

Original Article

Determinants of patient satisfaction in the emergency department: A Structural Equation Modeling–Partial Least Squares (SEM-PLS) analysis

Wiwin Meiriana^{1*}, Arie Wahyudi¹, Nurul Fitriah¹

¹ STIK Bina Husada Palembang, Indonesia

***Corresponding Author:**

Wiwin Meiriana

STIK Bina Husada Palembang, Indonesia

Email:

wiwin.meiriana@gmail.com

Keyword:

Emergency Service, Hospital; Patient Satisfaction; Quality of Health Care

© The Author(s) 2026

DOI:

<https://doi.org/10.52235/lp.v7i3.885>

Article Info:

Received : June 03, 2026

Revised : July 30, 2026

Accepted : September 01, 2026

Lentera Perawat

e-ISSN : 2830-1846

p-ISSN : 2722-2837



This is an Open Access article distributed under the terms of the [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

Abstract

Background: Patient satisfaction is an important indicator of hospital service quality. In emergency departments (EDs), patient experiences occur under high urgency and uncertainty. At Lahat Regional General Hospital, quality indicators have shown favorable performance, while complaints remain related to waiting time, staff communication, service certainty, and facility comfort, suggesting a gap between internal quality indicators and users' experiences.

Objective: To analyze the associations of demographic characteristics and SERVQUAL dimensions on patient satisfaction in the Emergency Department of Lahat Regional General Hospital.

Methods: A quantitative cross-sectional study was conducted in the Emergency Department of Lahat Regional General Hospital from March to May 2026. A total of 395 adult patients were recruited using convenience sampling after completing their ED care and meeting the eligibility criteria. The instrument was a performance-only adaptation of SERVQUAL consisting of 20 service-quality items and 3 satisfaction items. Data were analyzed using SPSS and SmartPLS 4. SEM-PLS assessment included outer loading, AVE, Composite Reliability, Cronbach's Alpha, Fornell-Larcker, VIF, R^2 , f^2 , Q^2 Predict, SRMR, and 5,000-subsample bootstrapping.

Results: Tangibles ($\beta=0.230$; $p<0.001$), reliability ($\beta=0.241$; $p=0.001$), assurance ($\beta=0.241$; $p<0.001$), and empathy ($\beta=0.202$; $p=0.001$) were positively and significantly associated with patient satisfaction. Responsiveness ($\beta=0.095$; $p=0.072$), age ($\beta=-0.032$; $p=0.610$), sex ($\beta=-0.026$; $p=0.672$), and education ($\beta=0.149$; $p=0.069$) did not show significant associations. The model yielded $R^2=0.730$, Q^2 Predict=0.691, and SRMR=0.055. Reliability and assurance had the same highest path coefficient ($\beta=0.241$), whereas tangibles had the largest effect size ($f^2=0.125$). Based on the path coefficient, followed by the effect size, reliability was identified as the most dominant factor associated with patient satisfaction.

Conclusion: Patient satisfaction in the Emergency Department was significantly influenced by tangibles, reliability, assurance, and empathy. Reliability was the strongest determinant, indicating that improving service consistency, accuracy, adherence to standard operating procedures, and dependable healthcare delivery should become priorities for quality improvement initiatives.

Background

The emergency department (ED) is a hospital unit that provides care for urgent and life-threatening conditions requiring rapid, accurate, safe, and coordinated management. Because care is delivered under considerable urgency and uncertainty, ED quality is reflected not only in clinical indicators but also in patients' experiences during care (Walsh et al., 2022; World Health Organization, 2022).

Patient satisfaction is a subjective evaluation of the care experience. The SERVQUAL model provides a framework for assessing service quality across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). In healthcare, these dimensions assess the physical environment, process dependability,

promptness, safety and trust, and interpersonal attention (Babakus & Mangold, 1992; Jonkisz et al., 2022).

Emergency care differs from other hospital services because it involves varying levels of acuity, the need for immediate management, and fluctuating workloads (Kristina et al, 2026). These conditions may shape patients' experiences of waiting time, communication, certainty about care, and environmental comfort. User experiences should therefore be considered alongside hospitals' internal quality indicators (Lisa et al, 2023).

ED visits at Lahat Regional General Hospital increased from 27,447 in 2024 to 30,282 in 2025, indicating high community demand for emergency care. During the same period, hospital reports continued to document complaints about waiting

time, staff communication, certainty of care, and facility comfort (Medical Records Unit, Lahat Regional General Hospital, 2025). Thus, internal quality indicators did not fully capture ED users' experiences. The hospital's 2025 complaint evaluation report recorded 37 service complaints, with the largest proportions concerning tangibles and reliability. This local evidence indicates that satisfaction assessments should focus on service dimensions directly experienced by users rather than exclusively on internal process indicators (Legal, Public Relations, and Interinstitutional Relations Unit, 2025; Jonkisz et al., 2022).

Previous studies have associated SERVQUAL dimensions with patient satisfaction, although the dimension making the greatest relative contribution varies across settings (Afifah & All, 2022; Maharina, 2022; Pratiwi et al., 2022; Rinduan et al., 2025; Sari & Widodo, 2021). Evidence remains limited regarding the combined contribution of SERVQUAL dimensions and demographic characteristics in regional hospital EDs. No prior empirical analysis at Lahat Regional General Hospital has simultaneously examined all five SERVQUAL dimensions and demographic characteristics within a single patient satisfaction model. Partial least squares structural equation modeling (PLS-SEM) enabled simultaneous testing of these relationships (Hair et al., 2022; Jonkisz et al., 2022; Jaya & Akbar, 2026).

This study aimed to analyze the associations of demographic characteristics and the five SERVQUAL dimensions with patient satisfaction in the ED of Lahat Regional General Hospital. Its contribution lies in providing contextual evidence to prioritize ED quality improvement by comparing the path coefficients and effect sizes of individual predictors.

Methods

Study Design

This quantitative analytical study used a cross-sectional design and was conducted in the ED of Lahat Regional General Hospital from March to May 2026. Because all variables were measured during the same observation period, the findings were interpreted as associations and not as evidence of causality.

Sampling

The target population comprised patients who received care in the ED of Lahat Regional General Hospital. The 30,282 ED visits recorded in 2025 represented the most recent complete annual

population data. Using Slovin's formula with a 5% margin of error yielded a sample of 395 respondents. Sample adequacy for PLS-SEM was also assessed against the model complexity of eight predictors directed toward the satisfaction construct. The 10-times rule indicated a minimum of 80 observations; therefore, 395 respondents substantially exceeded this threshold. Convenience sampling was used because of the dynamic nature of ED services. Patients were recruited after completing their care. Eligible participants were aged 18 years or older, had completed the care process, were able to communicate and complete the questionnaire, and agreed to participate. Patients requiring immediate intervention, whose condition precluded questionnaire completion, or who returned incomplete questionnaires were excluded. This procedure may have introduced selection bias because the most critically ill patients and those unable to respond may have been underrepresented.

Instruments

The exogenous variables were age, sex, educational level, and the five service-quality dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Patient satisfaction was the endogenous variable. For PLS-SEM, age was coded as 0 = adult (≤ 60 years) and 1 = older adult (> 60 years); sex as 0 = male and 1 = female; and education as 0 = lower education (junior secondary school or below) and 1 = higher education (senior secondary school or above). Demographic path coefficients were interpreted relative to these reference categories.

The study used an Indonesian-language questionnaire adapted from SERVQUAL (Parasuraman et al., 1988) for the ED context. A performance-only approach assessed perceptions of the care actually received rather than calculating an expectation-perception gap. This approach was selected because the study focused on users' actual experiences after care. Items TG1-TG4 measured tangibles, RL1-RL4 reliability, RS1-RS4 responsiveness, AS1-AS4 assurance, and EM1-EM4 empathy. Items KP1-KP3 represented overall service satisfaction. Wording was adapted to ED terminology and situations without changing the constructs' meaning. Content validity was evaluated by healthcare management experts and hospital practitioners familiar with emergency

care, who assessed construct relevance, wording clarity, contextual appropriateness, and respondent comprehensibility. The questionnaire was subsequently pilot-tested among 30 respondents at Empat Lawang Regional General Hospital; pilot data were excluded from the main analysis. Item validity was assessed using a corrected item-total correlation threshold of ≥ 0.30 , and reliability using Cronbach's alpha ≥ 0.70 .

Data Collection

All service-quality and satisfaction items used a five-point Likert scale. During data collection, eligible patients were approached after completing ED care, informed about the study, and invited to complete the questionnaire. Completed questionnaires were checked for completeness before data entry. For descriptive analysis, each dimension was categorized as good when its score was at or above the median and poor when below the median.

Data Analysis

PLS-SEM measurement-model assessment included outer loadings, average variance extracted (AVE), composite reliability, Cronbach's alpha, and discriminant validity using the Fornell-Larcker criterion. Structural-model assessment included variance inflation factors (VIF), R^2 , adjusted R^2 , f^2 , Q^2 predict, and standardized root mean square residual (SRMR). Hypotheses were tested using two-tailed bootstrapping with 5,000 subsamples and $\alpha = 0.05$. Results were reported as path coefficients, t statistics, and p values; associations were considered statistically significant at $p < 0.05$ or $t > 1.96$. Analyses were performed using IBM SPSS Statistics and SmartPLS 4. Relative contributions were interpreted using path coefficients and effect sizes (f^2), rather than p values alone.

Ethical Considerations

Participation was voluntary. Eligible patients were informed about the study, and consent was obtained before questionnaire completion. Respondents could decline or discontinue participation without consequences for their care. Questionnaires were handled confidentially and analyzed without personal identifiers. Formal ethics committee approval had not been obtained at the time of data collection; this limitation is reported transparently.

Results

A total of 395 respondents participated. Most were adults aged ≤ 60 years (97.0%), women (77.7%), and had completed senior secondary education or higher (95.7%). Most respondents rated ED service quality favorably, and 69.6% reported being satisfied with the care received.

Table 1. Participant Characteristics

Characteristic	N	%
Age		
Adult (≤ 60 years)	383	97.0
Older adult (> 60 years)	12	3.0
Sex		
Male	88	22.3
Female	307	77.7
Educational Level		
Lower education	17	4.3
Higher education	378	95.7
Total	395	100.0

Perceptions of Service-Quality Dimensions and Patient Satisfaction

Most respondents rated all service-quality dimensions favorably. Assurance received the highest proportion of favorable ratings (70.4%), followed by responsiveness (68.9%), reliability (68.6%), empathy (67.3%), and tangibles (58.0%). Overall, 69.6% of respondents reported satisfaction with ED services (Table 2).

Table 2. Perceptions of Service Quality and Patient Satisfaction

Variable	Good, n (%)	Poor, n (%)
Tangibles	229 (58.0)	166 (42.0)
Reliability	271 (68.6)	124 (31.4)
Responsiveness	272 (68.9)	123 (31.1)
Assurance	278 (70.4)	117 (29.6)
Empathy	266 (67.3)	129 (32.7)
Patient Satisfaction	275 (69.6)	120 (30.4)

The measurement model was assessed for indicator reliability, convergent validity, discriminant validity, and construct reliability before evaluation of the structural model (Table 3).

Table 3. Outer Loadings of All Indicators

Construct	Indicator	Outer Loading
Assurance (AS)	AS1	0.862
	AS2	0.899
	AS3	0.885
	AS4	0.894
Empathy (EM)	EM1	0.887
	EM2	0.913
	EM3	0.894
	EM4	0.904
Reliability (RL)	RL1	0.896
	RL2	0.893
	RL3	0.877
	RL4	0.883
Responsiveness (RS)	RS1	0.858
	RS2	0.909
	RS3	0.875
	RS4	0.813
Tangibles (TG)	TG1	0.847
	TG2	0.821
	TG3	0.839
	TG4	0.743
Patient Satisfaction (KP)	KP1	0.800
	KP2	0.777
	KP3	0.761

All indicators had outer loadings above 0.70 and therefore met the criterion for convergent validity. EM2 had the highest loading (0.913), whereas TG4 had the lowest (0.743). All indicators were retained in the structural model.

All constructs had AVE values above 0.50 and composite reliability values above 0.70, satisfying the criteria for convergent validity and construct reliability. Cronbach's alpha ranged from 0.678 to 0.915. Although the value for patient satisfaction was slightly below 0.70, the construct was retained because its composite reliability and AVE met the recommended criteria (Table 4).

Table 4. Construct Validity and Reliability

Construct	AVE	Composite Reliability	Cronbach's Alpha
Tangibles	0.662	0.886	0.830
Reliability	0.787	0.937	0.910
Responsiveness	0.747	0.922	0.887
Assurance	0.784	0.935	0.908
Empathy	0.809	0.944	0.921
Patient Satisfaction	0.608	0.823	0.678

For every construct, the square root of AVE exceeded its correlations with the other constructs, supporting discriminant validity according to the Fornell-Larcker criterion (Table 5).

Table 5. Discriminant Validity (Fornell-Larcker Criterion)

Construct	Assurance	Empathy	Patient Satisfaction	Reliability	Responsiveness	Tangibles
Assurance	0.885					
Empathy	0.749	0.899				
Patient Satisfaction	0.756	0.733	0.780			
Reliability	0.744	0.680	0.758	0.887		
Responsiveness	0.742	0.679	0.712	0.740	0.864	
Tangibles	0.492	0.523	0.639	0.556	0.527	0.814

Figure 1 presents the PLS-SEM measurement and structural models, including indicator outer loadings, path coefficients, R^2 , and the significance of the relationships based on bootstrapping.

All indicators had outer loadings above 0.70. In the structural model, tangibles, reliability, assurance, and empathy were positively and significantly associated with patient satisfaction, whereas responsiveness, age, sex, and educational level were not. The model explained 73.0% of the

variance in patient satisfaction ($R^2 = 0.730$), and an SRMR of 0.055 indicated acceptable model fit.

The structural-model assessment comprised collinearity (VIF), R^2 , adjusted R^2 , f^2 , Q^2 predict, SRMR, and bootstrapping with 5,000 subsamples. The principal results are presented in Table 6.

Tangibles ($\beta = 0.230$; $p < 0.001$), reliability ($\beta = 0.241$; $p = 0.001$), assurance ($\beta = 0.241$; $p < 0.001$), and empathy ($\beta = 0.202$; $p = 0.001$) were positively and significantly associated with patient satisfaction. Responsiveness ($\beta = 0.095$; $p =$

0.072), age ($\beta = -0.032$; $p = 0.610$), sex ($\beta = -0.026$; $p = 0.672$), and educational level ($\beta = 0.149$; $p = 0.069$) were not significantly associated with patient satisfaction.

Reliability and assurance had the largest path coefficients ($\beta = 0.241$). Because their coefficients were identical, dominance was further evaluated using effect size: reliability had a larger f^2 (0.073) than assurance (0.066) and was therefore identified as the strongest determinant of patient satisfaction (Table 8).

Table 6. Structural Model Assessment

Indicator	Value
Collinearity (VIF)	1.041-3.287
Satisfaction R^2	0.730
Adjusted R^2	0.725
f^2	0.000-0.125
Q^2 Predict	0.691
SRMR	0.055

Table 7. Hypothesis-Testing Results

Relationship	B	t-statistic	p-value	Decision
Age → Patient Satisfaction	-0.032	0.511	0.610	Not significant
Gender → Patient Satisfaction	-0.026	0.424	0.672	Not significant
Education → Patient Satisfaction	0.149	1.817	0.069	Not significant
Tangibles → Patient Satisfaction	0.230	3.660	<0.001	Significant
Reliability → Patient Satisfaction	0.241	3.345	0.001	Significant
Responsiveness → Patient Satisfaction	0.095	1.797	0.072	Not significant
Assurance → Patient Satisfaction	0.241	3.608	<0.001	Significant
Empathy → Patient Satisfaction	0.202	3.273	0.001	Significant

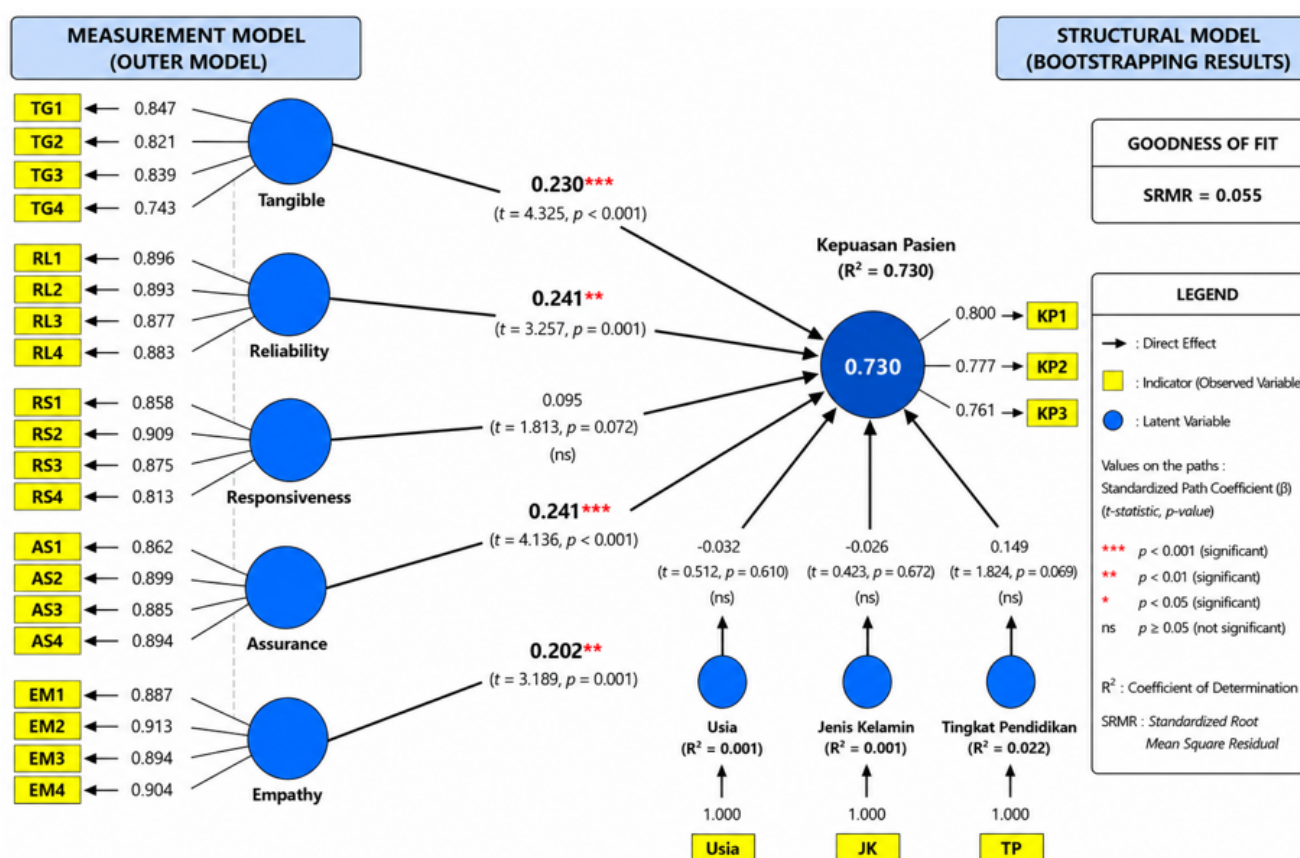


Figure 1. Measurement and Structural Models from the PLS-SEM Analysis

Table 8. Effect Sizes (f^2)

Variable	f^2	Interpretation
Tangibles	0.125	Small
Reliability	0.073	Small
Responsiveness	0.012	Very small
Assurance	0.066	Small
Empathy	0.057	Small

Discussion

This study examined determinants of patient satisfaction in the ED of Lahat Regional General Hospital by analyzing demographic characteristics and SERVQUAL dimensions using PLS-SEM. Satisfaction was more strongly associated with perceived service quality than with demographic characteristics. Tangibles, reliability, assurance, and empathy were significant predictors, whereas responsiveness was not, indicating that patients' care experiences were central to satisfaction in this ED.

Service-Quality Dimensions as the Principal Determinants of Patient Satisfaction

Unlike demographic characteristics, service-quality dimensions were the principal determinants of satisfaction. Tangibles, reliability, assurance, and empathy were positively and significantly associated with satisfaction, whereas responsiveness was not. This finding supports the SERVQUAL premise that satisfaction develops through actual healthcare experiences rather than demographic characteristics alone (Kusuma, Palupi, Wirawan, 2025).

Tangibles were positively associated with satisfaction, indicating that physical facilities, environmental cleanliness, medical equipment, and staff appearance remain important in shaping perceptions of quality. A clean and comfortable ED with adequate facilities may strengthen patients' confidence in the hospital's capacity to provide high-quality care. This result is consistent with prior evidence that the physical environment contributes to patients' initial evaluations of healthcare (Novrikasari et al 2026).

Reliability was significantly associated with satisfaction. The ability of health professionals to deliver accurate, consistent, timely, and procedure-compliant care is especially important in the ED, where patients require prompt management and expect accurate interventions,

clear procedures, and consistent service. Higher reliability was therefore associated with greater satisfaction, consistent with evidence identifying reliability as one of the SERVQUAL dimensions most consistently related to patient satisfaction (Anggraini, Amal, & Melastuti, 2026).

Responsiveness was not significantly associated with satisfaction, suggesting that staff response speed did not independently explain satisfaction in this setting. Emergency-service standards may have been applied relatively uniformly, leading patients to regard prompt care as an expected baseline and reducing variability in perceived responsiveness. Satisfaction may consequently depend on the overall quality of care rather than speed alone (Afifah, 2022).

Assurance was positively associated with satisfaction. Professional competence, the ability to foster safety, effective communication, and professional conduct help establish trust. Because patients and families are often anxious during emergencies, they need confidence that care is delivered by competent professionals according to established standards. Assurance may improve satisfaction by strengthening trust throughout the care process (Babakus & Mangold, 1992).

Empathy was positively associated with satisfaction, demonstrating the importance of individualized attention, compassion, courtesy, and understanding of patients' needs. Despite the urgency of ED care, patients continue to expect humane interactions. Empathic communication by physicians and nurses may reduce anxiety among patients and families and improve perceptions of overall service quality, reinforcing patient-centered care as a key component of satisfaction.

Reliability as the Strongest Determinant

Reliability was the strongest SERVQUAL determinant based first on the path coefficient and then on effect size. Reliability and assurance had equal path coefficients, but reliability had the larger effect size. Although tangibles had the largest effect size overall, its path coefficient was smaller than that of reliability. The ability to provide accurate, consistent, timely, and standards-based care was therefore the most influential aspect of satisfaction. Quality-improvement initiatives should prioritize adherence to standard operating procedures,

workforce competency, interprofessional coordination, and continuous service evaluation.

Overall, patient satisfaction was more strongly associated with perceived service quality than with demographic characteristics. Quality improvement should focus on hospital-controllable factors, particularly reliability, alongside assurance, empathy, and tangibles. This approach may improve patient experience while supporting quality- and safety-oriented emergency care.

Study Novelty

The study's contribution does not rest on PLS-SEM as a methodological novelty. Instead, it provides setting-specific empirical evidence regarding ED user satisfaction at Lahat Regional General Hospital, simultaneously tests five SERVQUAL dimensions and three demographic characteristics, and compares predictors' relative contributions using path coefficients and effect sizes. These findings provide a contextual basis for quality-improvement priorities in regional hospitals.

Study Limitations

This study has several limitations. Its cross-sectional design identifies associations at one time point and cannot establish causality. Convenience sampling may have introduced selection bias because critically ill patients and those unable to complete the questionnaire were underrepresented. The single-hospital setting limits generalizability. Educational attainment was highly imbalanced (95.7% higher and 4.3% lower education). Acuity level, actual waiting time, payment method, and previous ED visits were not included. Finally, formal ethics committee approval had not been obtained when the study was conducted; this is reported transparently and should be addressed in future research.

Conclusion and Recommendation

Service-quality dimensions were the principal determinants of patient satisfaction in the ED of Lahat Regional General Hospital, whereas age, sex, and educational level were not significantly associated with satisfaction. Tangibles, reliability, assurance, and empathy had positive and significant associations, while responsiveness did not. Reliability was the strongest determinant based on its path coefficient followed by its effect size, highlighting accurate, consistent, timely, and

standards-based care as central to satisfaction. Improvement initiatives should prioritize reliability while strengthening tangibles, assurance, and empathy as part of a patient-centered quality strategy.

Lahat Regional General Hospital should prioritize ED quality improvement by strengthening reliability. Recommended measures include improving adherence to standard operating procedures, providing continuous competency development for health professionals, and conducting routine quality evaluations. Improvements in physical facilities, communication and reassurance, and patient-centered empathy should be sustained to enhance patient experience and satisfaction.

Acknowledgement

The authors would like to express their sincere gratitude to all respondents who willingly participated in this study. The authors also thank the management of Lahat Regional Hospital for granting permission and facilitating the implementation of this research. Appreciation is extended to STIK Bina Husada Palembang for the academic support provided throughout the research process.

Funding Source

None.

Declaration of conflict of interest

The authors declare no competing interests.

Declaration on the Use of AI

AI-assisted tools were used to support language refinement, grammar checking, and manuscript editing. All scientific content, data analysis, interpretation of results, and final decisions regarding the manuscript remain the sole responsibility of the authors.

Data Availability Statement

Data sharing is not applicable to this article.

References

- Afifah, N., & All, E. (2022). Factors influencing patient satisfaction in government hospital emergency departments. *Jurnal Manajemen Pelayanan Kesehatan*, 25(2), 85-93.
- Anggraini, S., Amal, A. I., & Melastuti, E. (2026). Procedural implementation of the hospital integrated referral system (Sistem Rujukan Terintegrasi/ SISRUITE) in Indonesia: A systematic review. *Lentera Perawat*, 7(1), 226-238. <https://doi.org/10.52235/lp.v7i1.713>

- Babakus, E., & Mangold, W. G. (1992). Adapting the SERVQUAL Scale to Hospital Services: An Empirical Investigation. *HSR: Health Services Research*, 26:6, 767. <https://pmc.ncbi.nlm.nih.gov/articles/PMC1069855/pdf/hsresearch00075-0070.pdf>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3 ed.). Sage Publications.
- Jaya, I. F., & Akbar, M. A. (2026). Comprehensive research report and annotated translation: application of inspiratory muscle training on dyspnea scale and impact of Chronic Obstructive Pulmonary Disease (COPD). *Nurse and Health: Jurnal Keperawatan*, 15(1), 11-20.
- Jonkisz, A., Karniej, P., & Krasowska, D. (2022). The Servqual Method as an Assessment Tool of the Quality of Medical Services in Selected Asian Countries. *Int. J. Environ. Res. Public Health*, 19(13), 7831. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9266116/>
- Kristina, K., Gharbelasari, D. A. A., Asniar, A., Sundari, R. I., Tyas, A. P. M., Sujati, N. K., & Mardiyarningsih, E. (2026). *Buku Ajar Teori Keperawatan*. PT. Sonpedia Publishing Indonesia.
- Kusuma, M. I. A., Palupi, E. R. R., & Wirawan, N. (2025). Relationship between workload and nurses response time in the emergency room: A literature review. *Lentera Perawat*, 6(3), 419-426. <https://doi.org/10.52235/lp.v6i3.483>
- Legal, Public Relations, and Interinstitutional Relations Unit, Lahat Regional General Hospital. (2025). *Evaluation Report on Complaint Management at Lahat Regional General Hospital*, 2025.
- Lisa, W., Ceci, K., McCallum, D., & Brecher, D. (2023). *Emergency Severity Index Handbook Fifth Edition*. 1-36. www.ena.org
- Maharina, F. D. (2022). Overview of patient satisfaction with services in the Emergency Department of Cililin Regional General Hospital. *Jurnal Kesehatan*, 10(1), 84-89. <https://doi.org/10.55912/jks.v10i1.54>
- Medical Records Unit, Lahat Regional General Hospital. (2025). *Summary of Emergency Department Visits at Lahat Regional General Hospital, 2024-2025*.
- Novrikasari, N., Adriati, F., Listiana, A., Riyanti, R., Mundari, R., & Muhlisin, M. (2026). Analysis of health workforce preparedness in enhancing community resilience to flood disasters: A literature review. *Lentera Perawat*, 7(2), 559-567. <https://doi.org/10.52235/lp.v7i2.794>
- Pratiwi, E., Rahmawati, N., & Kurniawan, D. (2022). Analysis of demographic factors associated with hospital patient satisfaction. *Jurnal Administrasi Kesehatan Indonesia*, 10(1), 44-52.
- Rinduan, O., Kridawati, A., & Nugroho, D. (2025). Analysis of emergency department quality indicators and patient satisfaction at Bhayangkara Hospital Mataram. *Jurnal Manajemen dan Administrasi Rumah Sakit (MARS)*, 9(4).
- Sari, D. P., & Widodo, S. (2021). Factors influencing patient satisfaction in emergency departments. *Jurnal Administrasi Rumah Sakit Indonesia*, 7(2), 85-94.
- Walsh, A., Bodaghkhani, E., Etchegary, H., Alcock, L., Patey, C., Senior, D., & Asghari, S. (2022). Patient-centred care in the emergency department: a systematic review and meta-ethnographic synthesis. *International Journal of Emergency Medicine*, 15(1), 36. <https://doi.org/10.1186/s12245-022-00438-0>
- World Health Organization. (2022). *Quality of care in emergency settings*. WHO Press.