

The Effect of Empathy in Improving Patient Behavioral Retention Through Patient Satisfaction and Perceived Quality at the BPJS Pamularsih Clinic, Semarang

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Abstract. Ensuring the continuity of BPJS patient visits to primary healthcare facilities holds significant importance within the competitive landscape of the healthcare industry. The ability of healthcare professionals to demonstrate empathy emerges as a key determinant influencing patients' continued utilization of healthcare services, as it maximizes patient satisfaction and subsequently fosters behavioral retention. This study aims to examine the influence of empathy on patient behavioral retention through the mediating role of patient satisfaction and the moderating role of perceived quality in the research model, specifically focusing on BPJS patients at Klinik Pratama Pamularsih in Semarang City. This research employs a quantitative approach with an explanatory research design. The study population consists of patients using BPJS services at Klinik Pratama Pamularsih. A purposive sampling technique was utilized to select 100 respondents for this study. Data collection was conducted through questionnaires, and the data were analyzed using Structural Equation Modeling (SEM) based on Partial Least Square (PLS). The findings reveal that healthcare worker empathy and perceived quality serve as strategic factors in enhancing patient satisfaction and sustaining BPJS patient loyalty. Consequently, enhancing the quality of interpersonal interactions and implementing empathy-based services should be prioritized as a key focus for clinic management.

Keywords: Empathy; Patient; Quality; Satisfaction.

1. Introduction

Indonesia's social security system has undergone significant transformation since 2014 with the introduction of the National Health Insurance (JKN), managed by the Social Security Agency (BPJS). Under the legal umbrella of Law No. 24/2011, this agency serves a dual function through its Health and Employment units. The government's mandatory participation policy demonstrates JKN's role as a key instrument for national health protection.

Based on BPJS Kesehatan Regulation No. 1/2017, First-Level Health Facilities (FKTP) serve as

providers of non-specialist primary care. Their services are comprehensive, ranging from preventive and promotive measures to medical procedures such as diagnosis, observation, and basic care. Entities classified as FKTP include community health centers (Puskesmas), primary health clinics, type D hospitals, and independent physician practices. Quality improvement at this level relies not only on expanding reach but also on optimizing the patient experience as a key indicator of public service effectiveness (Agustina et al., 2023).

Semarang City's healthcare network in 2021 demonstrated strong integration with the BPJS Kesehatan system, serving more than 1.5 million participants. The facilities available include hundreds of primary and referral health facilities, complete with supporting pharmaceutical and laboratory infrastructure. Clinics, as a vital component of this system, serve as a focal point for residents seeking efficient and quality care. The primary function of clinics encompasses a comprehensive spectrum of healthcare services, from promotive and preventive measures to curative and rehabilitative measures for patients.

Pamularsih Primary Clinic is a clinic located in Semarang City that collaborates with BPJS Kesehatan (Social Security Agency for Health). This clinic was selected as a research site because it demonstrated dynamic changes in the number of participants over the past six months. Data on the fluctuation in participant numbers are as follows:

Table Number of visits in 2025

<i>Month</i>	<i>Number of participants</i>
<i>February</i>	<i>506</i>
<i>March</i>	<i>556</i>
<i>April</i>	<i>409</i>
<i>May</i>	<i>435</i>
<i>June</i>	<i>439</i>
<i>July</i>	<i>481</i>

Source: Internal Pamularsih Primary Clinic

This phenomenon indicates a possible gap between patient expectations and the actual quality of service at the Pamularsih Primary Clinic. This study uses empathetic perception to analyze the quality of service provided to ensure it meets patient expectations. If a gap analysis is not conducted, a decline in patient numbers may recur. This condition is caused by the clinic's inability to meet patient expectations, which significantly influences patients' decisions to continue using or abandoning the clinic's services. This will automatically impact the clinic's revenue.

The increasing number of patients seeking treatment at the Primary Clinic presents a challenge in improving the quality of healthcare services. Naturally, this increase in patient volume increases the workload of staff, often making it difficult for them to greet and smile at patients. This can potentially lead to patient dissatisfaction due to the unfriendly professionalism of healthcare workers. Satisfied patients tend to continue using the same healthcare facility for care. Individuals consistently choose healthcare facilities deemed competent in meeting their specific needs and quality expectations.

Batson (2020) stated that empathy can foster positive reactions in social interactions, particularly in healthcare. Furthermore, the Service Quality Framework proposed by Parasuraman et al. (2021) can be used to understand how perceptions of service quality impact patient satisfaction.

The correlation between medical practitioners' empathy and user satisfaction has been a focus of much academic literature. Significant evidence was presented by Hossain et al. (2022), who asserted that displays of empathy from healthcare staff consistently stimulate positive responses and patient satisfaction in hospital settings. However, a gap remains in the literature regarding the mediating role of patient satisfaction and perceived quality of BPJS Kesehatan services in primary care clinics. This study aims to fill this gap by offering a more in-depth perspective on patients' subjective experiences.

2. Research Methods

This study adopted an explanatory design with an associative approach, constructed to test hypotheses and strengthen the theoretical basis underlying the study. According to Zulganef (2018), associative research aims to analyze the patterns of relationships between two or more variables. In this context, the researcher sought to identify the causal relationship between healthcare worker empathy (the independent variable) and behavioral retention (the dependent variable), by using patient satisfaction and perceived quality as mediating variables.

3. Results and Discussion

3.1. Overview of Pamularsih Primary Clinic

Pamularsih Primary Clinic is one of the primary health care facilities in Semarang City. It operates as part of a primary health care network, focusing primarily on providing primary healthcare services to the local community. It collaborates with the National Health Insurance (JKN) program. It provides comprehensive healthcare services, including general health checks and treatment for mild to moderate illnesses. It also engages in infectious disease prevention and public health education, in accordance with the guidelines of the Indonesian Ministry of Health. It plays a role in early intervention for health issues, including the management of non-emergency cases requiring hospital referral.

Facilities at the Pamularsih Primary Clinic include a general clinic, a dental clinic, a waiting room, a pharmacy, a breastfeeding room, and a prayer room. The clinic is staffed by competent medical practitioners, including general practitioners, nurses, and other members of the medical team. Furthermore, the clinic is equipped with basic medical equipment such as blood pressure monitors, thermometers, and simple diagnostic tools, as well as an electronic health information system for patient data recording. The clinic plays a role in improving the health of the Semarang community with a holistic approach that combines prevention, treatment, and health promotion.

1) Respondent Overview

Table Respondent profile by gender

Gender	Amount	Percentage
Woman	61	61%
Man	49	49%
Total	100	100%

Source: Processed data, 2026

Based on Table, of the 100 respondents obtained, 61 were female (61%) and 49 were male (49%). This finding confirms that the sample characteristics are significantly dominated by female participants. This is acceptable, considering that women tend to be more aware of changes in their health conditions.

Table Frequency of visits per month

Frequency of Visits	Amount	Percentage
1-2 times	33	33%
3-5 times	46	46%
5-7 times	15	15%
8-10 times	4	4%
>10 times	2	2%
Total	100	100%

Source: Processed data, 2026

The data summarized in Table presents a profile of respondents' routine visits, demonstrating a gradation in the frequency of access to medical facilities each month. This distribution of visit frequency indicates how frequently BPJS patients use services, which is important for understanding respondents' experiences and assessments of the services they receive. Respondents were predominantly identified in the group with a medical visit frequency of between 3 and 5 times per month (46%). This indicates that the majority of the analysis unit is a regular service user with adequate interaction experience. This functional proximity allows respondents to provide an in-depth review of the empathetic behavior of healthcare staff, the quality of services received, and the resulting level of satisfaction.

In the category of 8–10 visits per month, there were 4 respondents, while only 2 people visited more than 10 times per month. Although the number of members is not particularly large, this group indicates the presence of patients experiencing certain health conditions and requiring ongoing monitoring and services. Overall, these results indicate that the majority of respondents were patients with medium to high visit frequency. This condition strengthens the accuracy of the research data, as respondents had real and repeated experience in using services, allowing them to honestly assess the level of empathy of healthcare workers, perceived quality of service, patient satisfaction, and their behavioral intentions.

2) Descriptive Analysis of Variables

The purpose of descriptive analysis is to analyze how respondents responded to each question. This analysis is used to describe respondents' responses to questions related to empathy, patient satisfaction, perceived quality, and behavioral retention. In this study, respondents were categorized into score groups based on a scale range using a predetermined formula (Zulganef, 2018).

$$RS = \frac{TR-TT}{Skala} \dots\dots\dots(4.1)$$

Information:

RS= Scale Range Scorehighest = 5

TR = Lowest score Scorelowest = 1

$$TT = \text{Highest score} = \frac{5-1}{5} = 1.33$$

Thus, the interval can be explained as follows:

Interval 1 – 2.33 : Low Category

Interval 2.34 – 3.67 : Medium Category

Interval 3.68 – 5 : High Category

In this section, the researcher describes the direct and indirect relationships between the research variables. This description can be seen in the following results:

1) The Influence of Empathy on Patient Satisfaction

The findings of the test on the empathy variable on patient satisfaction produced a P-value of $0.00 < 0.05$, thus the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. This finding states that there is a positive and significant influence between empathy and patient satisfaction levels. Thus, the test of the first hypothesis was accepted, which revealed that empathy has a positive and significant influence on patient satisfaction.

2) The Influence of Patient Satisfaction on Behavioral Retention

The test findings on patient satisfaction and behavioral retention yielded a P-value of $0.020 < 0.05$, thus rejecting H_0 and accepting H_a . This finding indicates a positive and significant impact between patient satisfaction and behavioral retention. Thus, the test accepts the second hypothesis, which reveals that the level of patient satisfaction has a positive and significant influence on behavioral retention.

3) The Influence of Empathy on Behavioral Retention

The results of the empathy variable test on behavioral retention yielded a P-value of $0.00 < 0.05$, thus H_0 is rejected and H_a is accepted. This finding indicates a positive and significant

influence between empathy and behavioral retention. Thus, the third hypothesis test can be accepted, which reveals that empathy has a positive and significant influence on behavioral retention.

4) The Influence of Perceived Quality on Behavioral Retention

The results of the test of perceived quality on behavioral retention obtained a P-value of $0.02 < 0.05$, which means H_0 is rejected and H_a is accepted. This explanation can be interpreted as a positive and significant influence between perceived quality and behavioral retention. These results can be concluded that the test is able to accept the fourth hypothesis, so the assumption that perceived quality has a positive and significant influence on behavioral retention can be accepted.

Table Summary of R Square Results

No	Information	R Square
1.	<i>Behavioral Retention</i>	0.913
2.	<i>Patient Satisfaction</i>	0.740
3.	<i>Perceived Quality</i>	0.825

Source: PLS Output Data, 2026

Based on the data analysis, the researcher presents a summary of the R-Square results, which can be seen in Table. The coefficient of determination (R-Square) values for each endogenous variable demonstrate a very strong ability of the exogenous variables to explain the endogenous variables. This indicates that the exogenous variables have a significant influence on the endogenous variables in the research model.

The results of the research data analysis show that the R Square for Behavioral Retention is 0.913. This means that 91.3% of the variation in behavioral retention can be explained by the variables empathy, Patient Satisfaction, and Perceived Quality. The remaining 8.7% can be contributed by other variables outside the scope of this study.

The findings of the research data analysis indicate that the R-square for the Patient Satisfaction variable has a value of 0.740. It can be concluded that 74.0% of the variation in patient satisfaction can be explained by the empathy variable. Meanwhile, the remaining 26.0% can be contributed by other variables outside the scope of this research model.

The findings of the research data analysis indicate that the R-square for the Perceived Quality variable has a value of 0.825. This means that 82.5% of the variation in perceived quality can be explained by the Patient Satisfaction variable. The remaining 17.5% can be influenced by other variables outside the scope of this research model.

3.2. Discussion

1) The Influence of Empathy on *Patient Satisfaction*

The research findings indicate that empathy demonstrated by healthcare workers has a

positive and significant impact on patient satisfaction, thus supporting hypothesis H1. This finding demonstrates that when patients experience greater empathy through the attention, care, listening skills, and friendliness of healthcare workers, their satisfaction with services at the BPJS Kesehatan Clinic will also increase.

These findings align with the concept of service encounter theory, which considers empathy a crucial aspect in improving the quality of interactions between service providers and customers. In healthcare, empathy is not only an emotional aspect, but also a crucial component in creating trust and reassurance for patients (Halpern, 2021). Research by Derksen et al. (2022) shows that the level of empathy possessed by healthcare workers is closely related to patient satisfaction, particularly in primary healthcare.

This finding is in line with Nugroho's (2023) study regarding BPJS Health services in Central Java, where they found that empathy shown by health workers was the main factor influencing patient satisfaction, compared to administrative aspects in services. Thus, the findings of this study support the opinion that empathy represents an important factor in increasing patient satisfaction in primary clinics operating within the BPJS Kesehatan system.

However, differences in service contexts can impact the strength of these relationships. At the Pamularsih BPJS clinic, time constraints and the large number of patients can hinder the effective application of empathy. Therefore, this study demonstrates the importance of improving the soft skills of healthcare workers, in addition to their medical skills.

2) Influence *Patient Satisfaction on Behavioral Retention*.

These findings indicate that patient satisfaction has a positive and significant influence on behavioral retention, thus accepting hypothesis H2. These findings reveal that patients who are satisfied with BPJS Kesehatan Clinic services are more likely to return, recommend the clinic to others, and demonstrate loyalty to the healthcare facility.

This phenomenon aligns with Expectation Confirmation Theory (ECT), which explains that customer satisfaction stems from the degree of congruence between their expectations and service performance, thus influencing their willingness to reuse the service in a healthcare context (Li et al., 2022). In healthcare, patient satisfaction serves as a key indicator in evaluating the service experience.

Studies by Al-Harbi et al. (2021) and Putri et al. (2024) revealed that patient satisfaction significantly influences behavioral retention, particularly in the form of repeat visits and patient loyalty to primary healthcare facilities. The results of this study reinforce these findings in the context of BPJS clinics in Indonesia.

The difference in the effect of satisfaction on behavioral intentions may be influenced by the characteristics of BPJS patients, who have limited access to services. Therefore, while satisfaction has a significant impact, external factors such as BPJS regulations and geographic access may also influence patient behavioral retention rates.

3) The Influence of Empathy on *Behavioral Retention*

These findings indicate that empathy displayed by healthcare workers has a positive and significant influence on behavioral retention, and hypothesis H3 is accepted. These findings indicate that empathy not only functions indirectly through patient satisfaction but also has a direct influence on behavioral retention.

These findings align with the concept of relationship marketing in healthcare, which states that the quality of interpersonal relationships between healthcare professionals and patients can create emotional bonds that directly impact patient loyalty (Berry & Bendapudi, 2022). Empathy creates positive emotional experiences that encourage patients to return to services, despite limitations in available facilities.

Zhou et al.'s (2023) research revealed that empathy from medical personnel can directly increase patients' intention to revisit, even at moderate levels of patient satisfaction. This statement supports the findings of this study, which demonstrates that empathy plays a significant role in shaping BPJS patient retention behavior.

However, these findings offer a different perspective from previous research that viewed empathy solely as an antecedent to satisfaction. This difference indicates that in the context of public healthcare services like BPJS, emotional aspects are far more crucial than purely functional ones.

4) Connection *Patient Satisfaction on Behavioral Retention is moderated by Perceived Quality*

The analysis results show that perceived quality moderates the relationship between patient satisfaction and behavioral retention, thus accepting hypothesis H4. This means that the influence of patient satisfaction on behavioral intention will be stronger when perceived service quality is at a high level.

The phenomena found in this study align with the theory of perceived service quality, which suggests that perceived quality serves as an evaluation tool that can strengthen or weaken the influence of customer satisfaction on their behavior (Wirtz et al., 2021). In healthcare, perceived quality encompasses patients' perceptions of the capabilities of medical personnel, the facilities provided, and the consistency and reliability of the services provided.

Kim and Lee's (2022) study demonstrated that perceived quality serves as a catalyst in the relationship between patient satisfaction and loyalty to primary healthcare services. This finding expands on previous studies in the context of BPJS Kesehatan (Indonesian Health Insurance) in primary care clinics.

This phenomenon demonstrates that relying solely on satisfaction is insufficient as a primary driver of patient behavior intensity if it is not supported by a positive perception of the quality of service received. Therefore, improving facilities and service quality at clinics is a crucial factor in strengthening the impact of patient satisfaction.

4. Conclusion

Referring to the results of data processing using the PLS technique involving 100 BPJS patients as respondents, the points of conclusion of this study are described below: Empathy has a positive and significant impact on patient satisfaction. Research findings indicate that empathy from healthcare workers has a strong influence on increasing patient satisfaction. The greater the empathy demonstrated through attention, nonverbal support, and the ability to respond to patients' emotions, the higher the level of patient satisfaction with the services provided. This demonstrates that emotional factors in healthcare play a crucial role in shaping positive service experiences. *Patient satisfaction* has a positive and significant impact on behavioral retention. Patient satisfaction has been shown to encourage positive behavioral intentions, such as returning, recommending the clinic to others, and building long-lasting loyalty. Therefore, patient satisfaction plays a crucial role in maintaining patient trust amidst intense competition in healthcare. Empathy has a positive and significant effect on Behavioral Retention.

Empathy not only indirectly influences patient satisfaction but also directly impacts behavioral retention. Good emotional interactions between healthcare professionals and patients can create a psychological bond that strengthens the patient's desire to continue using the clinic's services. *Perceived quality* has a positive and significant impact on patient satisfaction and behavioral retention. Patient perceptions of service quality, including facility conditions, speed of service delivery, interpersonal relationships, and the capabilities of healthcare professionals, have been shown to increase patient satisfaction and positive behavioral intentions. The greater a patient's awareness of the quality of care provided, the greater their likelihood of satisfaction and continued engagement with the clinic.

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