



Research Article

Enhancing Loyalty through Engagement, Experience, and Social Media Marketing

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Abstract: Tambak Mother and Child Hospital experienced a 15% decline in patient visits in 2024, involving both new and returning patients. This decline highlights the importance of patient loyalty, as loyal patients are more likely to continue using hospital services and recommend the hospital to others. This study aims to examine the effects of social media marketing and patient experience on patient loyalty, with patient engagement as a mediating variable. This study employed a quantitative causal research design. Data were collected from 190 patients using purposive sampling. Partial Least Squares–Structural Equation Modeling (PLS-SEM) was used to analyze the relationships among variables. The results indicate that social media marketing, patient experience, and patient engagement simultaneously have a significant effect on patient loyalty. Individually, social media marketing, patient experience, and patient engagement each show a positive and significant influence on patient loyalty. In addition, social media marketing and patient experience positively affect patient engagement. The findings further confirm that patient engagement mediates the relationships between social media marketing and patient loyalty, as well as between patient experience and patient loyalty. These findings suggest that hospital management should strengthen interactive communication through social media platforms, particularly Instagram, improve service efficiency by increasing staffing levels, and enhance service quality through friendly staff behavior and faster service processes. Future research is recommended to include broader samples across Mother and Child Hospitals and incorporate additional variables such as patient satisfaction, service quality, and trust.

Keywords: Hospital; Patient Engagement; Patient Experience; Patient Loyalty; Social Media.

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1. Introduction

In recent years, the healthcare sector has undergone significant transformation, with increasing demand for quality healthcare services. With numerous hospitals and healthcare providers competing, it is crucial for hospitals to develop effective marketing strategies to attract new patients and retain existing ones. Patient loyalty is one aspect that needs to be maintained because it can retain existing patients. Loyal patients are more likely to promote the hospital where they received healthcare services to others, thus attracting new patients.

Hospital marketing can be divided into several key components, including digital marketing, public relations, and customer service. Digital marketing has become increasingly important with the increasing use of social media and websites as primary sources of information for patients. Hospitals that are active on these platforms can reach a wider audience and build a positive image in the public eye. Informative and educational content, such as health articles, videos, and webinars, can help attract attention and provide added value to potential patients.

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Patient loyalty is influenced by various factors. One factor contributing to high and low patient loyalty is the effect of the marketing mix (social media marketing) (Huda & Yuliati, 2022). Social media marketing is a set of marketing tools that companies use to continuously achieve marketing goals in their target markets (Kotler & Keller, 2016). A set of marketing tools used by companies/hospitals can include aspects of place, product, promotion, price, participation, process, and physical evidence (Booms & Bitner, 1981; McCarthy, 1968). These aspects of the marketing mix ultimately determine patient loyalty. For example, strategic location, product or service quality, hospital promotions through various advertisements, lower prices compared to other hospitals, patient participation by the hospital, faster service delivery, and physical evidence or results of patient treatment.

Another factor that determines the level of loyalty of a patient is their experience (patient experience) (Chen et al., 2022). Patient experience is the sum of all interactions shaped by organizational culture and that influence patient perceptions across the care continuum (Institute, 2024). Thus, the overall interaction resulting from organizational culture and shaping patient perceptions across the care continuum will contribute to the level of patient loyalty. Things that patients experience across the care continuum, such as information and education, care coordination, physical comfort, emotional support, respect for patient preferences, family and friend involvement, continuity and transition, and overall impressions (Jenkinson et al., 2002).

Another factor that impacts the level of patient loyalty is patient engagement (Zaid & Patwayati, 2021). Patient engagement is the level of active relationship a patient has with the hospital (Palmatier et al., 2017). The level of active relationship that occurs between the patient and the hospital is characterized by the patient's enthusiasm in undergoing treatment activities, being proud of receiving treatment at the hospital, and feeling comfortable receiving treatment at a hospital and not wanting to move to another hospital. (Cheung et al., 2011). Patients who are enthusiastic about undergoing treatment, are proud of the hospital, and feel comfortable with the hospital tend to be loyal to all hospitals.

Tambak Mother and Child Hospital, established in 2003, is located at Jl. Tambak No. 18, Menteng, Central Jakarta, which is the border between Central Jakarta, South Jakarta, and East Jakarta. It has been accredited by the Accreditation Commission of the Indonesian Ministry of Health. Tambak Mother and Child Hospital is a type C hospital specifically for mothers, women, and children that implements the IMD (Early Breastfeeding Initiation) program, which is directly breastfeeding the baby immediately after delivery so that the bond of love between mother and baby is established starting from delivery. To support the smooth provision of breastfeeding, Tambak Mother and Child Hospital also has a lactation clinic.

Various health care programs are available at Tambak Mother and Child Hospital, both national programs and hospital programs currently under development. The national programs implemented at Tambak Mother and Child Hospital include improving maternal and infant health, reducing tuberculosis morbidity, reducing HIV/AIDS morbidity, reducing stunting and wasting prevalence, and providing hospital family planning services. With the National Program already running at Tambak Mother Hospital, it is easier for existing and new patients related to the national program to receive comfortable treatment at Tambak Mother and Child Hospital.

In January 2023, 3,303 patients visited, but by the end of December 2023, this had decreased to 3,100. In December 2024, the number of visits decreased again to 2,524. This was due to a lack of patient desire to return or a lack of loyalty to a single healthcare facility.

From February to April 2023, there was a 29% increase in patient numbers, both existing and new, but by the end of 2023, both existing and new patients experienced a 1% decrease. Meanwhile, in 2024, the number of existing patient visits from January 2024 to December 2024 decreased by 15%. This should be a concern for the hospital, and it should consider what strategies should be implemented to increase patient visits to Tambak Mother and Child Hospital. Therefore, this study will be conducted to examine the various aspects of the decline in patients at Tambak Mother and Child Hospital.

In social media marketing, 40% felt that Tambak Hospital's Instagram content wasn't enough to build trust in the hospital. 20% couldn't find the information they needed about Tambak Mother and Child Hospital on Instagram. 43% couldn't connect with many people

on Tambak Hospital's Instagram. 33% felt the Instagram community didn't attract them to healthcare services.

In patient experience, 17% of patients felt the doctor's answers to questions were not easy to understand. 10% of patients felt they didn't wait long enough to receive healthcare. 10% of patients felt they didn't wait long enough to receive medication. 17% of patients felt the doctor wasn't able to build trust. 7% of patients felt the doctor didn't treat them with respect. 20% of patients felt their family didn't get a chance to talk to the doctor. 33% of patients weren't informed about medication side effects. 10% of patients felt the doctor lacked good manners.

Patient engagement data revealed that 33% of patients felt unmotivated to undergo treatment at Tambak Mother Maternity and Child Hospital. 27% of patients felt unappreciative of receiving treatment at Tambak Mother and Child Hospital. Ten% of patients reported frequent interruptions during treatment at Tambak Mother and Child Hospital.

Patient loyalty data shows that 30% of patients are reluctant to use Tambak Mother and Child Hospital's healthcare services in the future. 27% of patients would not share positive things about Tambak Mother and Child Hospital with those closest to them.

Based on the background of the problem that has been explained, this study attempts to analyze the influence of social media marketing, patient experience, and patient engagement simultaneously on patient loyalty at Tambak Mother and Child Hospital.

2. Preliminaries or Related Work or Literature Review

Patient loyalty has become a critical issue in the healthcare industry due to increasing competition among hospitals and rising patient expectations. Patient loyalty refers to a patient's intention to continue using healthcare services and to recommend the hospital to others. Loyal patients contribute to organizational sustainability by ensuring stable utilization rates and positive word-of-mouth promotion (Oliver, 1999; Zeithaml et al., 1996).

In healthcare settings, patient loyalty is influenced not only by clinical outcomes but also by non-clinical factors such as service delivery, interpersonal interactions, and emotional experiences. Previous studies indicate that hospitals focusing on long-term relationships with patients tend to achieve higher retention rates and stronger reputational advantages (Kotler et al., 2011).

One important determinant of patient loyalty is patient experience. Patient experience encompasses patients' perceptions of all interactions across the care continuum, including administrative services, clinical encounters, and post-treatment communication. A positive patient experience has been consistently linked to higher satisfaction, trust, and loyalty in healthcare organizations (Wolf et al., 2021).

Empirical evidence suggests that patient experience plays a central role in shaping patients' emotional responses and future behavioral intentions. Patients who perceive healthcare services as responsive, empathetic, and efficient are more likely to return and recommend the hospital to others (Doyle et al., 2013).

Another key factor influencing patient loyalty is patient engagement. Patient engagement refers to the degree to which patients are actively involved in their healthcare processes, decision-making, and interactions with healthcare providers. Engaged patients tend to exhibit stronger emotional attachment and commitment to healthcare organizations (Barello et al., 2012).

Patient engagement has been widely recognized as a mediator between service-related factors and behavioral outcomes. Studies indicate that engaged patients demonstrate higher adherence to treatment plans, greater trust in providers, and stronger loyalty intentions (Grafigna et al., 2015).

In the digital era, social media marketing has emerged as a strategic tool for hospitals to communicate with patients and build relationships. Social media marketing enables healthcare organizations to share information, interact with patients, and enhance transparency, thereby influencing patients' perceptions and attitudes (Tuten & Solomon, 2014).

Research shows that effective social media marketing positively affects brand awareness, trust, and engagement in healthcare contexts. Hospitals that actively manage social media platforms are better positioned to create meaningful interactions that foster patient loyalty (Dwivedi et al., 2021).

Social media marketing also influences patient experience by shaping expectations before service encounters and perceptions after service delivery. Timely responses, informative content, and interactive communication on social media platforms contribute to a more positive overall patient experience (Felix et al., 2017).

Furthermore, social media interactions encourage patient engagement by providing opportunities for feedback, dialogue, and participation. Engaged social media users are more likely to develop emotional connections with healthcare providers, which strengthens loyalty intentions (Harrigan et al., 2017).

Several studies have highlighted the mediating role of patient engagement in the relationship between marketing activities and patient loyalty. Patient engagement transforms marketing efforts and service experiences into long-term relational outcomes by enhancing emotional bonds and trust (Hollebeek et al., 2019).

Based on the existing literature, it can be concluded that patient loyalty is shaped by an integrated mechanism involving social media marketing and patient experience, with patient engagement acting as a key mediating variable. This conceptual framework provides a strong theoretical foundation for examining patient loyalty in hospital settings, particularly in Mother and Child Hospitals facing declining patient visits.

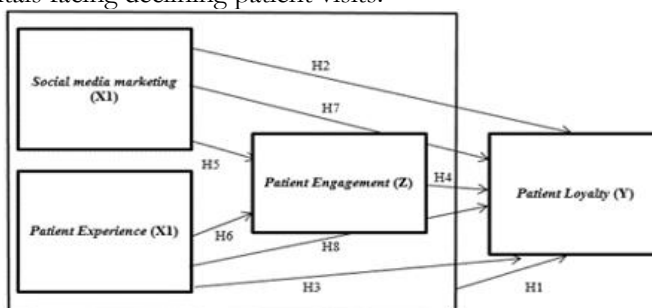


Figure 1. Research Hypothesis.

3. Proposed Method

This study employed a causal influence research design. The aim of the study was to determine the extent to which the independent variables (patient experience and social media marketing) influence the dependent variable (patient loyalty) through a mediating variable (patient engagement). The hypothesis was verified using data collected through a survey method using a questionnaire as a research instrument. The questionnaire was structured based on the dimensions and indicators of the research variables. This research design is a cross-sectional study, with observations conducted over a specific period of time.

The sampling technique used was purposive sampling. The minimum sample size recommended for this study is five times the number of indicators or observations (Hair et al., 2019). The number of samples in this study was 38 indicators multiplied by 5, resulting in 190 research samples according to the inclusion criteria. Inclusion criteria in this study were patients of Tambak Maternity and Child Hospital, general and insurance patients, outpatient treatment more than twice, aged 18 years and above, have accessed the Instagram account of Tambak Central Jakarta Maternity Hospital, and are willing to be research respondents.

4. Results and Discussion

Analysis Requirements Testing

Discriminant validity functions to determine whether a construct or each variable has distinct characteristics, meaning that it is empirically different and distinguishable from other variables

Table 1. HTMT(Heterotrait-Monotrait Ratio).

	PEN	PEX	PL
PEX	0,736		
PL	0,678	0,674	
SMM	0,545	0,649	0,602

Based on the results of the discriminant validity test presented in the table above, none of the HTMT values between constructs exceed 0.90, or all values are below 0.90. Therefore, all constructs in the PLS model meet the required criteria for discriminant validity. Social media marketing, patient experience, patient engagement, and patient loyalty each demonstrate distinct characteristics and do not overlap with one another. Based on the results of the discriminant validity assessment, it can be concluded that the PLS outer model has fulfilled the required discriminant validity criteria. After completing the evaluation of the outer model, the analysis can then proceed to the inner model stage

Reliability Test Analysis

Table 2. Reliability Test Results.

Variables	Cronbach's Alpha	Composite Reliability	Description
<i>Social Media Marketing</i>	0,932	0,942	Reliabel
<i>Patient Experience</i>	0,929	0,938	Reliabel
<i>Patient Engagement</i>	0,908	0,926	Reliabel
<i>Patient Loyalty</i>	0,828	0,886	Reliabel

Based on the analysis results presented in the table above, the Cronbach’s Alpha coefficients for all variables are greater than 0.60 and the Composite Reliability values exceed 0.70. Therefore, all variables in this study are considered reliable. Based on the overall results of the validity and reliability tests in the outer model evaluation stage, it can be concluded that all variables are valid and reliable in measuring their respective constructs. Consequently, the analysis can be continued to the next stage, namely the inner model evaluation.

Hypothesis Testing

Testing hypothesis in study This use mark path coefficient, t- statistics, and p-values. Hypothesis testing done to 256 respondents with help software SmartPLS (Partial Least Square) which can seen from results bootstrapping. Rules of thumb used in research This is t- statistic > 1.96 or mark p-value < 0.05 (5%) is acceptable conclude existence influence significant between variable free and variable bound.

Table 3. Simultaneous Test.

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig
Regression	256.116	3	85.372	51.000	,000 ^b
Residual	311.357	186	1.674		
Total	567.474	189			

Based on Table , the calculated F-value is 51.000 with a significance value of 0.000 (< 0.05). Therefore, it can be concluded that social media marketing, patient experience, and patient engagement simultaneously have a significant effect on patient loyalty.

Table 4. Hypothesis *Dirrect Effect*.

	Original Sample (O)	T Statistics	P Values	Conclusion
SMM → PL	0,233	3,291	0,001	Accepted
PEX → PL	0,261	3,112	0,002	Accepted
PEN → PL	0,298	3,854	0,000	Accepted
SMM → PEN	0,154	2,051	0,041	Accepted
PEX → PEN	0,588	8,254	0,000	Accepted

Based on table presents the original sample values, T-statistics, and P-values obtained from data analysis using the PLS-SEM (Partial Least Squares–Structural Equation Modeling) method. The results indicate that social media marketing, patient experience, and patient engagement each have a positive and significant effect on patient loyalty. Social media marketing shows a significant influence on patient loyalty ($p = 0.001$; $T = 3.291$), followed by patient experience ($p = 0.002$; $T = 3.112$) and patient engagement ($p = 0.000$; $T = 3.854$). These findings suggest that improvements in social media marketing, patient experience, and patient engagement contribute to higher levels of patient loyalty.

Furthermore, the analysis demonstrates that social media marketing and patient experience positively and significantly affect patient engagement. Social media marketing has a significant effect on patient engagement ($p = 0.041$; $T = 2.051$), while patient experience shows a stronger influence on patient engagement ($p = 0.000$; $T = 8.254$). This indicates that better implementation of social media marketing strategies and improved patient experiences enhance patient engagement, which in turn strengthens patient loyalty.

Tabel 5. Hypotesis Indirect Effect.

	Original Sample(O)	T Statistics (O/STDEV)	p Values	Description
SMM → PEN → PL	0,046	1,797	0,073	Rejected
PEX → PEN → PL	0,175	3,422	0,001	Accepted

Based on the test results presented in the table above, patient engagement does not mediate the effect of social media marketing on patient loyalty, as indicated by a p-value of 0.073 (> 0.05) and a T-statistic of 1.797 (< 1.96). This suggests that the presence of patient engagement does not enhance the influence of social media marketing on patient loyalty. In contrast, patient engagement is able to mediate the effect of patient experience on patient loyalty, as shown by a p-value of 0.001 (< 0.05) and a T-statistic of 3.422 (≥ 1.96). This indicates that patient engagement strengthens the influence of patient experience on patient loyalty..

Discussion

The findings of this study indicate that social media marketing has a positive and significant effect on patient loyalty. This result suggests that effective use of social media platforms enables hospitals to build stronger relationships with patients, enhance brand visibility, and foster trust. When patients perceive hospital social media content as informative, interactive, and responsive, they are more likely to remain loyal and recommend the hospital to others.

Patient experience was also found to have a significant positive effect on patient loyalty. This confirms that patients’ overall perceptions of service quality—ranging from registration processes to interactions with medical staff—play a crucial role in shaping loyalty. A positive experience creates emotional satisfaction, which encourages patients to repeatedly use hospital services.

Furthermore, patient engagement demonstrated a significant positive influence on patient loyalty. Engaged patients tend to feel emotionally connected to the hospital, actively participate in their care, and develop a stronger sense of attachment. This engagement ultimately translates into higher loyalty and long-term relationships with the healthcare provider.

The results also show that social media marketing significantly affects patient engagement. This implies that social media serves not only as a promotional tool but also as a platform for interaction, dialogue, and relationship-building. Interactive content, timely responses, and consistent communication can encourage patients to engage more actively with the hospital.

Patient experience was found to have a strong positive effect on patient engagement. This finding highlights that meaningful experiences during healthcare service delivery encourage patients to become more involved, provide feedback, and participate in communication with the hospital. Positive encounters reinforce emotional bonds and trust.

However, patient engagement was not able to mediate the relationship between social media marketing and patient loyalty. This suggests that social media marketing may influence patient loyalty directly, without necessarily requiring active engagement as an intermediary. Informational content and brand exposure alone may already be sufficient to shape loyalty perceptions.

In contrast, patient engagement successfully mediated the effect of patient experience on patient loyalty. This indicates that a positive patient experience enhances loyalty more effectively when it encourages patients to become actively engaged. Engagement strengthens emotional connections, amplifying the impact of experience on loyalty outcomes.

These findings support relationship marketing theory, which emphasizes the importance of interaction and emotional bonds in sustaining long-term customer relationships. In healthcare, patient engagement acts as a bridge that transforms service experiences into loyal behaviors.

From a managerial perspective, the results suggest that hospitals should prioritize improving patient experience as a strategic approach to enhancing engagement and loyalty. Efficient service processes, empathetic staff behavior, and timely service delivery are essential factors in achieving this goal.

Additionally, hospital management should optimize social media strategies by focusing on consistent, transparent, and patient-centered communication. While engagement may not mediate its effect on loyalty, social media remains a powerful tool for shaping patient perceptions and strengthening institutional image.

The findings also highlight the importance of integrating digital marketing strategies with service quality improvement. Hospitals that align online communication with offline service excellence are more likely to achieve sustainable patient loyalty.

Finally, this study contributes to the healthcare marketing literature by demonstrating the distinct roles of patient experience and patient engagement in influencing loyalty. It provides empirical evidence that engagement is a critical mechanism through which patient experience translates into long-term loyalty, particularly in hospital settings.

5. Comparison

The findings of this study are consistent with previous research that emphasizes the importance of social media marketing, patient experience, and patient engagement in enhancing patient loyalty. Several prior studies have reported that effective social media marketing directly strengthens patient loyalty by increasing trust and hospital visibility, while positive patient experiences significantly improve loyalty through emotional satisfaction and service quality perceptions. In line with earlier research, this study also confirms that patient engagement plays a crucial role in strengthening patient loyalty. However, unlike some previous studies that found patient engagement to fully mediate the relationship between social media marketing and loyalty, the present study reveals that patient engagement does not mediate this relationship, indicating a direct influence of social media marketing on loyalty. Conversely, the mediating role of patient engagement in the relationship between patient experience and patient loyalty aligns with earlier findings, suggesting that patient engagement serves as a key mechanism through which service experiences are transformed into long-term loyalty in healthcare settings..

6. Conclusions

This study concludes that social media marketing, patient experience, and patient engagement simultaneously have a significant influence on patient loyalty at Tambak Mother and Child Hospital, Central Jakarta. These findings indicate that patient loyalty is not solely determined by clinical service quality, but is also shaped by effective digital marketing strategies and patients' overall service experiences. Therefore, efforts to enhance patient loyalty should be implemented through an integrated approach that combines service excellence with strategic communication.

Partially, social media marketing and patient experience were found to have a positive and significant effect on patient loyalty. In addition, both variables significantly influence patient engagement. This suggests that informative and interactive social media content, along with positive patient experiences throughout the service process, can strengthen patients' emotional and cognitive attachment to the hospital. Patients who perceive high-quality experiences and meaningful interactions are more likely to revisit the hospital and recommend it to others.

Furthermore, this study confirms that patient engagement serves as a mediating variable in the relationship between social media marketing and patient experience with patient loyalty. This indicates that the influence of social media marketing and patient experience on patient

loyalty becomes stronger when patients are actively engaged. These findings highlight the importance of patient engagement as a key strategic factor in fostering long-term patient loyalty, emphasizing the need for hospital management to focus on strengthening patient interactions, emotional connections, and participatory experiences throughout healthcare service delivery.

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