare sector. *Frontiers in Medicine*, 11(December), 1–13.  
<https://doi.org/10.3389/fmed.2024.1455807>

Salim, A. (2020). Analisis Kualitas Pelayanan Rumah Sakit Negeri X Dan Kualitas Pelayanan Rumah Sakit Swasta Y Di Kota Pekanbaru. *Journal of STIKes Awal Bros Pekanbaru*, 38–47.

Santoso, A. S., Saputra, R. N. I., Oktisari, P., & Bernarto, I. (2024). The Influence of Perceived Service Quality Dimensions on Patients Satisfaction. *Journal La Sociale*, 5(4), 1044–1056.  
<https://doi.org/10.37899/journal-la-sociale.v5i4.1234>

Sari, M., & Ardiwirastuti, I. (2020). Correlation Between Patient Satisfaction To Patient Loyalty On Rsgm Iik Bhakti Wiyata Kediri Program Studi S1 Kedokteran Gigi Institut Ilmu Kesehatan Bhakti Wiyata Kediri. *Jurnal Wiyata*, 56–61.

Sudirman, Ali, M. N., & Rahman, N. (2024). Influence of Social Determinants of Health Service Quality on Patient Satisfaction at Undata Hospital, Palu. *Journal of Public Health and Pharmacy*, 4(2), 113–122. <https://doi.org/10.56338/jphp.v4i2.5427>

Syaharani, N. A., & Oktavia, R. (2024). *Economics and Digital Business Review*

Analisis Sustainability Report : Upaya Peningkatan Produktivitas Profitabilitas pada Perusahaan Manufaktur. 5(2), 675–684.

Wiogo, L. (2025). The Effect of Service Quality , Perceived Value , on Revisit Intention Mediated by Customer Satisfaction in Primary Health Care. *Jurnal Ranah Research*, 7(3), 1892–1908.