DIJEFA: Dinasti International Journal of Economics, Finance & Accounting
E-ISSN: 2721-303X
P-ISSN: 2721-3021
https://dinastipub.org/DIJEFA dinasti.info@gmail.com +62 811 7404 455
DOI: https://doi.org/10.38035/dijefa.v7i2.6849
https://creativecommons.org/licenses/by/4.0/
Received: 08 May 2026 | Revised: 22 May 2026 | Accepted: 08 June 2026

The Influence of Administrative Practices and Service Quality on Patient Loyalty Mediated by Patient Satisfaction

Sylvia Agestie[1*], Rizqi Athalia[2], Thalia Puteri Oktariana[3], Maria Nainggolan H[4]
[1]Universitas Pelita Harapan, Tangerang, Indonesia, 01615250130@student.uph.edu
[2]Universitas Pelita Harapan, Tangerang, Indonesia, 01615250153@student.uph.edu
[3]Universitas Pelita Harapan, Tangerang, Indonesia, 01615250148@student.uph.edu
[4]Universitas Pelita Harapan, Tangerang, Indonesia, 01615250135@student.uph.edu

*Corresponding Author: 01615250130@student.uph.edu[1]

Abstract: Acquiring new patients and retaining existing patients is a challenge for healthcare institutions due to competition in the healthcare industry. This study aims to analyze the influence of administrative practices and service quality on patient loyalty through patient satisfaction as the mediator. The study population was patients at Pelabuhan Hospital Palembang. A total of 156 patients became the research respondents. Purposive sampling technique was chosen as the method of obtaining the research sample. Data collection was carried out using Google Forms. Data analysis methods used were PLS SEM and importance performance map analysis. The results of the study did not indicate any influence of administrative practices on patient loyalty, but administrative practices had a positive effect on patient satisfaction. Service quality was found to have a positive effect on patient satisfaction and also patient loyalty. Patient satisfaction was found to have a positive effect on patient loyalty. Patient satisfaction fully mediated the effect of administrative practices on patient loyalty. Patient satisfaction partially mediated the effect of service quality on patient loyalty. Service quality and patient satisfaction are factors that must be considered to maintain patient loyalty. Further research can be conducted on other patients at other hospitals around Palembang, conducted longitudinally, and using a combination of qualitative and quantitative methods to enrich the research results.

Keywords: patient satisfaction, service quality, patient loyalty, administrative practices.

INTRODUCTION

Health efforts can be implemented through health care facilities or facilities. One type of facility that provides health care is a hospital. A hospital is a health care institution that provides various services, such as inpatient, outpatient, and emergency care, both individually and comprehensively, encompassing several activities, including promotive, preventive, curative, and rehabilitative care (Oktavia & Prayoga, 2023). As Indonesia's population grows, various types of hospitals compete to provide quality health care that meets standards.

Over the past three decades, competition in the healthcare industry has increased rapidly and has become a challenge for healthcare institutions in many countries so that healthcare providers must pay attention to efforts to attract and retain customers (X. Chen et al., 2022). The important role of effective health services has been recognized by countries around the world in driving social, economic and human development and resulting in increased medical facilities (Hussain, Kanwel, et al., 2025). In addition, the healthcare industry in order to survive in a highly competitive environment has undergone major restructuring in terms of its service delivery system (El Garem et al., 2024). The core of hospital competition is patient-oriented, obtaining patient preferences and creating loyalty to products or quality of health services to achieve sustainable development (Liu et al., 2021).

Increasing customer loyalty is achieved by building strong, long-term relationships between businesses and their customers. The benefits of a relationship between healthcare providers and customers or patients include increased frequency of visits, economic benefits for the hospital, recommendations for new services to those in the community, and the acquisition of new patients at lower costs (Arslan, 2020).

Patient satisfaction is patient feedback regarding the fulfillment of their healthcare needs, which can be below or exceed patient expectations (Ramli & Sjahruddin, 2015). Patient loyalty is defined as a strong desire to repurchase desired services in the future (Setyawan et al., 2022). Several previous studies have shown that satisfaction has a positive and significant impact on customer loyalty (Ramli & Sjahruddin, 2015).

A common complaint about outpatient services is long waiting times for registration, payment, and medication collection (Astarini & Fachrodji, 2023). Implementing good administrative practices is crucial to shorten these waiting times. Previous findings indicate that there is a positive relationship between administrative procedures and patient satisfaction (Hussain, Ruowei, et al., 2025). The results of the study prove that the speed of administrative services, friendliness and attitude of administrative staff influence patient satisfaction (Pasaribu et al., 2024). Effective hospital administration is essential to improving patient outcomes (Bhati et al., 2023). Administrative practices can also boost employee performance (Alotaibi & Hanawi, 2024).

Patient loyalty is influenced by various factors. Previous findings indicate that service quality directly influences patient satisfaction and loyalty, as well as indirectly through patient satisfaction (Fatimah et al., 2022; Guspianto et al., 2023). The administrative function of service providers has been found to encourage patient loyalty (Bentum-Micah et al., 2024). The quality of administrative services is a factor that can determine the level of patient satisfaction and also patient loyalty (Sinabutar, 2017). Promotion, price and quality of service factors also determine a patient's level of loyalty (Astarini & Fachrodji, 2023). Patients who trust and are satisfied with hospital services tend to show high loyalty to the hospital (Sertan et al., 2023). Marketing mix such as place, promotion, product, place are also factors that determine the level of patient loyalty (Budiman & Achmadi, 2023). Previous research found that customer complaints, satisfaction, quality, organizational citizenship behavior, values, hospital brand image, commitment and trust are determining factors of patient loyalty (Zhou et al., 2017).

Research combining all four variables—administrative practices, service quality, patient satisfaction, and patient loyalty—in the healthcare sector is still rare. Based on the existing background, this study aims to analyze the influence of administrative practices and service quality on patient loyalty, mediated by patient satisfaction.

METHODS

The research method used was quantitative cause and effect. The population was patients at the Palembang Harbor Hospital. The number of respondents was determined by multiplying

the number of indicators, 29, by 5, resulting in a minimum number of 145 respondents (Hair et al., 2019). A total of 156 responses were collected in this study. The sampling method chosen was purposive sampling. The respondent criteria were patients at the Palembang Harbor Hospital, not currently seriously ill, and willing to complete the research questionnaire.

Data collection used a Google Form with five alternative answers distributed through patient WhatsApp contacts. Answers strongly disagree were given a score of 1, disagree was given a score of 2, undecided was given a score of 3, agree was given a score of 4, and strongly agree was given a score of 5. The administrative practice instrument was adapted from Tan et al. (2019). The service quality instrument is adapted from Mohd Isa et al. (2019). Patient satisfaction measurement tool adapted from (Marshall & Hays, 1994). Patient loyalty measurement tool adapted from Arab et al. (2012). This study consists of five indicators of administrative practice variables, three indicators of service quality, eighteen indicators of patient satisfaction variables, and three indicators of patient loyalty variables.

The data analysis method used PLS SEM and importance performance map analysis. PLS SEM consists of an outer model and an inner model. The outer model stage includes convergent validity and reliability tests, while the inner model stage consists of R-square, f-square, and Q-square (Subhaktiyasa, 2024). This study also presents the Standardized Root Mean Square Residual (SRMR) value as a test of model adequacy. Hypothesis testing was conducted by bootstrapping 5,000 subsamples with a 95% significance level or a 5% error using a two-tailed test.

RESULTS AND DISCUSSION

Respondent Descriptive

Respondents consisted of 79 men (50.6%) and 77 women (49.4%). Respondents aged <18 years were 7 people (4.5%), aged 18 to 27 years were 83 people (53.2%), aged 28 to 37 years were 32 people (20.5%), aged 38 to 47 years were 10 people (6.4%), and aged over 47 years were 24 people (15.4%). Respondents with elementary school education were 2 people (1.3%), junior high school education was 6 people (3.8%), high school education was 82 people (52.6%), diploma education was 9 people (5.8%), bachelor's degree education was 50 people (32.1%), master's degree education was 7 people (4.5%). Respondents with unmarried status were 89 people (57.1%), married were 61 people (39.1%), divorced were 6 people (3.8%). Respondents with 1 visit were 35 people (22.4%), 2 to 5 visits were 55 people (35.3%), 6 – 10 visits were 15 people (9.6%), more than 10 visits were 51 people (32.7%). Total husband and wife income per month < 5 million rupiah was 94 people (60.3%), total income of 5 to 10 million rupiah was 37 people (23.7%), income of 11 to 15 million rupiah as many as 6 people (3.8%), total income above 15 million rupiah as many as 19 people (12.2%).

Outer Model

Table 1. Outer Loading Values

PA		KUP		KEP		KEP		KEP		LP	
pa2	0.863	kup3	0.913	kep17	0.905	kep2	0.855	kep8	0.794	lp2	0.969
pa5	0.839	kup1	0.911	kep18	0.893	kep5	0.848	kep11	0.760	lp3	0.947
pa3	0.812	kup2	0.910	kep4	0.884	kep13	0.838	kep12	0.759	lp1	0.936
pa1	0.759			kep10	0.872	kep3	0.833	kep15	0.731		
pa4	0.653			kep16	0.868	kep6	0.825	kep9	0.633		
				kep1	0.865	kep14	0.817	kep7	0.521		

Information: PA = administrative practice, KUP = service quality, KEP = patient satisfaction, LP = patient loyalty.

The outer loading value > 0.45 is still used in this study with the condition that the minimum sample size is 150 respondents and the average variant extracted (AVE) value > 0.5

(Hair et al., 2019). Based on this, all indicators in this study are maintained and used in further analysis.

Table 2. AVE and Reliability Values

Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Administrative Practice	0.845	0.891	0.622
Service Quality	0.898	0.936	0.830
Patient Satisfaction	0.968	0.972	0.658
Patient Loyalty	0.947	0.966	0.904

Based on the table above, it can be seen that all research variables are declared valid because they have an AVE value > 0.5 and are declared reliable because they have a Cronbach's Alpha value > 0.7 (Hair et al., 2025). Administrative practice, service quality, patient satisfaction, and patient loyalty each have AVE values of 0.622, 0.830, 0.658, 0.904 and have Cronbach's Alpha values of 0.845, 0.898, 0.968, 0.947 respectively. The results of this study indicate that the measurement instrument is able to measure the construct that is intended to be measured and tends to be stable when used at different times.

Inner Model

R^2 values of 0.75, 0.50, and 0.25 can be considered strong, medium, and weak (Subhaktiyasa, 2024). This study obtained an R-square value of 0.838, with patient loyalty as the dependent variable. This means that administrative practice, service quality, and patient satisfaction contribute 83.8% to patient loyalty, while the remaining 16.2% is influenced by other factors. This R-square value is considered strong because it is greater than 0.75.

Table 3. f Square

Variable	Patient Satisfaction	Patient Loyalty
Patient Satisfaction		1.004
Service Quality	0.562	0.107
Patient Loyalty		
Administrative Practice	0.140	0.013

F Square values higher than 0.02, 0.15, and 0.35 represent small, medium, and large f^2 effect sizes, respectively. (Subhaktiyasa, 2024). In this study, large effects were seen in the influence of patient satisfaction on patient loyalty and also in the influence of service quality on patient satisfaction. Small effects were seen in the influence of service quality on patient loyalty and also in the influence of administrative practices on patient satisfaction. The influence of administrative practices on patient loyalty appeared to have no effect.

Q square values higher than 0, 0.25, 0.15, and 0.35 represent small, medium, and large predictive relevance of the PLS path model, respectively (Subhaktiyasa, 2024). The Q Square value of patient loyalty was obtained at 0.746 or has good predictive relevance and is in the large category. An SRMR value ≤ 0.08 indicates acceptable model fit (Subhaktiyasa, 2024). The results of this study obtained an SRMR value of 0.068 so that the model was declared acceptable.

Hypothesis Testing

In this study, a T statistic value ≥ 1.96 and a p value < 0.05 indicates that the hypothesis is accepted or that there is a significant influence of the independent variable on the dependent variable. Conversely, if the T statistic < 1.96 and ≥ 0.05 indicates that the hypothesis is rejected or that there is no significant influence.

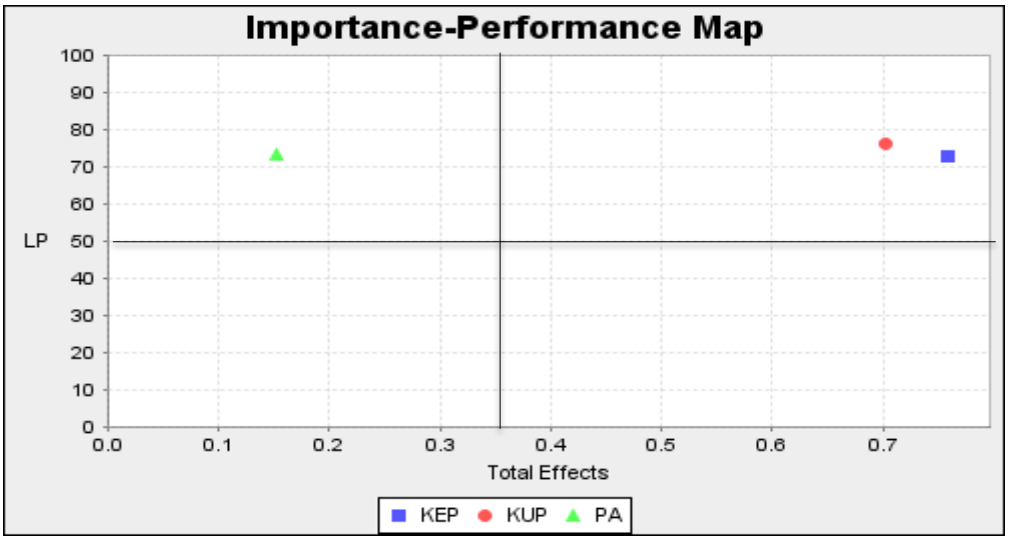
Table 4. Hypothesis Test Results

	Original Sample	T Statistics	P Value	Decision
Administrative Practice → Patient Loyalty	-0.074	1.227	0.220	Rejected
Service Quality → Patient Loyalty	0.247	2.044	0.041	Accepted
Patient Satisfaction → Patient Loyalty	0.757	6.974	0.000	Accepted
Administrative Practice → Patient Satisfaction	0.299	3.715	0.000	Accepted
Service Quality → Patient Satisfaction	0.600	8.092	0.000	Accepted
Administrative Practice → Patient Satisfaction → Patient Loyalty	0.227	3.316	0.001	Accepted
Service Quality → Patient Satisfaction → Patient Loyalty	0.454	5.182	0.000	Accepted

Based on the table above, one hypothesis is rejected and six hypotheses are accepted. Administrative practices were found to have no effect on patient loyalty. Service quality and patient satisfaction were each found to have a positive effect on patient loyalty. Administrative practices and service quality were each found to have a positive effect on patient satisfaction. There was a full mediation effect of patient satisfaction on the influence of administrative practices on patient loyalty, while there was a partial mediation effect on the influence of service quality on patient loyalty.

Importance Performance Map Analysis (IPMA)

IPMA offers advancements in partial least squares structural equation modeling (PLS-SEM) analysis, which is used in this study by selecting the customer loyalty construct as the target construct (Noor Arzahan et al., 2022). IPMA expands the understanding of PLS-SEM analysis results by involving the average value of the latent construct and its indicators (Ringle & Sarstedt, 2016). IPMA states that the total effect shows the importance of the previous factors in forming the target factor (customer loyalty), while the average value of the latent construct shows the performance value of the construct (Noor Arzahan et al., 2022).



Picture 1. IPMA constructs, standardized effects

Information: KEP = patient satisfaction, KUP = service quality, PA = administrative practice

Based on the figure above, service quality falls into the high importance (0.702 > 0.375) and high performance (76.305 > 50) categories. Patient satisfaction falls into the high importance (0.757 > 0.375) and high performance (73.058 > 50) categories. Administrative practice falls into the low importance (0.153 < 0.375) and high performance (73.227 > 50) categories. Based on these results, it is necessary to maintain the quality of service provided

and maintain patient satisfaction so that patients remain loyal to the Palembang Harbor Hospital. Administrative practice is not a factor that is considered important but has good performance, so it is necessary to explore other factors that influence patient loyalty besides administrative practice.

The Influence of Administrative Practice on Patient Loyalty

The results of this study indicate that administrative practices have no effect on patient loyalty. This means that the quality of administrative practices implemented by a hospital does not determine patient loyalty. This contradicts previous findings that administrative procedures can increase patient loyalty (Hussain, Kanwel, et al., 2025). Administrative services are a driving factor in patient loyalty (Sinabutar, 2017).

Administrative practices include appointment activities, admission, hospitalization, and discharge (Tan et al., 2019). Patient loyalty is the tendency of patients to prefer a particular hospital when they have a medical need, the desire to visit again, and the desire to recommend the hospital to others (Shie et al., 2022). Based on the research results, the activity of appointments, patient admissions, inpatient care, and patient discharge does not determine the patient's desire to choose the Palembang Harbor Hospital when requiring medical services, does not determine the patient's desire to return and recommend the hospital to others.

The Influence of Service Quality on Patient Loyalty

The results of this study indicate that service quality has a positive effect on patient loyalty. This finding means that the higher the quality of service provided by the hospital, the higher the level of patient loyalty. Several previous studies support this finding. Hospitals need to improve service quality and build trusting relationships with patients to enhance patient loyalty (Shie et al., 2022). Health services play an important role in building trust and loyalty (Widiastuti et al., 2024). Quality services that create the best value for patients can make patients more loyal to a hospital (Guspianto et al., 2023).

Service quality is the overall subjective perception or evaluation of a service during the interactive process of service delivery (Q. Chen et al., 2022). A comprehensive evaluation by patients of the services at this hospital will lead to the creation of a desire for patients to choose the Palembang Port Hospital when they need medical services, increase the desire for patients to return and increase the behavior of recommending the hospital to others.

The Influence of Patient Satisfaction on Patient Loyalty

The results of this study indicate that patient satisfaction has a positive effect on patient loyalty. This means that the more satisfied a patient is with the services provided by the hospital, the higher their level of patient loyalty. This finding supports previous findings that higher patient satisfaction is followed by higher patient loyalty (X. Chen et al., 2022). Patient satisfaction plays an important role in strengthening patient loyalty directly (Parmana et al., 2024). Patient satisfaction is a determining factor of patient loyalty (AlOmari & Hamid, 2022).

Patient satisfaction is the result of the interaction between the patient and the healthcare provider or hospital (Goodrich & Lazenby, 2023). Patient reactions to the services provided by this hospital will determine the patient's desire to choose Palembang Harbor Hospital when requiring medical services, determine the patient's desire to return and determine the behavior of recommending the hospital to others.

The Influence of Administrative Practice on Patient Satisfaction

The results of this study indicate that administrative practices have a positive effect on patient satisfaction. This means that better administrative practices lead to higher patient satisfaction. This contrasts with previous findings that indicated no effect of administrative

practices on patient satisfaction (Tan et al., 2019). The results of this study are supported by previous findings that administrative quality can increase patient satisfaction (Asif et al., 2019). Administrative procedures are a factor that determines a patient's level of satisfaction (Hussain, Ruowei, et al., 2025).

Administrative practices include appointment activities, admission, hospitalization, and discharge (Tan et al., 2019). Patient satisfaction is the result of the interaction between the patient and the healthcare provider (Goodrich & Lazenby, 2023). The activities involved in hospital administrative practices can determine how satisfied they are with the services provided by healthcare providers.

The Influence of Service Quality on Patient Satisfaction

The results of this study indicate that service quality has a positive effect on patient satisfaction. The higher the quality of service provided by the hospital, the more satisfied patients are with the service. This finding supports previous findings that service quality has a very strong positive correlation with patient satisfaction (Khayru & Issalillah, 2022). There is a significant correlation between the dimensions of service quality (responsiveness, assurance, communication, and discipline) and patient satisfaction (Emon et al., 2023). Service quality was found to be a driving factor of patient satisfaction (Novitasari, 2022). The overall subjective perception or evaluation of the service during the interactive process of service delivery determines the level of patient satisfaction.

The Influence of Administrative Practice on Patient Loyalty Mediated by Patient Satisfaction

The results of this study found that patient satisfaction fully mediated the effect of administrative practices on patient loyalty. This means that administrative practices will only influence patient loyalty if mediated by patient satisfaction. If not mediated, there is no effect of administrative practices on patient loyalty. Previous findings showed the influence of administrative practices on patient satisfaction, then the influence of patient satisfaction on patient loyalty (AlOmari & Hamid, 2022; Asif et al., 2019; X. Chen et al., 2022; Hussain, Ruowei, et al., 2025; Parmana et al., 2024). The easier the administrative practices are perceived by patients, the more satisfied and loyal the patients will be.

Administrative practices include appointment activities, admission, hospitalization, and discharge (Tan et al., 2019). The concept of customer satisfaction can be defined as a holistic psychological state that arises when emotions associated with unmet expectations combine with the customer's pre-existing beliefs and expectations about the consumption experience (AlSokkar et al., 2024). Easy appointment-making activities through to patient discharge increase existing customer confidence and expectations about the consumption experience. According to expectation confirmation theory, the degree to which a customer's expectations are met by a product or service directly influences their level of satisfaction (AlSokkar et al., 2024). It has been observed that customer satisfaction tends to increase when their expectations are met.

The Influence of Service Quality on Patient Loyalty Mediated by Patient Satisfaction

The results of this study found that patient satisfaction partially mediated the effect of service quality on patient loyalty. This finding aligns with previous findings that patient satisfaction mediates the effect of service quality on patient loyalty (AlOmari & Hamid, 2022). Improved perceived service quality can increase patient satisfaction and long-term patient loyalty (Bentum-Micah et al., 2024). The better the quality of service provided by the hospital, the more satisfied and loyal the patients will be.

Researchers are encouraged to investigate both internal (i.e., attitudes, perceived behavioral control) and external (i.e., subjective norms) factors when studying consumer behavior (Rozenkowska, 2023). According to the Theory of Planned Behavior, human behavior is guided by three types of considerations: beliefs about the likely consequences of the behavior (behavioral beliefs), beliefs about the normative expectations of others (normative beliefs), and beliefs about the existence of factors that can encourage or hinder the performance of the behavior (control beliefs) (Bosnjak et al., 2020). Administrative practices, service quality, and patient satisfaction are internal factors that can influence patient loyalty.

CONCLUSION

The results of this study concluded that administrative practices had no effect on patient loyalty. Meanwhile, service quality and patient satisfaction each had a positive effect on patient loyalty. Administrative practices and service quality each had a positive effect on patient satisfaction. Patient satisfaction was found to fully mediate the effect of administrative practices on patient loyalty. Patient satisfaction was found to partially mediate the effect of service quality on patient loyalty.

The hospital is expected to provide the best quality service to increase patient satisfaction and loyalty. Future research could expand the study population to other hospitals in Palembang, conduct a longitudinal study, and use a combination of quantitative and qualitative methods to enrich the research findings.

REFERENCES

AlOmari, F., & Hamid, A. B. (2022). Strategies to improve patient loyalty and medication adherence in Syrian healthcare setting: The mediating role of patient satisfaction. *PloS One*, *17*(11), e0272057.

Alotaibi, E. G., & Hanawi, D. M. K. (2024). Impact of administrative practices on Job performance in Alhada Military Hospital. *American Academic & Scholarly Research Journal*, *14*(7).

AlSokkar, A. A. M., Law, E. L.-C., AlMajali, D. A., Al-Gasawneh, J. A., & Alshinwan, M. (2024). An indexed approach for expectation-confirmation theory: A trust-based model. *Electronic Markets*, *34*(1), 12.

Arab, M., Tabatabaei, S. M. G., Rashidian, A., Forushani, A. R., & Zarei, E. (2012). The effect of service quality on patient loyalty: a study of private hospitals in Tehran, Iran. *Iranian Journal of Public Health*, *41*(9), 71.

Arslan, I. K. (2020). The importance of creating customer loyalty in achieving sustainable competitive advantage. *Eurasian Journal of Business and Management*, *8*(1), 11–20.

Asif, M., Jameel, A., Sahito, N., Hwang, J., Hussain, A., & Manzoor, F. (2019). Can leadership enhance patient satisfaction? Assessing the role of administrative and medical quality. *International Journal of Environmental Research and Public Health*, *16*(17), 3212.

Astarini, Y., & Fachrodji, A. (2023). The effect of promotion, quality of service and price on patient loyalty with patient satisfaction as mediation. *International Journal of Social and Management Studies*, *4*(2), 37–45.

Bentum-Micah, G., Cai, L., Atuahene, S. A., Ameyaw, M. A., Bondzie-Micah, V., & Adu-Yeboah, S. S. (2024). Health provider administration functions, patient satisfaction, and loyalty: Their mediation by patient healthcare service quality perceptions. *Journal of Psychology in Africa*, *34*(1), 65–72.

Bhati, D., Deogade, M. S., & Kanyal, D. (2023). Improving patient outcomes through effective hospital administration: a comprehensive review. *Cureus*, *15*(10), e47731.

Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, *16*(3), 352.

Budiman, C., & Achmadi, H. (2023). The Effect Of Marketing Mix On Patient Satisfaction And Their Impact On Patient Loyalty In Hospital Inpatients. *Jurnal Manajemen Kesehatan Indonesia*, *11*(1), 1–9.

Chen, Q., Gong, Y., Lu, Y., & Tang, J. (2022). Classifying and measuring the service quality of AI chatbot in frontline service. *Journal of Business Research*, *145*, 552–568.

Chen, X., Zhao, W., Yuan, J., Qin, W., Zhang, Y., & Zhang, Y. (2022). The relationships between patient experience with nursing care, patient satisfaction and patient loyalty: a structural equation modeling. *Patient Preference and Adherence*, 3173–3183.

El Garem, R. A. A., Fouad, A., & Mohamed, H. (2024). Factors associated with patient loyalty in private healthcare sector in Egypt. *Journal of Humanities and Applied Social Sciences*, *6*(2), 181–206.

Emon, M. M. H., Khan, T., & Alam, M. (2023). Effect of Technology on Service Quality Perception and Patient Satisfaction-A study on Hospitals in Bangladesh. *International Journal of Research and Applied Technology (INJURATECH)*, *3*(2), 254–266.

Fatimah, S., Idrus, M., Mukhtar, A., Salam, K. N., & Ismawati, I. (2022). Study on service quality on customer satisfaction and loyalty. *Jurnal Manajemen*, *26*(3), 512–532.

Goodrich, G. W., & Lazenby, J. M. (2023). Elements of patient satisfaction: an integrative review. *Nursing Open*, *10*(3), 1258–1269.

Guspianto, G., Mutmainnah, M., & Aurora, W. I. D. (2023). How can service quality, patient value, and patient satisfaction increase hospital patient loyalty? *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, *9*(3), 1726–1736.

Hair, J. F., Babin, B. J., Black, W. C., & Anderson, R. E. (2019). *Multivariate Data Analysis*. Cengage. https://books.google.co.id/books?id=0R9ZswEACAAJ

Hair, J. F., Babin, B. J., Ringle, C. M., Sarstedt, M., & Becker, J.-M. (2025). *Covariance-based structural equation modeling (CB-SEM): a SmartPLS 4 software tutorial: JF Hair et al.* Springer.

Hussain, A., Kanwel, S., Khan, S., Alonazi, W. B., Malik, A., & Khan, A. A. (2025). Antecedents of patient loyalty: Exploring mediating and moderating paradigms in public hospitals. *Patient Preference and Adherence*, 527–542.

Hussain, A., Ruowei, W., Xia, X., Jameel, A., Chunhong, S., & Ahmad, S. (2025). A cross-sectional study on the impact of administrative procedures and medical staff services on patient satisfaction with trust in public sector hospitals: the moderating role of e-health knowledge. *BMC Health Services Research*, *25*(1), 1576.

Khayru, R. K., & Issalillah, F. (2022). Service quality and patient satisfaction of public health care. *International Journal of Service Science, Management, Engineering, and Technology*, *1*(1), 20–23.

Liu, S., Li, G., Liu, N., & Hongwei, W. (2021). The impact of patient satisfaction on patient loyalty with the mediating effect of patient trust. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, *58*, 00469580211007221.

Marshall, G. N., & Hays, R. D. (1994). *The patient satisfaction questionnaire short-form (PSQ-18)* (Vol. 7865). Rand Santa Monica, CA.

Mohd Isa, S., Lim, G. S. S., & Chin, P. N. (2019). Patients' intent to revisit with trust as the mediating role: lessons from Penang Malaysia. *International Journal of Pharmaceutical and Healthcare Marketing*, *13*(2), 140–159.

Noor Arzahan, I. S., Ismail, Z., & Yasin, S. M. (2022). Resilient safety culture and safety performance: examining the effect in Malaysian Paramedic Training Institute through Importance-Performance Map Analysis (IPMA). *Safety*, *8*(2), 25.

Novitasari, D. (2022). Hospital quality service and patient satisfaction: how the role of service excellent and service quality? *Journal of Information Systems and Management (JISMA)*, *1*(1), 29–36.

Oktavia, S. N., & Prayoga, D. (2023). Kualitas pelayanan terhadap loyalitas pasien pada Rumah Sakit Ibu dan Anak: Literature review. *Jurnal Kesehatan Tambusai*, *4*(3), 2199–2205.

Parmana, A. D., Paramarta, V., & Nurina, Y. I. (2024). Factors Affecting Patient Satisfaction and Patient Loyalty in Hospitals: Systematic Literature Review. *International Islamic Medical Journal*, *6*(2), 54–63.

Pasaribu, U., Harahap, H., Lastari, A., Permayasa, N., & Hadi, A. J. (2024). The Impact of Hospital Administration Service Quality on Patient Satisfaction of Health Insurance Agencies: A Cross-Sectional Study. *Promotif: Jurnal Kesehatan Masyarakat*, *14*(2), 69–74.

Ramli, A. H., & Sjahruddin, H. (2015). Building patient loyalty in healthcare services. *International Review of Management and Business Research*, *4*(2), 391.

Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial Management & Data Systems*, *116*(9), 1865–1886.

Rozenkowska, K. (2023). Theory of planned behavior in consumer behavior research: A systematic literature review. *International Journal of Consumer Studies*, *47*(6), 2670–2700.

Sertan, A., Çek, K., Öniz, A., & Özgören, M. (2023). The influence of medicine approaches on patient trust, satisfaction, and loyalty. *Healthcare*, *11*(9), 1254.

Setyawan, F. E. B., Supriyanto, S., & Lestari, R. (2022). Organizational commitment, patient satisfaction and loyalty in the first-level health facilities. *International Journal of Public Health Science (IJPHS)*, *11*(3), 1046–1057.

Shie, A.-J., Huang, Y.-F., Li, G.-Y., Lyu, W.-Y., Yang, M., Dai, Y.-Y., Su, Z.-H., & Wu, Y. J. (2022). Exploring the relationship between hospital service quality, patient trust, and loyalty from a service encounter perspective in elderly with chronic diseases. *Frontiers in Public Health*, *10*, 876266.

Sinabutar, R. (2017). Influence Of The Quality Of Medical And Administrative Services On The Inpatients Loyalty At The Adventist Hospital Bandung. *International Journal of Health & Medical Sciences*, *3*(1).

Subhaktiyasa, P. G. (2024). PLS-SEM for multivariate analysis: A practical guide to educational research using SmartPLS. *EduLine: Journal of Education and Learning Innovation*, *4*(3), 353–365.

Tan, C. N. L., Ojo, A. O., Cheah, J. H., & Ramayah, T. (2019). Measuring the influence of service quality on patient satisfaction in Malaysia. *Quality Management Journal*, *26*(3), 129–143. https://doi.org/10.1080/10686967.2019.1615852

Widiastuti, W., Indartono, S., & Sa'adah, N. (2024). Islamic service quality and patient loyalty: Investigating the role of satisfaction in healthcare contexts. *Society*, *12*(2), 538–555.

Zhou, W.-J., Wan, Q.-Q., Liu, C.-Y., Feng, X.-L., & Shang, S.-M. (2017). Determinants of patient loyalty to healthcare providers: An integrative review. *International Journal for Quality in Health Care*, *29*(4), 442–449