

THE EFFECT OF WAITING TIME AND INFORMATION CLARITY ON BPJS OUTPATIENT SATISFACTION WITH PATIENT TRUST AS A MEDIATING VARIABLE AT SPN CLINIC PURWOKERTO

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Abstract

Patient satisfaction is a key indicator of healthcare service quality, especially in the context of insured outpatient services such as BPJS in Indonesia. This study examines the effect of waiting time and information clarity on BPJS outpatient satisfaction, with patient trust as a mediating variable, at Klinik SPN Purwokerto. A quantitative survey was conducted using a closed-ended Likert-type questionnaire distributed to 120 BPJS outpatients selected through purposive sampling. Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS. The results show that all seven hypotheses are supported. Waiting time has a positive and significant effect on patient trust and patient satisfaction. Information clarity has a positive and significant effect on patient trust and patient satisfaction. Patient trust positively and significantly affects patient satisfaction. Patient trust also significantly mediates the effects of waiting time and information clarity on patient satisfaction, indicating partial mediation in both pathways. The model explains 52.0% of the variance in patient trust and 57.0% of the variance in patient satisfaction. The findings suggest that improving operational efficiency in waiting time and the quality of information communication can simultaneously strengthen patient trust and satisfaction in BPJS outpatient services.

Keywords: Waiting time; information clarity; patient trust; patient satisfaction; BPJS outpatient

INTRODUCTION

Patient satisfaction is often used as a benchmark for assessing the success of healthcare services provided by a healthcare facility. This assessment not only reflects the final outcome of medical procedures but also reflects the patient's experience during the service. In a health insurance-based healthcare system like BPJS, this experience becomes even more important because patients consider not only the clinical aspects but also the overall service process (Darmawan et al., 2022; Wardani & Guntari, 2024).

Patient experiences with healthcare services are influenced by various non-medical factors, such as speed of service, clarity of information, and interactions with healthcare professionals. One aspect that is often a major concern is waiting time. The length of time a patient must wait from registration to receiving care often influences their perception of service quality. Not only the actual duration, but also how patients perceive and evaluate the waiting process also plays a role in shaping the service experience (Ma et al., 2019; Xie & Or, 2017). If waiting time is not managed well, it can reduce overall patient comfort and satisfaction (Lewis et al., 2018). In the context of BPJS services in Indonesia, waiting time issues are still frequently encountered, particularly in administrative processes and pharmaceutical services (Wardani & Guntari, 2024; Wulandari et al., 2025).

In addition to waiting time, clarity of information is also a crucial factor in determining how patients perceive the care they receive. Clear and easily understood information helps patients

understand their health condition, treatment procedures, and post-treatment steps. Good communication between healthcare professionals and patients can reduce uncertainty and increase trust in the care provided (Asan et al., 2021). Several studies have also shown that patient-centered communication contributes to increased trust and satisfaction with healthcare services (Hong & Oh, 2020; Jameel et al., 2025).

Trust plays a crucial role in the relationship between service experience and patient satisfaction. Patients tend to build trust based on their experiences during the service process, both in terms of waiting times and clarity of information. This trust then influences how patients evaluate the overall quality of care (Chang et al., 2013; W. Chen et al., 2020; Shan et al., 2016). When patients feel confident in the competence and integrity of healthcare providers, they tend to rate the care they receive more positively (Ward et al., 2017).

Although numerous studies have been conducted on waiting time, information clarity, and patient satisfaction, studies combining these three variables and incorporating trust as a mediating variable are limited, particularly in BPJS outpatient services at primary healthcare facilities. Therefore, this study aims to analyze the effect of waiting time and information clarity on patient satisfaction, with trust as a mediating variable.

This research was conducted at the SPN Purwokerto Clinic, a first-level healthcare facility partnered with BPJS Kesehatan (Indonesian Social Security Agency for Health). The clinic plays a crucial role in providing basic healthcare services to the community, while also serving members of the Indonesian National Police (Polri) and their families. With diverse patient populations, the clinic faces challenges in managing service flow and conveying clear information to patients. These conditions make the SPN Purwokerto Clinic a relevant location to examine the relationship between waiting time, information clarity, trust, and patient satisfaction.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

The Impact of Waiting Time on Patient Confidence

Waiting times in healthcare services are not only related to the length of the process a patient must go through, but also reflect how the service system is managed. When patients are made to wait for long periods without adequate explanation, this can cause discomfort and erode trust in the service provided. Conversely, well-managed wait times can convey the impression that services are running smoothly and professionally. (Ward et al., (2017). Thus, the better the waiting time management, the greater the likelihood of increased patient trust in healthcare providers. Based on the explanation and results of previous research, the hypothesis in this study is:

H1: Shorter waiting times have a positive impact on patient confidence.

The effect of waiting time on patient satisfaction

Waiting time is one factor that often influences patient satisfaction levels. Patients generally have certain expectations regarding the speed of service. When the perceived wait time exceeds these expectations, patient satisfaction tends to decline. Conversely, faster service or service that meets expectations can increase patient satisfaction. (Wulandari et al., 2025), (Mosleh et al., 2025) And (Zhang et al., 2023). Different studies have concluded that waiting time significantly impacts patient satisfaction, even when service is slow (Chollom & Pwol, 2024). Furthermore, patient perceptions of waiting time are often more influential than actual waiting times. This suggests that managing patient expectations is also crucial for improving satisfaction (Ma et al., 2019). Therefore, shorter, well-managed waiting times are expected to positively impact patient satisfaction. Based on the explanation and results of previous research, the hypothesis in this study is:

H2: Shorter waiting times have a positive effect on patient satisfaction.

The Influence of Information Clarity on Patient Trust

Information clarity relates to the ability of healthcare professionals to convey information that is easily understood by patients. Clear information can help reduce uncertainty and improve patient understanding of their health condition and treatment process. Effective communication has been shown to play a role in increasing patient trust in healthcare professionals as sources of information (Asan et al., (2021). Furthermore, transparent and consistent information delivery also strengthens patient confidence that the services provided are trustworthy (Hong & Oh, 2020). Therefore, the clearer the information received, the higher the patient's level of trust. Based on the explanation and results of previous research, the hypothesis in this study is:

H3: Clarity of information has a positive effect on patient trust.

The Influence of Information Clarity on Patient Satisfaction

Clarity of information plays a significant role in improving patient satisfaction. Patients who receive clear and complete information tend to feel a better understanding of their condition and are better prepared for treatment. This results in increased comfort and satisfaction with the services received (Jameel et al., 2025). Previous research found a significant positive correlation between the quality of medical information communication and outpatient satisfaction (X. Chen et al., 2025). Other research has found that clarity of information significantly influences patient satisfaction. Conversely, a lack of clarity of information can lead to confusion and dissatisfaction. Therefore, good information delivery is a crucial factor in improving service quality and patient satisfaction (Wulandari et al., 2025). Based on the explanation and results of previous research, the hypothesis in this study is:

H4: Clarity of information has a positive effect on patient satisfaction.

The Influence of Patient Trust on Patient Satisfaction

Trust is a crucial factor in the relationship between patients and healthcare providers. In many situations, patients lack the ability to directly assess the technical quality of care, so they rely on trust as the basis for evaluating care.(W. Chen et al., 2020).

Previous research has Shan et al., (2016) dan Chang et al., (2013) shown that trust has a significant influence on patient satisfaction, with patients with high levels of trust tending to be more satisfied with the services they receive. Therefore, trust is expected to have a positive effect on patient satisfaction. Based on the explanation and results of previous research, the hypothesis in this study is:

H5: Patient trust has a positive effect on patient satisfaction.

Patient trust as a mediator in the relationship between waiting time and clarity of information with patient satisfaction

Patient trust can serve as a bridging variable between service experience and satisfaction. Experiences such as wait times and clarity of information not only directly impact satisfaction but also influence patient trust levels. This trust, in turn, strengthens patient satisfaction with the service (Jameel et al., 2025)received (Hidayat, 2024).

Chang et al., (2013) found that patient trust acts as a mediating variable linking service interactions with satisfaction, while(Jameel et al., 2025) showed that patient trust mediates the relationship between practitioner communication and patient satisfaction. Thus, patient trust is expected to mediate the relationship between waiting time and satisfaction, as well as between information clarity and patient satisfaction. Based on the explanation and results of previous research, the hypothesis in this study is:

H6: Patient trust mediates the relationship between waiting time and patient satisfaction.

H7: Patient trust mediates the relationship between information clarity and patient satisfaction.

The relationship between waiting time and clarity of information on patient satisfaction with patient trust as a mediator is described in the following research model.

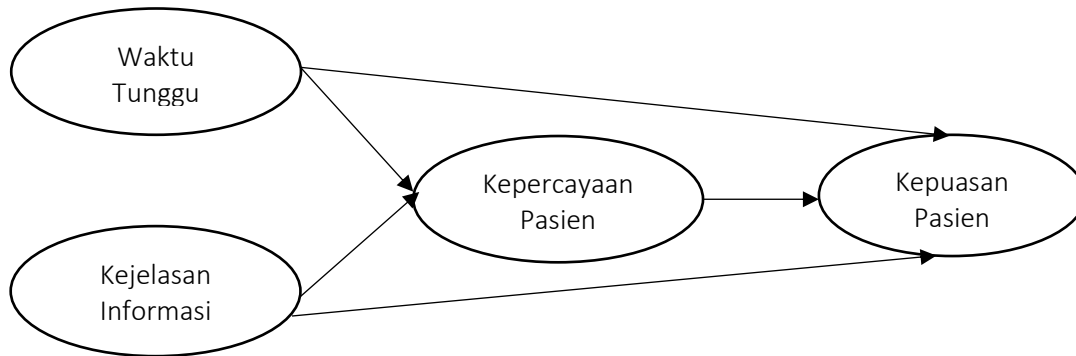


Figure 1 Research Model

RESEARCH METHODS

This research was conducted at the SPN Purwokerto Clinic , with the research subjects being outpatients participating in the National Health Insurance (JKN) . A questionnaire survey was conducted on 120 respondents using a *purposive sampling method* . Data collection was carried out by distributing closed questionnaires using a 5-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree” (5). The research instrument was compiled based on indicators that have been validated in previous studies.

The data analysis technique used is Structural Equation Modeling–Partial Least Square (SEM–PLS) with the help of SmartPLS software. This model is used to test the causal relationship between variables and the mediating effect simultaneously and the selection of analysis tools because it can analyze measurement and structural models simultaneously and does not require normal distribution of data (Hair et al., 2019).

Table 1 Constructs and Measurement

Variable Types	Variable Name	Operational Definition & Indicators
Independent Variables	Waiting Time (X_1)	Wait time is a patient's perception of the length of time between arrival at a healthcare facility and completion of care. This concept encompasses not only objective duration but also the patient's subjective experience of the efficiency of the service flow and the timeliness of expectations, measured through five indicators: 1. registration speed a. The registration process is fast and straightforward. b. Registration queue time is still within reasonable limits. 2. waiting time for examination a. didn't wait long before being checked. b. Patient services are carried out in an orderly manner according to sequence. 3. timeliness of information a. Waiting time as informed. b. The clinic provides clear waiting time estimates. 4. service flow efficiency a. The service flow is easy to follow. b. There is no accumulation of patients in one service. 5. waiting time for medication. a. The waiting time for medication is relatively short.

Variable Types	Variable Name	Operational Definition & Indicators
		b. The drug taking process is systematic.
	Information Clarity (X ₂)	Clarity of information is the level of patient understanding of medical and administrative information conveyed by health workers, including aspects of clarity, completeness, consistency, and ease of information to be understood and used in making health-related decisions, including 5 indicators: 1. Clarity of diagnosis a. The doctor explained the condition of the disease clearly. b. The language used is easy to understand. 2. Clarity of treatment procedures a. understand the treatment procedures being undertaken. b. The explanation of medical procedures is provided in detail. 3. Drug information a. The officer explains how to use the medicine. b. Information on drug side effects is provided. 4. clarity of follow-up instructions a. The re-control instructions are clearly explained. b. Understanding what to do after treatment. 5. communication and opportunity to ask questions a. given the opportunity to ask questions b. The officer answered the questions clearly.
Mediating Variables	Patient Trust (M)	Patient trust is the patient's belief in the competence, integrity, and good intentions of health workers and institutions in providing safe, honest, and patient-oriented services, measured through 4 indicators: 1. trust in the competence of doctors/nurses a. Trust that health workers have good competence. b. Health workers look professional in their work 2. trust in the honesty of information a. The information provided feels honest. b. Trust the explanation given. 3. trust in the clinical service system a. The clinic service system is reliable. b. The clinic prioritizes patient interests. 4. sense of security in undergoing treatment a. Feel safe during treatment. b. The clinic environment is comfortable.
Dependent Variable	Patient Satisfaction (Y)	Patient satisfaction is a patient's overall evaluation of the service experience received, which arises from a comparison between expectations before receiving the service and the service performance perceived after the service is provided, measured through 5 indicators: 1. Satisfaction with administrative services a. Satisfied with the registration process b. Satisfactory administrative services. 2. Satisfaction with medical services a. Satisfied with the doctor's service. b. Medical services as expected. 3. Information satisfaction a. Satisfied with the information provided

Variable Types	Variable Name	Operational Definition & Indicators
		b. Understand the patient's condition well.
		4. Waiting time satisfaction
		a. The waiting time is still acceptable.
		b. The service doesn't take too long.
		5. Overall satisfaction.
		a. Overall satisfied.
		b. Willing to return for treatment at this clinic.

RESULTS AND DISCUSSION

Before testing the relationship between latent variables, the initial step in the SEM-PLS approach is to test the feasibility of the measurement model (outer model) to ensure that the indicators used are valid and reliable. Convergent validity is assessed from the outer loading and Average Variance Extracted (AVE) values, while construct reliability is evaluated through Cronbach's Alpha and Composite Reliability values. According to Hair et al., (2019), an indicator is declared valid if it has an outer loading ≥ 0.70 and AVE ≥ 0.50 , and reliable if the Composite Reliability and Cronbach's Alpha values ≥ 0.70 .

Table 2 Outer Loading

Variables	Items	Outer Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Patient Trust	K1	0.791	0.916	0.916	0.630
	K2	0.800			
	K3	0.788			
	K4	0.770			
	K5	0.819			
	K6	0.781			
	K7	0.809			
	K8	0.793			
Clarity of Information	KI1	0.708	0.913	0.915	0.560
	KI2	0.727			
	KI3	0.727			
	KI4	0.769			
	KI5	0.795			
	KI6	0.765			
	KI7	0.770			
	KI8	0.769			
	KI9	0.703			
	KI10	0.743			
Patient Satisfaction	KP1	0.766	0.938	0.940	0.645
	KP2	0.801			
	KP3	0.797			
	KP4	0.869			
	KP5	0.825			
	KP6	0.853			
	KP7	0.783			
	KP8	0.840			
	KP9	0.744			
	KP10	0.741			
Time Wait	WT1	0.826	0.929	0.931	0.610
	WT2	0.739			

Variables	Items	Outer Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
	WT3	0.739			
	WT4	0.806			
	WT5	0.820			
	WT6	0.733			
	WT7	0.834			
	WT8	0.772			
	WT9	0.743			
	WT10	0.792			

The measurement model assessment in Table 2 shows that all indicators meet the recommended criteria for convergent validity and internal consistency reliability. All outer loading values exceed 0.70, indicating that each indicator adequately represents its respective construct. In addition, the AVE values for patient trust (0.630), information clarity (0.560), patient satisfaction (0.645), and waiting time (0.610) are all above 0.50, indicating that each construct explains more than half of the variance in its indicator. Cronbach's Alpha and Composite Reliability values for all constructs are also above 0.90, indicating that the measurement scale used in this study is highly reliable.

Table 3 presents the results of discriminant validity testing using the Fornell-Larcker Criterion approach, namely by comparing the square root of the Average Variance Extracted (VAVE) value of each construct with the correlation between constructs. A construct is said to have good discriminant validity if the VAVE value is higher than the correlation value between other constructs (Hair et al., 2019).

Table 3. Discriminant Validity (Fornell-Larcker Criterion Method)

Variables	Clarity of Information	Patient Trust	Patient Satisfaction	Waiting Time
Clarity of Information	<u>0.748</u>			
Patient Trust	0.613	<u>0.794</u>		
Patient Satisfaction	0.588	0.666	<u>0.803</u>	
Waiting Time	0.381	0.584	0.617	<u>0.781</u>

The discriminant validity test using the Fornell–Larcker criterion, shown in Table 3, also showed satisfactory results. The square root of the AVE for each construct was higher than its correlation with other constructs, indicating that each latent variable was empirically distinct from the others. This finding confirms that waiting time, information clarity, patient trust, and patient satisfaction encompass distinct conceptual domains and are suitable for further structural model testing.

Table 4 presents the R-Square (R^2) and Q-Square (Q^2) values for the endogenous variables in the model, namely patient trust and patient satisfaction. The R-Square value indicates how much of the variance of the endogenous construct can be explained by the exogenous construct, while the Q-Square measures the predictive ability of the model based on the blindfolding technique (Hair et al., 2019).

Table 4. R-Square (R^2) and Q-Square (Q^2)

Variables	R-Square	Q-Square
Trust	0.520	0.321
Patient Satisfaction	0.570	0.357

The analysis results in Table 4 provide information that the structural model exhibits moderate explanatory power. The R-squared value of 0.520 for patient trust indicates that waiting

time and information clarity explain 52.0% of the variance in patient trust. Meanwhile, the R-squared value of 0.570 for patient satisfaction indicates that waiting time, information clarity, and patient trust together explain 57.0% of the variance in patient satisfaction. The Q-squared values of 0.321 for patient trust and 0.357 for patient satisfaction further indicate that the model has adequate predictive relevance.

Table 5 presents the results of hypothesis testing which include the path coefficient value, t-statistic value, and p-value of the relationship between latent variables.

Table 5 Results of the Direct and Mediation Effect Hypothesis Tests

Variable Relationship	β (Beta)	Standard Deviation	T statistics	P values	Hypothesis Conclusion
Direct Influence					
Waiting Time -> Patient Trust	0.410	0.079	5,204	0.000	Accepted
Waiting Time -> Patient Satisfaction	0.336	0.097	3,467	0.001	Accepted
Information Clarity -> Patient Trust	0.458	0.068	6,759	0.000	Accepted
Information Clarity -> Patient Satisfaction	0.275	0.079	3,494	0.000	Accepted
Patient Trust -> Patient Satisfaction	0.301	0.103	2,916	0.004	Accepted
Mediating Effect					
Waiting Time -> Patient Trust -> Patient Satisfaction	0.123	0.051	2,420	0.016	Accepted
Information Clarity -> Patient Trust -> Patient Satisfaction	0.138	0.052	2,677	0.007	Accepted

The results of the hypothesis testing showed that all direct and indirect relationships were positive and statistically significant. Clarity of information had the strongest direct effect on patient trust ($\beta = 0.458$; $p = 0.000$), followed by waiting time ($\beta = 0.410$; $p = 0.000$). This suggests that, in this context, clarity of communication plays a slightly more important role than waiting time in building patient trust. For patient satisfaction, waiting time ($\beta = 0.336$; $p = 0.001$), clarity of information ($\beta = 0.275$; $p = 0.000$), and patient trust ($\beta = 0.301$; $p = 0.004$) all had significant positive effects. In addition, patient trust significantly mediated the relationship between waiting time and satisfaction ($\beta = 0.123$; $p = 0.016$) as well as the relationship between clarity of information and satisfaction ($\beta = 0.138$; $p = 0.007$). Since both direct and indirect effects remain significant, the mediation can be interpreted as partial mediation (Hair et al., 2019).

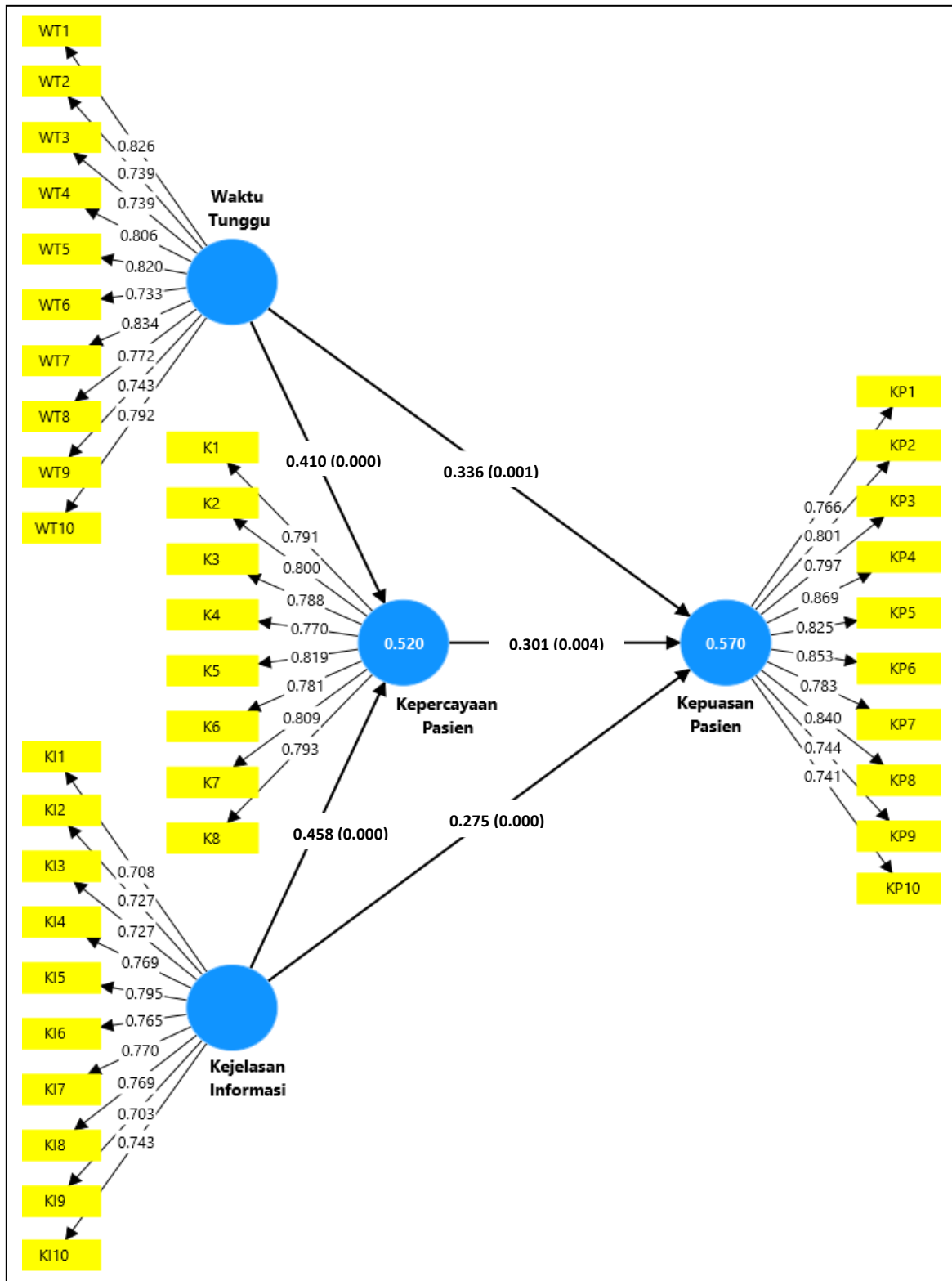


Figure 2Structural Model

Hypothesis Testing: Direct Effects (H1–H5)

H1: The Effect of Waiting Time on Patient Trust

The path analysis in Table 6 shows that waiting time has a positive and significant effect on patient trust, supporting H1. These results indicate that when patients perceive the waiting process at the Purwokerto SPN Clinic as efficient, predictable, and consistent with the information provided to them, their trust in the clinic's competence and integrity increases. These results align with [1] Ward et al., (2017), which reported that prolonged or poorly managed waiting times can erode trust in healthcare institutions, while reasonable waiting times strengthen patients' confidence that the system operates fairly and professionally. These findings are also consistent with [2] Naiker et al., (2018), which emphasize that waiting time is not only an operational issue but also a relational one because it shapes patients' overall perceptions of the provider's reliability. In the context of BPJS outpatient care, where patients often expect long queues, clinics that manage waiting times effectively send a strong signal of professionalism, which in turn fosters trust.

H2: The Effect of Waiting Time on Patient Satisfaction

Waiting time also had a positive and significant effect on patient satisfaction, supporting H2. The shorter and more acceptable the perceived waiting time, the higher the level of satisfaction reported by BPJS outpatients. This finding corroborates Xie & Or (2017), which shows that actual waiting time is significantly related to patient satisfaction in the outpatient department, and Ma et al., (2019), which suggests that the waiting experience significantly shapes satisfaction unless expectations are well managed. In the Indonesian context, this result is consistent with Wardani & Guntari (2024), which concluded that BPJS patient satisfaction is closely related to waiting time in administrative and pharmacy services. This result also aligns with Wulandari et al., (2025), which found that waiting time has a positive and significant effect on patient satisfaction in JKN outpatient pharmacy services. Practically, this implies that even small improvements in registration speed, queue management, and medication dispensing time at the Purwokerto SPN Clinic can translate into measurable improvements in patient satisfaction.

H3: The Effect of Information Clarity on Patient Trust

Clarity of information had the strongest direct effect on patient trust in the model, supporting H3. The findings indicate that when patients clearly understand the diagnosis, treatment procedures, medications, and follow-up instructions, their trust in the competence and honesty of healthcare providers increases. This finding aligns well with Asan et al., (2021), which found that patient-centered clinician communication, specifically explaining next steps and helping resolve uncertainty, was significantly associated with higher trust in clinicians. This is also consistent with Hong & Oh (2020) and Liu & Jiang (2021), which showed that the clarity of explanations provided by healthcare providers strengthened patients' trust in the providers as a credible source of health information. The fact that clarity of information outperformed wait time as a predictor of trust suggests that, in this clinical setting, communication quality is more diagnostic of trust than operational efficiency alone.

H4: The Effect of Information Clarity on Patient Satisfaction

Clarity of information also had a positive and significant effect on patient satisfaction, supporting H4. Patients who received clear, complete, and easy-to-understand information tended to feel more involved in their care and reported higher satisfaction. This finding is consistent with Jameel et al., (2025), which reported that practitioner-patient communication had a significant positive effect on patient satisfaction in general hospitals. This is also consistent with Wulandari et al., (2025) In the context of the Indonesian National Health Insurance (JKN), information clarity has been shown to influence patient satisfaction with outpatient pharmacy services. Although the magnitude of this direct effect is smaller than that of waiting time, the pattern suggests that clear

information adds to patient satisfaction. unique value dimension that is not excessive with operational speed.

H5: The Influence of Patient Trust on Patient Satisfaction

Patient trust has a positive and significant effect on patient satisfaction, supporting H5. This finding suggests that patient trust in the competence, honesty, and goodwill of healthcare workers and the clinic system directly impacts higher satisfaction with the overall service experience. This result is consistent with Chang et al., (2013), which reports that patient trust positively influences satisfaction in interpersonal-based medical service interactions, and with W. Chen et al., (2020), which identifies trust in doctors as the strongest predictor of patient satisfaction. It is also consistent with Shan et al., (2016), which shows that trust is the single most significant predictor of patient satisfaction in hospital care, and (S. Liu et al., 2021), which reports that patient trust is closely related to patient satisfaction and loyalty. In the context of BPJS at the SPN Clinic in Purwokerto, where many patients use insurance-covered services, trust likely serves as an important evaluative shortcut: patients who trust the clinic view the overall service experience more positively.

Hypothesis Testing: Indirect Effect (Mediation) (H6–H7)

H6: Patient Trust Mediates the Effect of Waiting Time on Patient Satisfaction

The mediation test showed that patient trust significantly mediated the relationship between waiting time and patient satisfaction, supporting H6. Since the direct effect of waiting time on satisfaction ($\beta = 0.336$) also remained significant, the mediation can be interpreted as partial mediation, meaning that part of the effect of waiting time on satisfaction operates through trust, while the other part is direct. This finding supports studies Chang et al., (2013) that posit trust as a mediating variable between service interactions and satisfaction, by suggesting that the same logic applies specifically to waiting time as a service process attribute. It also supports Ward et al., (2017) by empirically demonstrating that trust mechanisms are sensitive to waiting experiences. The practical implication is that increasing waiting times benefits satisfaction in two ways: it directly increases satisfaction, and it also makes patients more confident in the clinic, which further strengthens satisfaction.

H7: Patient Trust Mediates the Effect of Information Clarity on Patient Satisfaction

Patient trust also significantly mediated the relationship between information clarity and patient satisfaction, supporting H7. Since the direct effect of information clarity on satisfaction ($\beta = 0.275$) was also significant, this again represents a case of partial mediation. These results confirm that clear information not only directly increases satisfaction but also strengthens trust, which then further increases satisfaction. This mechanism is conceptually consistent with Hong & Oh (2020) and Jameel et al., (2025), who reported that trust mediates the effect of practitioner communication on satisfaction outcomes. Between the two mediation pathways in this study, the indirect effect through information clarity ($\beta = 0.138$) was slightly larger than that through waiting time ($\beta = 0.123$), reinforcing the view that communication quality is a highly potent trust-building mechanism in the BPJS outpatient setting.

CONCLUSION

This study examines how waiting time and information clarity influence BPJS outpatient satisfaction, with patient trust as a mediating variable, at the SPN Purwokerto Clinic. Using SEM-PLS analysis on 120 respondents, the study shows that waiting time and information clarity significantly influence patient trust and patient satisfaction, and that patient trust significantly mediates the relationship between each independent variable and satisfaction. Information clarity emerged as the strongest predictor of patient trust, while waiting time had the largest direct effect

on patient satisfaction among the three predictors. R-square values of 0.520 for patient trust and 0.570 for patient satisfaction indicate that the proposed model has moderate to substantial explanatory power.

These findings imply that BPJS outpatient services should be managed not only as an operational system focused on reducing waiting times but also as a communication system focused on delivering clear, consistent, and easy-to-understand information. Clinic management at the Purwokerto SPN Clinic is encouraged to: (1) improve patient flow in registration, examination, and pharmacy services; (2) provide accurate wait time estimates so that patient expectations can be properly managed; and (3) train medical and administrative personnel to clearly communicate diagnoses, procedures, medication use, and follow-up instructions. Because trust partially mediates these relationships, investments in wait time management and communication quality will result in increased satisfaction both directly and indirectly.

This study has several limitations. First, data were collected from a single clinic with 120 respondents, which limits the generalizability of the findings. Second, the cross-sectional design does not allow for strong causal inference. Third, the study focused on two service process attributes—waiting time and information clarity—and did not examine other potentially relevant variables such as service quality dimensions, hospital image, empathy, or perceived cost. Future studies are encouraged to use larger, multi-site samples, adopt a longitudinal design, and include additional mediating or moderating variables to deepen our understanding of patient satisfaction with BPJS and JKN outpatient services in Indonesia.

Theoretical and Practical Implications

Theoretically, this study contributes to the literature by integrating two service process attributes, waiting time and information clarity, into a single mediation model that uses patient trust as a connecting mechanism in the BPJS outpatient setting. While previous research has examined waiting time and communication separately (Asan et al., 2021; Ma et al., 2019; Xie & Or, 2017), this study shows that they operate together through the same psychological mechanism: trust. The fact that information clarity exerts a stronger influence on trust than waiting time challenges the assumption that operational efficiency alone determines patient trust in healthcare providers. Instead, these findings support the view that W. Chen et al., (2020) and Shan et al., (2016) that the relational and informational qualities of care play a central role in shaping trust.

Practically, the results of this study provide actionable guidance for the management of the Purwokerto SPN Clinic and similar BPJS outpatient service providers. First, because waiting times directly impact trust and satisfaction, clinics should optimize patient flow, particularly in registration, examination queues, and medication dispensing at the pharmacy, areas identified by studies related to BPJS in Indonesia as recurring pain points (Wardani & Guntari, 2024; Wulandari et al., 2025). Second, because clarity of information is the strongest predictor of trust, clinics should systematically improve communication practices: ensuring that diagnoses, treatment procedures, medication use, follow-up instructions, and estimated waiting times are clearly and consistently explained. Third, because trust partially mediates both relationships, training healthcare workers in communication and transparency of the care process is likely to yield compounding benefits, as each improvement increases satisfaction both directly and through stronger trust.

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