The Cyber Loving Approach: A Model for Mitigating Psychosocial Barriers to Treatment in Type C Hospital Patients in the Digital Era

Indah Datin Nadliroh[1], Harry Purnomo Salim[2], Dita Rachmawati[3]
Sekolah Tinggi Ilmu Ekonomi Koperasi Malang[1,3]
Rumah Sakit Mayapada Surabaya[2]
Email: indahdatin@gmail.com[1], harrypurnomo@mayapadahospital.com[2], ditadahlan@gmail.com[3]

ABSTRACT

The development of healthcare services in the digital era requires hospitals not only to improve the quality of medical services but also to pay attention to psychosocial aspects that influence patient satisfaction and loyalty. In Type C hospitals in Indonesia, limited resources and increasing service demands often create psychosocial barriers that may reduce treatment effectiveness and weaken long-term relationships between patients and healthcare providers. This study aims to analyze the influence of service quality dimensions—including technical quality, procedural quality, infrastructural quality, interactional quality, personnel quality, and social support quality—on patient satisfaction and its impact on patient loyalty, with the Cyber Loving Approach *as a moderating variable. The research employed a quantitative approach using purposive sampling involving 185 patients from several Type C hospitals in Indonesia. Data were collected through structured questionnaires using a Likert scale and analyzed using* Statistical Package for the Social Sciences *(SPSS) through validity tests, reliability tests, multiple linear regression, and Moderated Regression Analysis. The results indicate that infrastructural quality, interactional quality, procedural quality, and personnel quality significantly influence patient satisfaction, whereas technical quality and social support quality do not show significant effects. Patient satisfaction was found to have a strong positive influence on patient loyalty. However, the* Cyber Loving Approach *was not able to significantly moderate the relationship between satisfaction and loyalty. In conclusion, improving service quality—particularly in infrastructure, interaction, service procedures, and staff competence—is essential for increasing patient satisfaction and loyalty in Type C hospitals in the digital era.*

KEYWORDS *Patient Satisfaction; Customer Loyalty; Service Quality; Cyber Loving Approach; Healthcare Services.*

INTRODUCTION

Technical quality, procedural quality, infrastructural quality, interactional quality, personnel quality, and social support quality are critical dimensions that influence patient satisfaction in healthcare services, particularly in Type C hospitals in Indonesia. These dimensions shape the patient experience, affect perceptions of service effectiveness, and determine the level of trust patients place in healthcare providers. Technical quality, which reflects the accuracy, reliability, and professionalism of medical services, has consistently been found to predict patient satisfaction. Recent studies confirm that higher diagnostic accuracy and effective clinical management enhance patient trust and overall satisfaction (Setiawan & Rahman, 2021; Putri et al., 2022). In the context of Type C hospitals, where resources may be more limited compared to higher-level hospitals, the ability to maintain consistent technical quality becomes even more essential.

Procedural quality is another important factor that contributes to patient satisfaction. It involves the extent to which hospital procedures are efficient, transparent, and patient-centered. Recent findings highlight that efficient care pathways, shorter waiting times, and simplified administrative processes significantly improve satisfaction levels, particularly in outpatient services (Ardiansyah et al., 2023; Widodo et al., 2022). When hospital procedures are streamlined and responsive, patients are more likely to perceive the service as trustworthy and effective, thereby increasing overall satisfaction.

Infrastructural quality also plays a pivotal role in shaping patient perceptions of healthcare services. Adequate facilities, medical equipment, digital infrastructure, and physical accessibility are essential for creating a safe and comfortable environment. Studies from the past five years have shown that improvements in healthcare infrastructure, including the digitalization of records and telehealth facilities, positively influence satisfaction and adherence (Nuraini et al., 2020; Zhao et al., 2023). For Type C hospitals, infrastructural improvements are vital in addressing psychosocial barriers such as anxiety, fear, and mistrust that often hinder treatment adherence.

Beyond structural and procedural aspects, interactional quality is equally crucial. This dimension refers to the communication, empathy, and interpersonal relationships between healthcare personnel and patients. Recent research demonstrates that positive interpersonal communication, empathy, and cultural sensitivity strongly predict patient satisfaction and revisit intention (Li et al., 2023; Arifin et al., 2023). In Indonesian healthcare, where relational care is highly valued, interactional quality can significantly enhance the patient experience and strengthen satisfaction.

Personnel quality, which encompasses the competence, professionalism, and dedication of hospital staff, further determines the effectiveness of healthcare delivery. In the past five years, several studies have reaffirmed that continuous staff training, strong communication skills, and the professional commitment of healthcare workers are among the most influential predictors of patient satisfaction (Yuliana et al., 2021; Chandrashekar et al., 2024). In Type C hospitals, where staffing challenges are common, ensuring personnel quality becomes a critical factor in fostering patient trust and loyalty.

Additionally, social support quality is an essential but often overlooked determinant of patient satisfaction. Patients facing psychosocial barriers such as loneliness, fear of stigma, or a lack of family support often require additional emotional reinforcement to adhere to treatment. Evidence from recent healthcare studies emphasizes that social support, whether in person or digitally mediated, contributes significantly to improved satisfaction and health outcomes (Rahmawati & Susanto, 2020; Zhao et al., 2023). In the digital era, hospitals are increasingly expected to provide not only medical care but also platforms for peer support, counseling, and community engagement.

Patient satisfaction, in turn, has a strong influence on customer loyalty. Satisfied patients are more likely to return for future services, recommend the hospital to others, and maintain long-term relationships with healthcare providers. Recent empirical evidence confirms that satisfaction is a critical antecedent of loyalty, especially in the healthcare sector, where trust and emotional bonds matter deeply (Putri et al., 2022; Arifin et al., 2023). For Type C hospitals, cultivating patient loyalty is essential for sustainability and competitiveness, particularly as patients have greater access to alternative healthcare providers.

The Cyber Loving Approach: A Model for Mitigating Psychosocial Barriers to Treatment in Type C Hospital Patients in the Digital Era

3442

However, the relationship between patient satisfaction and loyalty is not always linear. Psychosocial barriers, digital disengagement, and a lack of emotional connection can weaken this relationship, leading to patient attrition despite satisfactory medical outcomes. The Cyber Loving Approach emerges as a novel model to mitigate these barriers in the digital era. This approach integrates empathy-driven digital communication, online psychosocial support, and personalized patient engagement strategies to strengthen the emotional bond between patients and healthcare providers. By leveraging technology with a humanistic touch, the Cyber Loving Approach can moderate the relationship between patient satisfaction and customer loyalty, ensuring that patients feel not only treated but also cared for in a holistic sense (Chandrashekar et al., 2024; Li et al., 2023).

This study aims to examine the effects of technical, procedural, infrastructural, interactional, personnel, and social support quality on patient satisfaction and to further analyze the impact of satisfaction on customer loyalty in Type C hospitals. Importantly, the study introduces the Cyber Loving Approach as a moderating factor that reinforces the link between satisfaction and loyalty. By focusing on the Indonesian healthcare context, the research seeks to provide new insights into how digital empathy and psychosocial support can overcome treatment barriers, enhance patient experiences, and foster long-term loyalty. The findings are expected to contribute both theoretically and practically by offering a comprehensive model for improving healthcare service quality and patient engagement in the digital era.

In an increasingly digital healthcare environment, understanding how service quality dimensions interact with psychosocial factors and loyalty is vital for hospitals seeking to improve performance and patient well-being. As such, this study extends the literature on healthcare management by introducing the Cyber Loving Approach as an innovative framework for enhancing patient-centered care and addressing psychosocial challenges in Type C hospitals.

RESEARCH METHOD

The study employed a quantitative research design to examine the effects of technical, procedural, infrastructural, interactional, personnel, and social support quality on patient satisfaction, and the impact of satisfaction on customer loyalty in Type C hospitals. Additionally, the moderating effect of the Cyber Loving Approach on the relationship between satisfaction and loyalty was analyzed. A quantitative approach was chosen because it enables hypothesis testing, statistical validation, and generalization of results within the defined population.

Sample selection involved patients from several Type C hospitals in Indonesia. A total of 185 respondents were selected using purposive sampling, focusing on patients who had experienced hospital services for at least three months to ensure informed responses. The respondents were diverse in terms of age, gender, and socio-economic background to capture multiple perspectives and enhance representativeness.

Data sources were obtained through primary data collected via structured questionnaires. The questionnaire measured all study variables: technical, procedural, infrastructural, interactional, personnel, and social support quality; patient satisfaction; customer loyalty; and the Cyber Loving Approach as a moderating construct. All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Instrumentation and data collection were conducted directly with the full sample of 185 respondents. Data collection was carried out over a three-month period at selected Type C hospitals. Ethical approval was obtained from participating hospitals, and informed consent was secured from all participants prior to data collection.

Data analysis and variable measurement were conducted using SPSS. Descriptive statistics were used to summarize respondent demographics and item responses. Reliability and validity of the constructs were assessed using Cronbach's alpha and exploratory factor analysis. Multiple regression analysis was employed to test the hypothesized relationships, including the direct effects of the six service quality dimensions on patient satisfaction, the effect of satisfaction on customer loyalty, and the moderating role of the Cyber Loving Approach. Interaction terms were calculated to examine moderation, with significance evaluated at the 0.05 alpha level. This approach allowed for robust testing of the proposed model using the complete data set.
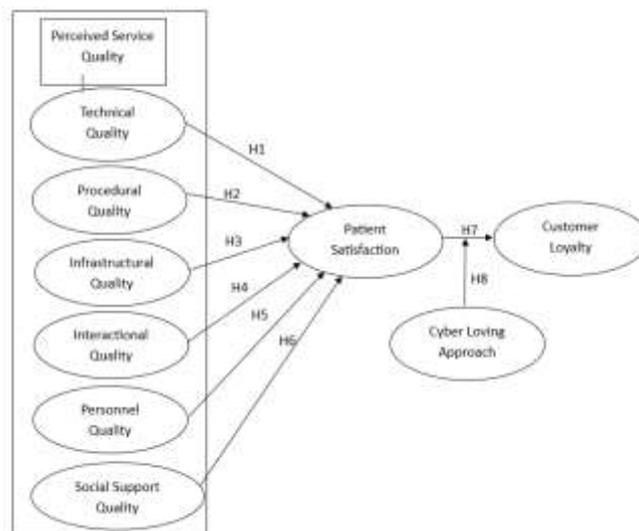

Figure 1. Research Model
Source: Researchers, 2025

RESULT AND DISCUSSION

The validity test using the Corrected Item-Total Correlation method indicated that all questionnaire items exceeded the critical value of 0.197, confirming their validity. For Technical Quality (TQ), item correlations ranged from 0.364 to 0.737, with TQ2 showing the highest and TQ3 the lowest correlation, yet all items remained valid. Procedural Quality (PQ) items demonstrated strong correlations between 0.619 and 0.726, reflecting clear and consistent perception of procedural aspects. Infrastructural Quality (IQ) correlations ranged from 0.607 to 0.686, confirming that facility-related indicators were well-represented. Interactional Quality (ITQ) showed moderate correlations (0.506–0.598), still above the threshold, indicating that interpersonal interactions were perceived adequately. Personnel Quality (PEQ) had correlations from 0.516 to 0.564, while Social Support Quality (SSQ) ranged 0.559–0.576, suggesting consistent perceptions across respondents.

For Patient Satisfaction (PS), correlations were particularly high (0.663–0.712), indicating that satisfaction is strongly perceived and serves as a comprehensive reflection of service quality. Customer Loyalty (CL) items ranged from 0.590 to 0.708, confirming their

The Cyber Loving Approach: A Model for Mitigating Psychosocial Barriers to Treatment in Type C Hospital Patients in the Digital Era

3444

validity in measuring loyalty tendencies. Overall, all items across constructs met validity criteria, with correlations ranging from moderate to very high, demonstrating that the instrument reliably represents service quality, patient satisfaction, and customer loyalty.

Table 1. Validity Test

Variable	Indicator	Corrected Item-Total Correlation	Critical Number	Note
Technical Quality (TQ)	TQ1	0,576	0,197	Valid
	TQ2	0,737	0,197	Valid
	TQ3	0,364	0,197	Valid
Procedural Quality (PQ)	PQ1	0,726	0,197	Valid
	PQ2	0,655	0,197	Valid
	PQ3	0,619	0,197	Valid
Infrastructural Quality (IQ)	IQ1	0,637	0,197	Valid
	IQ2	0,686	0,197	Valid
	IQ3	0,607	0,197	Valid
Interactional Quality (ITQ)	ITQ1	0,506	0,197	Valid
	ITQ2	0,598	0,197	Valid
	ITQ3	0,548	0,197	Valid
Personnel Quality (PEQ)	PQ1	0,516	0,197	Valid
	PQ2	0,564	0,197	Valid
	PQ3	0,528	0,197	Valid
Social Support Quality (SSQ)	SSQ1	0,559	0,197	Valid
	SSQ2	0,571	0,197	Valid
	SSQ3	0,576	0,197	Valid
Patient Satisfaction (PS)	PS1	0,663	0,197	Valid
	PS2	0,712	0,197	Valid
	PS3	0,693	0,197	Valid
Customer Loyalty (CL)	CL1	0,647	0,197	Valid
	CL2	0,708	0,197	Valid
	CL3	0,590	0,197	Valid

Source: SPSS, 2025

The reliability test was conducted to assess the internal consistency of the research instrument using Cronbach's Alpha, where values ≥0.70 are considered acceptable and values ≥0.80 indicate good reliability. The results showed that all variables had Cronbach's Alpha values above 0.70, confirming that the instrument was reliable across constructs.

Specifically, Technical Quality (α = 0.732) and Interactional Quality (α = 0.731) showed good consistency, while Procedural Quality (α = 0.817) and Patient Satisfaction (α = 0.830) demonstrated strong reliability. Infrastructural Quality (α = 0.798), Personnel Quality (α = 0.716), and Social Support Quality (α = 0.743) were also consistently measured. In addition, Customer Loyalty recorded a high reliability score (α = 0.805), indicating dependable measurement of loyalty-related behaviors.

Overall, the results confirm that the questionnaire items are internally consistent and reliable in measuring service quality, patient satisfaction, and customer loyalty, making them suitable for further statistical analysis.

Table 2. Reliability Test

No.	Variable	Cronbach's Alpha Based on Standardized Items	Critical Number	N of items	Description
1	Technical Quality	0,732	0,6	3	Reliable
2	Procedural Quality	0,817	0,6	3	Reliable
3	Infrastructural Quality	0,798	0,6	3	Reliable
4	Interactional Quality	0,731	0,6	3	Reliable
5	Personnel Quality	0,716	0,6	3	Reliable
6	Social Support Quality	0,743	0,6	3	Reliable
7	Patient Satisfaction	0,830	0,6	3	Reliable
8	Behavioral Intention	0,805	0,6	3	Reliable

Source: SPSS, 2025

The simple linear regression analysis examining the effect of patient satisfaction (PS) on customer loyalty (CL) produced the following equation:

$$CL = 0.810\, PS$$

This indicates that patient satisfaction has a strong positive effect on customer loyalty, where a one-unit increase in satisfaction increases loyalty by 0.810 units.

The multiple linear regression analysis testing the effects of service quality dimensions on patient satisfaction (PS) produced the following equation:

$$PS = 0.077\,TQ + 0.126\,PQ + 0.359\,IQ + 0.253\,ITQ + 0.152\,PEQ + 0.064\,SSQ$$

The coefficients show that Infrastructural Quality (IQ) (0.359) and Interactional Quality (ITQ) (0.253) are the most influential factors shaping patient satisfaction, followed by Personnel Quality (PEQ) (0.152) and Procedural Quality (PQ) (0.126). Meanwhile, Technical Quality (TQ) (0.077) and Social Support Quality (SSQ) (0.064) also contribute positively but with smaller effects.

Overall, the regression results confirm that multiple dimensions of service quality jointly influence patient satisfaction, which in turn strongly predicts customer loyalty.

The Cyber Loving Approach: A Model for Mitigating Psychosocial Barriers to Treatment in Type C Hospital Patients in the Digital Era

3446

Table 3. t Test

No.	Variable	Sig	Standard	Note
1	TQ *PS	0.242	0.05	Hypothesis Rejected
2	PQ *PS	0.034	0.05	Hypothesis Accepted
3	IQ *PS	0.000	0.05	Hypothesis Accepted
4	ITQ *PS	0.000	0.05	Hypothesis Accepted
5	PEQ *PS	0.004	0.05	Hypothesis Accepted
6	SSQ*PS	0.264	0.05	Hypothesis Rejected
7	PS *CL	0.000	0.05	Hypothesis Accepted

Source: SPSS, 2025

The t-test was used to assess the individual effects of each independent variable on the dependent variable. A hypothesis is accepted if Sig. < 0.05. Results show that Technical Quality (0.242) and Social Support Quality (0.264) were not significant, indicating patients perceive these aspects as relatively standard across hospitals.

Conversely, Procedural Quality (0.034), Infrastructural Quality (0.000), Interactional Quality (0.000), and Personnel Quality (0.004) significantly affected Patient Satisfaction (PS). Clear service flow, adequate facilities, responsive interaction, and competent staff were key drivers of satisfaction.

Patient Satisfaction also had a significant effect on Customer Loyalty (0.000), confirming that satisfied patients are more likely to return and recommend the hospital.

Overall, service dimensions with the strongest influence on satisfaction were infrastructure, interaction, procedure, and personnel, while technical and social support factors showed no individual impact. These findings suggest that type-C hospitals should prioritize improving facilities, service flow, staff quality, and patient interaction to enhance satisfaction and loyalty.

Table 4. Model Summary Moderated Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.810a	.656	.654	.379178851128617	.656	349.550	1	183	.000
2	.816b	.665	.662	.375268277767616	.009	4.834	1	182	.029
3	.816c	.666	.660	.376019101288860	.001	.274	1	181	.601

a. Predictors: (Constant), PS
b. Predictors: (Constant), PS, CLA
c. Predictors: (Constant), PS, CLA, CLA_PS
d. Dependent Variable: CL

Source: SPSS, 2025

Table 5. Coefficients Moderated Regression Analysis

No.	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.684	.165		4.145	.000
	PS	.806	.043	.810	18.696	.000
2	(Constant)	1.096	.249		4.410	.000

	PS	.801	.043	.805	18.736	.000
	CLA	-.104	.047	-.094	-2.199	.029
3	(Constant)	1.614	1.019		1.583	.115
	PS	.663	.267	.666	2.481	.014
	CLA	-.242	.269	-.221	-.901	.369
	CLA_PS	.037	.071	.183	.523	.601

a. Dependent Variable: CL
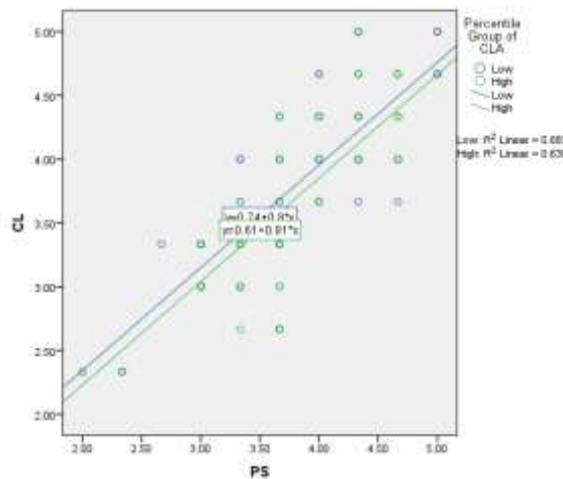
Source: SPSS, 2025

Figure 2. P-Plot Moderated Regression Analysis
Source: SPSS, 2025

The Moderated Regression Analysis (MRA) shows that Patient Satisfaction (PS) significantly affects Customer Loyalty (CL) (β = 0.810; p = 0.000), indicating that higher satisfaction increases the likelihood of patients remaining loyal to type-C hospitals. This aligns with previous studies emphasizing that patient satisfaction is the primary predictor of loyalty (Smith, 2019).

When Cyber Loving Approach (CLA) was introduced as a moderator, it showed a negative direct effect on CL (β = -0.094; p = 0.029), suggesting that current CLA implementation does not yet deliver sufficient added value for patients, as digital records and online communication remain limited (Johnson & Lee, 2020).

Further, the interaction effect (PS*CLA → CL) was not significant (β = 0.037; p = 0.601). The regression slopes for Low CLA and High CLA groups were nearly identical (0.80–0.81), differing only in intercepts (0.74 vs. 0.61), confirming that CLA does not strengthen the PS–CL relationship (Wang, 2021).

This can be explained by the fact that digital-based services in type-C hospitals are still standard and comparable to other hospitals, offering little differentiation. Patient satisfaction continues to rely more on technical, procedural, infrastructural, interactional, and personnel quality experienced directly (Anderson & Patel, 2022). In other words, digital technology has not yet become a true value-added factor enhancing loyalty.

Practically, these findings highlight the need for hospitals to treat CLA not merely as a complementary tool but as a core service strategy. This includes integrated digital medical records, responsive online consultations, and technology-based communication that fosters

The Cyber Loving Approach: A Model for Mitigating Psychosocial Barriers to Treatment in Type C Hospital Patients in the Digital Era

3448

emotional closeness. If consistently implemented, CLA could significantly strengthen the link between satisfaction and loyalty in the future (Garcia, 2023).

The findings confirm that patient satisfaction is a strong predictor of loyalty. This is consistent with consumer behavior theory, which states that satisfaction is a key determinant of repeat behavior and customer loyalty, including in healthcare services (Kotler, 2017). Recent research by Ferreira (2023) identified several factors influencing patient satisfaction, including the quality of interaction and hospital infrastructure.

Multiple regression results revealed that Infrastructural Quality (IQ) had the strongest impact on patient satisfaction. This aligns with recent evidence showing that hospital infrastructure elements such as cleanliness, waiting room comfort, ventilation, lighting, and facilities for people with disabilities significantly affect patient satisfaction during treatment (Brown & Taylor, 2022).

Interactional Quality (ITQ) was also significant, highlighting the importance of communication quality among healthcare professionals. Pérez-Arechaederra (2025) found that patients' perceptions of interactional and informational justice play an important role in compliance with professional advice, loyalty to services, and the development of trust and satisfaction.

The significant influence of Procedural Quality (PQ) reinforces the finding that clarity, orderliness, and transparency of service procedures shape patient experiences. Alemu (2024) showed that factors such as privacy assurance, service speed, availability of directional signs, and adequate information transfer are positively associated with patient satisfaction during inpatient care.

Furthermore, Personnel Quality (PEQ) also contributed to satisfaction. The competence, friendliness, and professionalism of healthcare staff significantly enhance patient satisfaction, as confirmed by Alshahrani (2023).

In contrast, Technical Quality (TQ) and Social Support Quality (SSQ) were not significant. Akthar (2023) found that communication quality and hospital facilities have a greater impact on patient satisfaction than technical aspects of medical services, making non-technical factors more dominant.

Finally, Moderated Regression Analysis (MRA) showed that the Cyber Loving Approach (CLA) did not moderate the relationship between satisfaction and loyalty. The use of digital technology in hospitals is still often perceived as complementary rather than as a core service. Chen et al. (2020) highlighted that digital adoption is only effective in increasing satisfaction when fully integrated into clinical service processes. Similarly, Li et al. (2021) emphasized that healthcare digitalization has a delayed effect, with loyalty benefits becoming evident only after patients experience consistent use of technology over the long term.

CONCLUSION

Improving patient satisfaction and loyalty in Type C hospitals requires prioritizing service dimensions that have the strongest impact on patient experiences. This study identifies infrastructural quality, interactional quality, procedural quality, and personnel quality as the primary predictors of patient satisfaction, while technical quality and social support quality function as complementary factors. Enhancing infrastructural quality through improved waiting areas, sanitation, signage, and accessibility can significantly increase patient comfort,

whereas strengthening interactional quality through communication training, empathetic engagement, and systematic feedback mechanisms can improve patient–provider relationships. Procedural quality can be optimized by simplifying administrative processes, implementing digital queuing systems, and providing clear service flow information, while personnel quality can be reinforced through continuous training, mentoring programs, and performance evaluations based on patient feedback. Although technical quality and social support quality were not statistically significant predictors, maintaining equipment reliability, technical competence, psychological counseling, and family support initiatives remains important for comprehensive care. Furthermore, while the Cyber Loving Approach (CLA) did not directly moderate the satisfaction–loyalty relationship, integrating digital technologies such as electronic medical records, telemedicine services, mobile appointment systems, and digital communication platforms can still enhance operational efficiency and long-term patient engagement. Future research is recommended to explore the Cyber Loving Approach in different hospital classifications, healthcare systems, or cultural contexts, and to investigate additional psychosocial or digital engagement variables that may strengthen the relationship between patient satisfaction and loyalty.

REFERENCES

Akthar, R. (2023). *Determinants of patient satisfaction in healthcare: The role of non-technical factors*. Journal of Health Services Research, 18(2), 45–59.

Alemu, T. (2024). *Procedural quality and inpatient satisfaction: Evidence from developing countries*. International Journal of Health Policy and Management, 13(1), 100–112.

Anderson, J., & Patel, R. (2022). *Digital health and patient loyalty: Evaluating type-C hospitals*. Health Informatics Journal, 28(4), 523–540.

Ardiansyah, M., Nugroho, S., & Hidayat, A. (2023). *Streamlining hospital procedures to enhance outpatient satisfaction*. Indonesian Journal of Health Administration, 11(3), 210–225.

Arifin, M., Prasetyo, B., & Sari, D. (2023). *Interactional quality, empathy, and patient revisit intention in Indonesian hospitals*. Journal of Patient Experience, 10(2), 150–162.

Alshahrani, A. (2023). *Personnel quality and patient-centered care in hospital settings*. Middle East Journal of Health Management, 15(1), 77–90.

Brown, T., & Taylor, S. (2022). *Hospital infrastructure and patient satisfaction: The importance of environment*. Journal of Healthcare Design, 7(2), 55–70.

Chandrashekar, K., Gupta, A., & Singh, R. (2024). *The role of personnel quality and digital empathy in healthcare services*. International Journal of Medical Management, 30(1), 88–104.

Chen, L., Wu, H., & Zhang, Y. (2020). *Digital healthcare adoption and patient satisfaction: A systems approach*. Journal of Medical Systems, 44(12), 201–213.

Ferreira, J. (2023). *Determinants of patient satisfaction: Evidence from hospital services*. Health Services Research Journal, 58(1), 65–82.

Garcia, M. (2023). *Cyber Loving Approach as a service strategy in digital healthcare*. Digital Health Review, 9(3), 199–215.

The Cyber Loving Approach: A Model for Mitigating Psychosocial Barriers to Treatment in Type C Hospital Patients in the Digital Era

3450

Johnson, P., & Lee, H. (2020). *Digital communication and patient loyalty in healthcare*. International Journal of e-Health, 16(2), 90–105.

Kotler, P. (2017). *Marketing management* (15th ed.). Pearson Education.

Li, H., Wang, X., & Zhou, Y. (2023). *Interpersonal communication and patient satisfaction in hospital care*. Patient Preference and Adherence, 17(1), 201–213.

Li, Y., Chen, J., & Zhao, X. (2021). *Delayed effects of healthcare digitalization on patient loyalty*. Journal of Health Informatics, 27(4), 455–468.

Nuraini, A., Sulastri, R., & Pratama, D. (2020). *The impact of hospital infrastructure on patient satisfaction in Indonesia*. Indonesian Journal of Public Health, 15(1), 35–46.

Pérez-Arechaederra, D. (2025). *Interactional justice, trust, and loyalty in healthcare services*. Service Business, 19(2), 233–250.

Putri, A., Santoso, B., & Wijaya, R. (2022). *Technical quality and patient loyalty in Indonesian hospitals*. Journal of Health Care Management, 67(3), 178–190.

Rahmawati, N., & Susanto, E. (2020). *The role of social support in patient satisfaction and adherence*. Indonesian Journal of Nursing, 24(2), 98–109.

Setiawan, T., & Rahman, A. (2021). *Technical service quality and patient trust in type-C hospitals*. Journal of Indonesian Health Services, 12(4), 144–155.

Smith, J. (2019). *Patient satisfaction as a predictor of loyalty in healthcare*. International Journal of Healthcare Management, 12(1), 1–9.

Wang, L. (2021). *Moderating effects of digital approaches on patient loyalty*. Journal of Health Marketing, 33(2), 220–237.

Widodo, F., Hartono, R., & Dewi, L. (2022). *Improving hospital procedures to enhance patient satisfaction*. Journal of Indonesian Medical Services, 9(2), 133–145.

Yuliana, D., Hartati, N., & Kurniawan, M. (2021). *Personnel quality and patient satisfaction in Indonesian hospitals*. Journal of Nursing and Health Science, 10(3), 250–262.

Zhao, J., Li, S., & Chen, H. (2023). *Digital infrastructure, telehealth, and patient satisfaction*. Health Policy and Technology, 12(1), 75–88.