

Correlation between Hospital Image and Patient Satisfaction toward Loyalty in Hospital: A Scoping Review

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ARTICLE INFO	ABSTRACT
<p>Manuscript Received: 06 Jan, 2025 Revised: 28 Mar, 2025 Accepted: 21 Apr, 2025 Date of Publication: 05 May, 2025 Volume: 8 Issue: 5 DOI: 10.56338/mppki.v8i5.7171</p>	<p>Introduction: The Indonesian healthcare sector has grown quite impressively these years, with increased competition due to private investments and rapid development in the services of hospitals. Even though government hospitals dominate the market with 51.4%, the business environment is promising, with private hospitals having a low concentration ratio that demands strategic initiatives in terms of service quality and reputation. This research investigates the relationships between hospital image, patient satisfaction, and loyalty.</p> <p>Methods: This scoping review utilized databases like Google Scholar, PubMed, and Science Direct, focusing on studies published between 2019 and 2024. The keywords used for this scoping review were: (Hospital Brand OR Hospital Image OR Hospital Reputation OR Hospital Identity OR Hospital Branding Identity OR Hospital Branding) AND (Patient Satisfaction OR Satisfied Patient OR Healthcare Satisfaction OR Patient Experience OR Hospital Service Evaluation OR Healthcare Service Evaluation OR Patient Perception of Care OR Patient Perception of Service) AND (Patient Loyalty OR Patient Retention OR Patient Adherence OR Patient Commitment OR Hospital Loyalty OR Healthcare Consumer Retention OR Healthcare Consumer Loyalty).</p> <p>Results: After screening 367 records, 101 studies were assessed for eligibility, and 12 met the inclusion criteria. Results consistently highlight the direct and indirect impact of hospital reputation on patient satisfaction and loyalty.</p> <p>Conclusion: Patient satisfaction played a major role in forming patient loyalty. Healthcare providers should be more aware of developing services through medical equipment and medical personnel recruitment, which may lead to the improvement of patient experiences and create satisfaction and loyalty. Future research needs to investigate complex correlations that may form patient loyalty in a hospital setting including socio-economic aspects, perceived value, and service quality.</p>
KEYWORDS	
<p>Hospital Image; Patient Loyalty; Patient Satisfaction</p>	
<p>Publisher: Fakultas Kesehatan Masyarakat Universitas Muhammadiyah Palu</p>	

INTRODUCTION

As private investment in the healthcare industry has grown, hospital competition in Indonesia has also increased significantly. Indonesia currently has a greater number of hospitals than it had ten years ago, which has made the business environment more competitive. With 51.4% of the market, government hospitals dominate Indonesia's hospital market structure, although private hospitals are still able to compete because of the low concentration ratio (1). To maintain and attract more patients, hospitals must manage strong competition with efficient and precise business strategies, especially when it comes to providing high-quality services and developing a solid reputation (2–4).

In this competitive world of healthcare services, patient loyalty plays a vital role in influencing patients' decisions to choose a healthcare facility. Building patient loyalty in the competitive healthcare sector depends heavily on patient satisfaction and hospital image. Patient loyalty is impacted by the hospital's image in both direct and indirect ways. In addition to directly increasing patient loyalty, a positive hospital image raises customer satisfaction through better-perceived service quality, which in turn increases the chances that customers will return. Improving service quality, patient satisfaction, and patient loyalty can all be significantly impacted by a positive hospital image (5–8).

One important mediating factor in the relationship between patient loyalty and hospital image is patient satisfaction. Increased patient loyalty might result from high satisfaction levels since they strengthen patients' faith in and dedication to the facility. Patient satisfaction also plays a role as a mediating factor in service quality and brand image (6,8–11).

Patient perceptions of a hospital's image are influenced by their familiarity with the facility and their level of trust in its care. Patients' decision-making process while choosing a hospital is directly impacted by this image, resulting in hospital recognition and differentiation (12). A hospital's image is greatly influenced by social and marketing factors including social media and word-of-mouth advertising. (13,14) Therefore, patient satisfaction and efficient communication techniques should be the primary concerns for hospitals aiming to enhance their reputation. (15,16)

Furthermore, patient satisfaction affects patient behavior and hospital loyalty in addition to reflecting the efficacy of healthcare therapy. The effectiveness of healthcare service quality is measured by patient satisfaction. In an attempt to raise the quality of services, patient dissatisfaction may become an issue that requires communication. Patient behavior and hospital loyalty are influenced by high-quality healthcare services. Numerous factors, including dependability, certainty, responsiveness, empathy, and physical (material) features, can be used to evaluate the quality of healthcare services. Increasing patient satisfaction requires improving the standard of service in several areas (17).

Hospital management should create marketing strategies that focus on enhancing service quality and hospital image. Patient loyalty and satisfaction can be raised by addressing waiting times and giving patients enough information about their services. Patient loyalty to the hospital can also be increased by developing stronger relationships with referring physicians and making sure that patients are treated equally. Maintaining patient loyalty requires both adept patient satisfaction and an excellent hospital brand image. Thus, hospitals can greatly increase patient satisfaction and loyalty by enhancing service quality and enhancing brand image (7,9,10,18).

From the explanations above, we can figure out how important hospital image and patient satisfaction are for creating patient loyalty. Here we resume the theories which have been stated before.

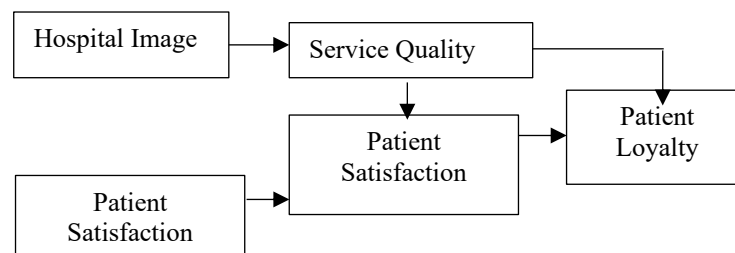


Figure 1. Direct and Indirect correlation between hospital image, patient satisfaction, and Patient Loyalty (5–9,11).

METHOD

This study used Systematic Reviews and Meta-Analyses extension for scoping review (PRISMA-ScR) checklist to guide articles' selection in this scoping review. This review was guided by the research question, "Is there any correlation between hospital image and patient satisfaction regarding patient loyalty?" We used PCC to organize search strategies and refine the research question.

Population: Patient

Concept: Hospital Image, Patient Satisfaction, and Patient Loyalty

Context: Hospital

Gathering references and data sources was done using online databases such as Google Scholar, PubMed, Science Direct, Ebsco Host, and ProQuest.

The keywords used for this scoping review were: (Hospital Brand OR Hospital Image OR Hospital Reputation OR Hospital Identity OR Hospital Branding Identity OR Hospital Branding) AND (Patient Satisfaction OR Satisfied Patient OR Healthcare Satisfaction OR Patient Experience OR Hospital Service Evaluation OR Healthcare Service Evaluation OR Patient Perception of Care OR Patient Perception of Service) AND (Patient Loyalty OR Patient Retention OR Patient Adherence OR Patient Commitment OR Hospital Loyalty OR Healthcare Consumer Retention OR Healthcare Consumer Loyalty).

These were defined inclusion criterias that were used to choose the articles; (1) Published between 2019 and 2024, (2) Including as original research, (3) Available in full-text, (4) Open access, (5) Language used in English. Exclusion criteria also stated for this paper are studies related to patient satisfaction and loyalty in non-hospital settings.

For the first step, the author screened for duplicate articles using a reference manager, employing the abstract, title, and author as basic information. In the next step, the author screened full-text articles for their eligibility against the inclusion and exclusion criteria. The final step aimed to summarize all the data extracted from the articles using Microsoft Word and Microsoft Excel. Figure 1 illustrates the framework for inclusion, eligibility evaluation, screening, and identification.

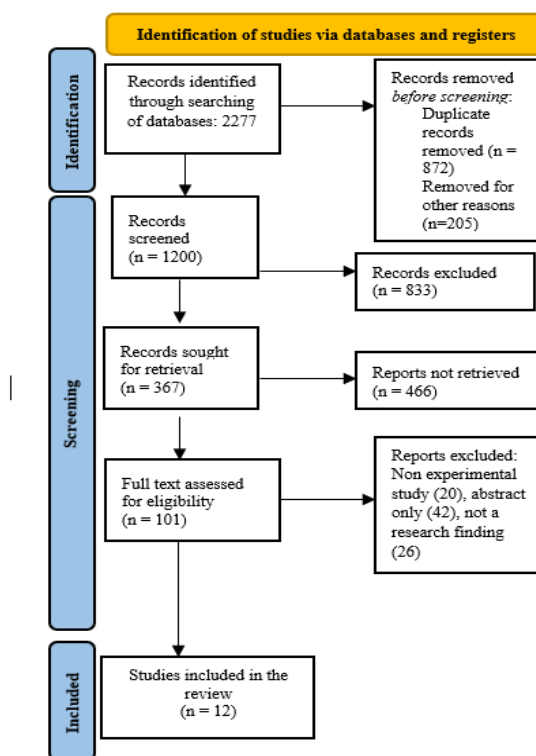


Figure 2. The framework for inclusion, eligibility evaluation, screening, and identification

RESULTS

From these 4 databases, 1200 records were collected after duplicates were removed. After that, the records were filtered by title and abstract according to inclusion and exclusion criteria. There are about 12 appropriate articles based on the inclusion and exclusion criteria used in the screening procedure.

All of the articles used cross-sectional method, with 10 studies included as quantitative studies, and 2 studies used mixed method to strengthen findings. One article was published in 2019, three in 2020, four in 2021, three in 2022, and one in 2023.

We found several studies from different countries from the results, conducted in China (n=4), Taiwan (n=1), Thailand (n=1), Malaysia (n=1), Vietnam (n=2), Syria (n=1), Jordan (n=1), and Iran (n=1). All of the findings conducted in Asia.

Eight subsections were used to analyse the results: title, author, year, country, study aim, research method, sample, and outcome. All studies with cross-sectional method had good quality. To summarize, a map of factors was made by listing factors directly and indirectly influencing patient loyalty, also including hospital brand and patient satisfaction. Table 1 represents each research including in this scoping review.

Table 1. Research analysis

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
Zhishan Liang/2023/China (37).	Evaluating the Relationships between Perceived Patient Value, Patient Satisfaction and Loyalty by Inpatients at a Tertiary Public Hospital in China	Cross sectional	To identify patient value definition and its dimensions in healthcare and to examine their relationships with patient satisfaction and loyalty	740 samples	<ul style="list-style-type: none"> Health-Outcome Value, interactive value, economic value, Shared Decision-Making Value had significant effect on patient satisfaction. (p<0.001) Patient satisfaction had significant effect on patient loyalty (p<0.001) Patient satisfaction had mediating effect on Health-Outcome Value toward patient loyalty
Shie AJ et al/2022/Republic of China (19)	Exploring The Relationship Between Hospital Service Quality, Patient Trust, And Loyalty from A Service Encounter Perspective in Elderly with Chronic Diseases.	Cross sectional	Analyze how the quality of services provided in the hospital affects patients' perception about healthcare encounters, trust, and loyalty.	483 valid questionnaires	<ul style="list-style-type: none"> The quality of hospital services significantly influenced the perceived satisfaction of patients after contact with healthcare services (p < 0.001) The higher the quality of

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
					hospital services, the greater was the patient trust and loyalty (p value < 0.001).
Tsai CM/ 2021/Taiwan (20)	Do Perceived Quality and Brand Image Still Affect Customer Satisfaction in Hospitals During The COVID-19 Pandemic?	Cross sectional	To study the relationships among perceived quality, brand image, and customer satisfaction in hospitals during the COVID-19 pandemic period.	242 questionnaires	<ul style="list-style-type: none"> • Perceived quality has a positive and significant impact on brand image and customer satisfaction (p<0.001) • Brand image has a significant impact on customer satisfaction. (p<0.001) • The total effect of perceived quality on customer satisfaction is 0.589, which the direct effect =0.312 and the indirect effect=0.277.
Chitthanom C/2020/Thailand (21)	Relationships Among Medical Activity Perceived Functional Values, Satisfaction Trust, And Revisit Intention In Medical Tourism: A Case Study On CLMV Tourists In Thailand.	Cross sectional	To find the relationships among all these variables in medical tourism; Medical activity, Perceived functional values, Satisfaction, Trust and Intention to revisit.	652 questionnaires	<ul style="list-style-type: none"> • Medical activity and perceived value had positive effect on revisit intentions via patient satisfaction and trust (p<0.005) • Patient satisfaction influence trust and revisit intentions (p<0.001) • Trust had significant influence on revisit intentions (p<0.001)
Haque R et al/2020/China (22)	Factors Affecting Customer's Satisfaction and	Cross sectional	To find the relationship between various factors that	300 valid questionnaires	<ul style="list-style-type: none"> • Service quality dimensions significantly impact customer

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
	Loyalty in Hospitals In China.		influence customer satisfaction and loyalty in hospitals in China.		satisfaction in the Chinese hospital industry. (p<0.001) <ul style="list-style-type: none"> • Doctor's Conduct (p<0.001) exert the highest influence or significant impact on Chinese patient' satisfaction. • Customer satisfaction significantly impacts customer loyalty (p<0.001)
Alomari F and Hamid ABA. /2022/Syria (23)	Strategies To Improve Patient Loyalty and Medication Adherence in Syrian Healthcare Setting: The Mediating Role of Patient Satisfaction	Cross sectional	Investigates the relationships among service quality, patient satisfaction, patient loyalty, and medication adherence in the Syrian healthcare context, with a focus on patient satisfaction as a mediator.	321 responses	<ul style="list-style-type: none"> • Patient satisfaction mediated the relationship between patient loyalty and service quality (assurance, reliability and financial aspect). • Patient satisfaction had mediation effect on the relationship between medication adherence and service quality (reliability and financial aspect). • Financial aspect had the highest impact on patient satisfaction ($\beta = 0.242$) and medication adherence ($\beta = 0.302$).
Aladwan M et al/2021/Jordania (24)	The Relationship Among Service Quality, Patient Satisfaction and Patient Loyalty: Case Study in Jordan Mafraq Hospital.	Cross sectional	Analyze the impact of perceived service quality on patient satisfaction and patient loyalty within a public hospital context in Jordan, Mafraq Governmental Hospital.	400 questionnaires	<ul style="list-style-type: none"> • Hospital reputation was reported as having a positive direct effect on patient loyalty (P-Value = 0.032) • Hospital reputation was also reported as having a positive direct

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
					<p>effect on patient satisfaction (P-Value = 0.000),</p> <ul style="list-style-type: none"> • Patient satisfaction was reported as having a positive direct effect on patient loyalty (P-Value = 0.000) • Patient satisfaction was reported as having a mediating effect on the relationship between hospital reputation and patient loyalty (P-Value = 0.002)
Phan Thanh Nhai et al/ 2021/Vietnam (25)	Sustainable business development of private hospitals in Vietnam: Determinants of patient satisfaction, patient loyalty and revisit intention	Cross sectional	To analyze relationship between quality of service and hospital brand image with satisfaction and patient loyalty, revisit intention at private hospitals in Vietnam	286 participants	<ul style="list-style-type: none"> • There was no significant relationship between satisfaction and hospital brand image ($p > 0.05$) • Hospital brand image had a direct positive impact toward loyalty ($p < 0.001$). • Quality of service had a direct positive impact toward patient satisfaction ($p < 0.001$) and intention to re-visit ($p = 0.004$). • Patient satisfaction had a direct positive correlation with patient loyalty ($p < 0.001$). • Patient loyalty had a direct positive correlation with the intention to revisit ($p < 0.001$).

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
Liu S, Li G, and Liu N/2023/China (26)	The Impact of Patient Satisfaction on Patient Loyalty with the Mediating Effect of Patient Trust	Cross sectional	Focused to asses on the issues of customer loyalty in the healthcare industry, particularly from the perspective of public hospitals in China.	1696 patients	<ul style="list-style-type: none"> • Patient Satisfaction had positive effect on Patient Trust, significantly greater than zero ($P = .000$) • Patient trust showed significant direct positive relationship with Patient Loyalty ($P = .001$) • There is no direct relationship found between Patient Satisfaction and Patient Loyalty ($P = .073$) • There is significant mediating effect of Patient Trust on Patient Satisfaction and Patient Loyalty ($P = .000$).
Rohollah K et al/2020/Iran (27)	Role Of Service Quality, Trust and Loyalty in Building Patient-Based Brand Equity: Modeling for Public Hospitals	Cross sectional	Aimed to find factors influencing on the brand equity of hospitals	450 samples	<ul style="list-style-type: none"> • Brand awareness has a significant impact on brand association. ($p < 0.001$) • Brand association has a significant impact on Perceived quality ($p < 0.001$) • Perceived quality has a significant impact on brand satisfaction. ($p < 0.001$) • Brand satisfaction has a significant impact on brand Trust. ($p < 0.001$) • Brand Trust has a

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
					<p>significant impact on brand loyalty. (p<0.001)</p> <ul style="list-style-type: none"> • Brand loyalty has a significant impact on brand Equity. (p<0.001) • Brand awareness has no significant impact on brand Trust. (p:0.778) • Brand awareness has a significant impact on brand loyalty. (p<0.001) • Brand awareness has a significant impact on brand Equity. (p<0.001) • Brand association has a significant impact on brand Trust. (p<0.001) • Perceived quality has a significant impact on brand Trust. (p<0.001) • Brand satisfaction has a significant impact on brand loyalty. (p<0.001) • Brand satisfaction has no significant impact on brand Equity. (p:0.224)
Nguyen NX, Tran K, and Nguyen TA. /2021/ Vietnam (28)	Impact of Service Quality on In-Patients' Satisfaction, Perceived Value, And Customer Loyalty: A Mixed-Methods Study From	Cross sectional	Explores the dimensions of service quality in private healthcare and how they impact in-patient satisfaction, perceived value,	Five inpatients for the qualitative phase and 368 inpatients for the quantitative phase	<ul style="list-style-type: none"> • All five patients agreed on three priority improvements: (1) Training a team of highly knowledgeable medical experts with strong

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
	A Developing Country		and customer loyalty in Vietnam.		<p>personal skills, namely empathy and communication;</p> <p>(2) shifting the administrative procedures to save time; and (3) building a solid social media presence and pro bono and e-service to justify their expertise.</p> <ul style="list-style-type: none"> • Among the four service quality dimensions, the impact of social influence on Customer Percieved Value (0.276, P = 0.000) was the most significant, • Function (0.138, P = 0.048) was the least. • Social influence has the most significant effect on customer satisfaction (0.324, P = 0.000) • Emotion (0.118, P = 0.008) had the most negligible effect • Regarding customer loyalty, both Customer Percieved Value and customer satisfaction exercises positively influenced Word of Mouth and revisit intention (P<0.005)
Muhammad KR, Miraj AB, and Suhaiza Z/2021/Malaysia (29)	Healthcare Services: Patient Satisfaction and Loyalty Lessons from Islamic	Cross sectional	Explore the Muslim patient's psychological factors that have	379	<ul style="list-style-type: none"> • The findings found that the administrative behaviour, nurse's

Author/Year/Country	Title	Research design	Aim	Sample	Outcome
	Friendly Hospitals, Patient Preference and Adherence		associated with health care services in driving their loyalty intention for future treatment in private hospitals of Malaysia.		<p>services, and hospital environment, significantly causes a highly significant impact on satisfaction ($p < 0.001$)</p> <ul style="list-style-type: none"> • Shariah amenities showed highly significant negative impact on loyalty ($p > 0.001$) • Service quality had significant impact toward loyalty to health care services at the hospital. ($p < 0.001$)

From the results, it was obtained that patient satisfaction had a significant effect on patient loyalty in most of the results. Six studies even stated direct and indirect relations between patient satisfaction and patient loyalty. Namely perceived value, service quality, and patient trust acted as mediating factors of patient satisfaction toward patient loyalty (20,23,24,26,28).

We found four studies that stated service quality has a direct and indirect effect between patient satisfaction and patient loyalty (20,23,29). Besides service quality, perceived value is also stated several times in its correlation between patient satisfaction and loyalty mediating factors (21,27,30). A study by Sha liu even explained more about the components of perceived value, which acted as a mediating factor between patient satisfaction and loyalty. Economic value, health outcome value, interacting value, and shared decision-making value had a significant correlation with patient satisfaction, meanwhile, health outcome value had a significant effect on patient loyalty, with patient satisfaction acting as a mediating factor (26).

Brand reputation was found to be an influencing factor for patient satisfaction and loyalty as stated in three studies. Brand reputation directly influenced patient satisfaction and loyalty (24,27,28). A study by Aladwan et al found that brand reputation had a significant role in forming patient satisfaction, which indirectly influenced patient loyalty (24). Study by Nguyen also found that brand reputation could be increased by using social media. Data obtained from a qualitative study found that social media played a primary role in gaining loyalty, and brand reputation played a mediating role in this condition. Aside from brand reputation, we also found that brand association and brand awareness played significant roles in forming patient satisfaction and loyalty. Brand association influenced perceived quality, which acted as a mediating role in forming brand satisfaction. Brand satisfaction also had a direct significant effect on brand loyalty (27,28).

DISCUSSION

Our findings proved the fundamental theories stated by Hasan that forming loyalty in customers is complicated, service providers should fulfill several main components that lead to loyalty. The factors that influence customer loyalty include customer satisfaction, product or service quality, brand image, perceived value, trust, customer relationship, switching cost, and reliability (31).

Most of our findings support these statements. Meanwhile, a study by Phan Thanh Nhai et al. found a contradictive result with no interaction between patient satisfaction and hospital brand. This suggests that the

hospital's brand image primarily serves as a perceived value and acts as an intangible element that contributes to the overall service quality. While the brand image might influence a patient's decision to choose a hospital, it doesn't significantly affect their level of satisfaction. Instead, patient satisfaction is shaped by tangible aspects of service quality, such as medical equipment, facilities, staff competency, transparent pricing, and the medical examination and treatment process (25).

The relationship between loyalty and hospital brand is also about patient trust. Positive patient' experiences, high-class service quality, and strong brand images create such trust (32,33). This result is linear with our findings. Kalhor et al. found that brand awareness had an indirect effect on perceived quality through brand association, and perceived quality affected satisfaction. Brand satisfaction indirectly impacts brand trust and loyalty (27). Shie et al. and Chitthanom C also found that positive experience provided by service quality affected patient trust and will impact revisit intention, which can build loyalty (19,21). Further relationship between satisfaction, trust, and loyalty stated by Liu et al., patient satisfaction had an indirect correlation with loyalty through patient satisfaction (26).

Based on our findings, service quality is influential in enhancing brand satisfaction and brand trust, leading to the building of brand loyalty. The dimensions of service quality-that is, tangibles, reliability, responsiveness, assurance, and empathy were found influential in affecting the way patients perceive the service interaction they experience with healthcare providers. Service quality leads to the development of patient trust, reliability is a less important determinant of patient loyalty, and this aspect needs further development of professional skills by the medical staff.

Analysis by Ching Ming Tsai had shown that physical quality and medical policy are the most important factors influencing patients' perceptions of hospital services, which form the brand image. A good brand image, in turn, increases customer satisfaction; thus, hospitals having better brand images are more prone to retain patients and attract recommendations for themselves. A study by Wenyi Lin confirmed these findings, perceived value and patient satisfaction are the most important factors influencing patient loyalty, with patient satisfaction serving as a partial mediator (20,30).

Alomari et al. investigated the relationships between service quality, patient satisfaction, patient loyalty, and medication adherence in the Syrian context of healthcare and showed significant insights whereby the proposed model explained 35% of patient satisfaction, 55% of patient loyalty, and 46% of medication adherence, hence being effective in predicting such outcomes. The association between service quality and medication adherence was mediated by patient satisfaction. That means that increasing service quality it would result in an increase in the satisfaction level of patients, which further encourages their adherence (23). A Study by Rahooiah Kalhor showed that service quality is influential in enhancing brand satisfaction and brand trust, leading to the building of brand loyalty, although brand satisfaction does not affect brand equity (27).

The findings between satisfaction and service quality proved theory by Richard L. Oliver in 1980. This theory called Expectancy Disconfirmation Theory, or EDT for short, is a theory commonly used to explain how satisfaction or dissatisfaction is formed. It is defined as the customer's anticipation of the performance of a product or service. It reflects the customer's experience after using the product or service, which may turn out to be better or even worse than their expectations. Customers with direct and indirect experience will use the purchased product or the offered service (34).

The overall research generally supports the fact that service quality in a healthcare setting is very important and enhances patient satisfaction greatly, which increases brand reputation and loyalty, with consequent better outcomes in health (19,20,23,27–29,35,36). Among the dimensions of service quality, the relevant ones were reliability and responsiveness. Besides, responsiveness influences patient loyalty much more strongly compared to reliability. The most powerful drivers of patient satisfaction and medication adherence were financial aspects, which underlined the role of economic considerations in healthcare experiences (23).

Satisfaction from service contacts is also an important determinant of trust, and thus, a hospital should ensure that the medical equipment is good, comfort is provided, and care is extended with due attention to developing a rapport with the patients (19,21). Moreover, there are still gaps that exist in the service quality, especially at access to service; hence, the hospitals should take away such inadequacies to effectively meet the expectations of the patients. Continuous improvement of quality in services such as sustained high standards ensures not only increased

levels of satisfaction among patients but also a stronger brand image in competitive markets. Therefore, the hospital management needs to work out strategies for developing patient loyalty and service provision (22).

Besides service quality, we found that factors influencing customer satisfaction and loyalty include the attitude of the hospital staff, especially doctors, and perceived value determining the level of patients' experiences and loyalty. It was found that patients were more satisfied if they perceived a good attitude and showed concern for them by health care providers, which had a greater influence on their intention to revisit and recommend the hospital to others. This result had corresponding findings with the research from Chutturat et al. and Rahman et al, medical activity, perceived functional value, satisfaction, and trust have an important impact on revisiting intention to Udon Thani among medical tourists. This study found that satisfaction and trust are critical mediators of the relationship between perceived value and intention to return for medical services and thus are important in influencing tourists' decisions. Linear results also found from a study conducted by an Jin Shie et al showed that perceived high-quality hospital services led to a high degree of satisfaction from patients after their healthcare interactions, building more trust and loyalty in the institution (19,21,22). Through this research, we identified four dimensions of patient value that are important; interacting value, shared decision-making value, health outcome value, and economic value. The implication is that enhancing patient value is critical for maximizing the levels of satisfaction and loyalty among patients and offers important lessons for health personnel and hospital managers. Reflecting to its importance, effective communication and medical personnel recruitment are the key parameters to improving patient experiences and creating satisfaction also loyalty.

A unique interaction that can result from patient loyalty is found in perceived value, the interacting value can positively influence both shared decision-making and health-outcome values, while shared decision-making value has a significant effect on health-outcome and economic value. Furthermore, health-outcome value contributes to an increase in economic value and patient satisfaction, which again is a forerunner of patient loyalty. A correspondence study stated deep analysis which showed that patient satisfaction does not directly affect patient loyalty, but its effect on patient loyalty is fully mediated by patient trust, as for patients to be loyal, they have to be trusted (26,37). From the explanations above we can assume that customer perceived value affects patient satisfaction. These findings confirmed a theory stated by Zeithaml in 1988 (38).

There are complicated relationships among patient market cognition, hospital dynamic and service capabilities, patient satisfaction, and perceived competitive advantages of hospitals. The empirical results indicate that patient market cognition, which refers to knowledge, information, and choice intention, positively influences the dynamic capability integration, agility, and innovation of hospitals and their service capabilities, such as facility excellence, convenience, clinical ability, responsiveness, and doctor-patient communication. These capabilities further play a very important role in enhancing patient satisfaction, which is measured by factors such as time, price, and clinical outcomes (35).

In other words, the findings reveal that brand awareness has no relationship with brand equity, and thus, one cannot help but note that recognizing the name of a hospital is not enough to bring value to its brand. In contrast, the research underlines the impact of brand associations on positive perceived quality and trust that leads to brand loyalty. The validated model indicates that the quality of service would improve patient trust in the hospital brand to the extent that a preference will be developed for returning for future treatments in the same facility. The research underlines the identification and prioritization of the dimensions affecting brand equity as a necessity for hospital managers to maintain competitiveness and provide effective healthcare services. Overall, the study provides valuable insights into how public hospitals can strategically enhance their brand equity with focused improvements in service quality and patient trust (27,28). Results highlighted the high quality of the service and good brand image that a hospital should have, especially in periods of a health crisis, because such an element would mean great means for creating patient loyalty and satisfaction during a crisis. Improved patient market cognition brings better hospital capability, which is then improved to achieve better satisfaction of the patients and a more competitive advantage for the hospital. competitive market.

Satisfaction and loyalty are also related to socio-economic background, which had not been explained further in our paper. Government and health policies play a major role in it. Hospital patients in Indonesia mostly come from lower-middle economic backgrounds; they tend to prioritize cost considerations over the services provided to them. Economically, they have a weaker bargaining position. Their inability to seek treatment at private hospitals due to

high costs leads to the perception that what they sacrifice which is cost, for treatment is justified by what they receive which is services. This condition is further reinforced by government programs related to healthcare subsidies, such as *BPJS (Badan Penyelenggara Jaminan Sosial)*, where patients receive financial assistance for medical treatment. This fact supports the finding that even when the cost they sacrifice exceeds what they receive, they are still accepting—despite recognizing that government hospitals tend to have lower-quality contact personnel compared to those in private hospitals (39–41).

Switching costs is related to patient loyalty, especially during these recent years when BPJS was applied, as patients feel satisfied with the hospital's image or reputation, feel comfortable interacting with staff, believe it would take too much time to evaluate the services of another hospital if they were to switch, and feel that switching would be neither effective nor efficient. Patients may also worry that the services at another hospital may not meet their expectations, that switching might result in higher costs, and that they would lose many benefits, such as comfortable services and good facilities. The switching cost includes the expenses patients would incur if they wanted to move to another hospital, which may take the form of time, effort, money, or psychological burden (40,42).

Liu highlighted the social effect of creating loyalty. The results showed individuals with higher education levels reported greater satisfaction (26). Educational attainment has been identified as a key factor influencing patient satisfaction and loyalty, this may be because educated patients are generally more capable of navigating the healthcare system, asking informed questions, and advocating for their own needs. To effectively meet the expectations of these patients, healthcare providers should adopt more personalized care strategies (43). Additionally, cultural context plays a vital role in shaping how patients perceive and experience healthcare. The findings indicate that providers who are sensitive to their patient's cultural backgrounds are more likely to enhance both satisfaction and loyalty. For example, delivering gender-sensitive care and honoring patients' religious and cultural values can help build stronger, trust-based relationships between providers and patients (43,44).

CONCLUSION

Overall, the findings highlighted that brand reputation significantly impacts patient satisfaction and loyalty. Patient satisfaction also influences revisit intention and increased patient loyalty. Healthcare providers need to balance various aspects of service provision and general healthcare service delivery, to effectively enhance brand reputation, patient satisfaction, and loyalty. Enhancing patient value is critical for maximizing the levels of satisfaction and loyalty among patients and offers important lessons for health personnel and hospital managers. Healthcare providers should be more aware of developing services through medical equipment and medical personnel recruitment which may lead to the improvement of patient experiences and creating satisfaction also loyalty.

Although this scoping review provides the correlation between hospital brand, patient satisfaction, and patient loyalty, other enhancing factors should be investigated deeply, such as socioeconomic aspect, perceived value, and service quality. Thus, future research needs to investigate these complex correlations which may form patient loyalty in a hospital setting.

AUTHOR'S CONTRIBUTION STATEMENT

The first author acts as the corresponding author and contributes to searching the articles and writing this article. The second author contributed to searching independently and defining eligibility for selected articles. The third author contributed to re-assessing eligibility for articles selected, also correcting for any structural and content issues for this paper

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors used AI-assisted technologies in writing this paper. Technologies used, namely Grammarly for translating and ChatGPT for correcting the grammar. Searching, collecting, and screening papers were done by authors independently. Paraphrasing was also done by the authors.

SOURCE OF FUNDING STATEMENTS

The source of funding in this article is from the first or corresponding author and Diponegoro University.

ACKNOWLEDGMENTS

The authors declare no other support or funding from external parties in this article.

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