

# The Effect of Health Service Quality on BPJS Kesehatan Customer Satisfaction With Employee Performance as an Intervening Variable (Case Study on General Poly of Mitra Keluarga Samarinda Clinic)

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**Abstract-**The purpose of this study is to examine the effect of health service quality and employee performance on the satisfaction BPJS Kesehatan customers in Mitra Keluarga Clinic. This type of research uses quantitative research using questionnaire method. The population in this research is BPJS Health participants registered at Mitra Keluarga Clinic. Purposive sampling was used to select 273 participants from among all BPJS Health participants registered at Mitra Keluarga Clinic. Data analysis techniques in this study used Partial Least Square (PLS). Healthcare service quality has seven indicators, including waiting time, medicine, effectiveness, soft interaction, hard interaction, equipment condition, and ambient condition. Employee performance has seven indicators, including giving enough time, asking about symptoms, listening, explaining, involving in decisions, treating with care and concern, and taking problems seriously. While customer satisfaction has three indicators, including overall service satisfaction, interest in revisiting, and willingness to provide recommendations to other parties. The results of this study shows that healthcare service quality have a positive and significant relationship on customer satisfaction, employee performance have a positive and significant relationship on customer satisfaction, healthcare service quality have a positive and significant relationship on employee performance, and also healthcare service quality have a significant indirect relationship on customer satisfaction through employee performance.

**Keywords:** *healthcare service quality, employee performance, customer satisfaction.*

## 1. Introduction

Mitra Keluarga Clinic is a First Level Health Facility (FKTP) registered with BPJS Kesehatan located in North Samarinda District, Samarinda City and established since 2016. The density of FKTP competition in North Samarinda District requires Mitra Keluarga Clinic to maintain the number of participants, superior, and marketshare of 10% but this has not been achieved. Therefore, Mitra Keluarga Clinic conducts a customer satisfaction survey through the KESSAN feature (Participant Message Impression After Service). As a result, there were 67 complaints related to service quality and 35 employee performance. The existence of complaints certainly has an impact on customer satisfaction in using services, while the quality of service and employee performance are important factors in the health service industry.

## 2. Literature Review

### 2.1 Previous Research

Research by Taqdees et al. (2017) showed that the better quality of health services provided will increase patient satisfaction and loyalty. Research by Hadiwijaya (2018) showed that communication and service quality have a positive and significant effect on nurse performance. Research by Nova Hari & Hartati (2018) showed that service quality has a positive and significant indirect influence on customer satisfaction through employee performance.

### 2.2 Theoretical Foundations

#### 2.2.1 Healthcare Service Quality

Healthcare Service Quality can be interpreted as the difference between patient expectations and expectations regarding healthcare and the actual overall health service (D'cunha & Suresh, 2015). According to Bakti (2016) healthcare service quality indicators are: (1) Waiting time; (2) Medicine; (3) Effectiveness; (4) Soft interaction; (5) Hard interaction; (6) Equipment condition; (7) Ambient condition.

#### 2.2.2 Employee Performance

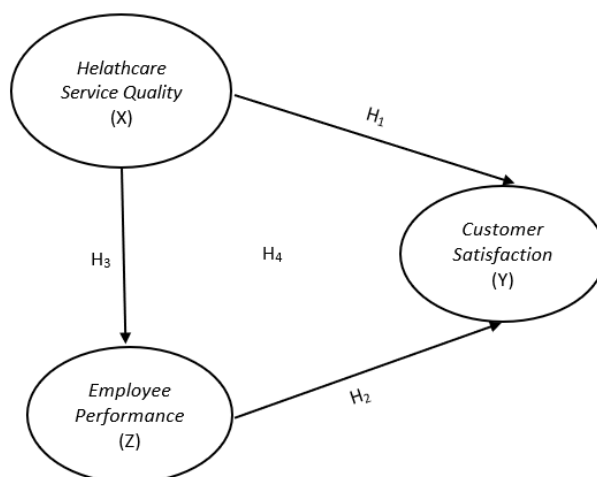
Employee performance is the result of the work of personnel either individually or in groups in carrying out a task in accordance with the standards applicable in each organization (Rahmaddian et al., 2021). Employee performance indicators according to Van Den Assem & Dulewicz (2015): (1) Giving enough time; (2) Asking about symptoms; (3) Explaining; (4) Involving in decisions; (5) Treating with care and concern; (6) Taking problem seriously.

#### 2.2.3 Customer Satisfaction

According to Kotler and Keller (in Putu et al., 2018) customer satisfaction can be interpreted as a pleasant or unpleasant experience experienced by customers towards the product or service obtained. According to Irawan (in Annisa, 2021) customer satisfaction has indicators including: (1) Service satisfaction as a whole; (2) Re-visiting interest; (3) Willingness to make recommendations to other parties.

## 3. Research Framework

### 3.1 Analysis Models



**Figure 3.1 Analysis Model**  
Source: Data processed by researchers (2022)

### 3.2 Hypothesis

**H<sub>1</sub>:** Healthcare Service Quality positively affects Customer Satisfaction at Mitra Keluarga Clinic.

**H<sub>2</sub>:** Employee Performance positively affects Customer Satisfaction at Mitra Keluarga Clinic.

**H<sub>3</sub>:** Healthcare Service Quality positively affects Employee Performance at Mitra Keluarga Clinic.

**H<sub>4</sub>:** Healthcare Service Quality affects Customer Satisfaction through Employee Performance as a mediator at Mitra Keluarga Clinic.

## 4. Research Methods

### 4.1 Types of Research, Samples, and Data Collection

The limitation of research is the performance of health employees, namely the performance of general practitioners. The study population was BPJS Kesehatan patients registered at the Mitra Keluarga Samarinda Clinic with an average visit of 864 patients. The study sample used purposive sampling with the following criteria:

1. General poly patients are  $\geq 17$  years old.
2. General poly patients who get general health services at Mitra Keluarga Clinic.
3. General poly patients are not employees of Mitra Keluarga Clinic.

Determination of the number of samples using the Slovin formula as follows:

$$n = \frac{N}{1 + N(e)^2} = 273.4 \approx 273 \frac{864}{1 + 864(5\%)^2} \frac{864}{3,16}$$

The data collection method used a questionnaire with a Likert scale measurement of 1-5 and analyzed using PLS-SEM.

### 4.2 Operational Variables and Definitions

**Table 4.3 Operational Definitions and Measurement of Variables**

Variable	Definition	Indicators
Service Quality (X)	The definition of healthcare service quality according to D'cunha & Suresh (2015) can be interpreted as the difference between patient expectations and expectations related to healthcare and the actual overall health service.	According to Bakti (2016) there are seven indicators that are able to measure healthcare service quality according to: <ol style="list-style-type: none"> <li>1. Waiting time.</li> <li>2. Medicine.</li> <li>3. Effectiveness.</li> <li>4. Soft interaction.</li> <li>5. Hard interaction.</li> <li>6. Equipment condition.</li> <li>7. Ambient condition.</li> </ol>
Employee Performance (Z)	The definition of employee performance according to Rahmaddian et al., (2021) is the result of the work of personnel either individually or in groups in carrying out a task in accordance with applicable standards in the organization	According to Van Den Assem & Dulewicz (2015) there are six indicators that are able to measure employee performance according to: <ol style="list-style-type: none"> <li>1. Giving enough time.</li> <li>2. Asking about symptoms.</li> <li>3. Explaining.</li> <li>4. Involving in decisions.</li> <li>5. Treating with care and concern.</li> <li>6. Taking problem seriously.</li> </ol>
Customer Satisfaction (Y)	The definition of customer satisfaction according to Kotler and Keller (2016) is as a pleasant or unpleasant feeling experienced by customers towards the product or service obtained (Putu et al., 2018).	According to Irawan (2008) there are 3 indicators to measure customer satisfaction (Annisa, 2021): <ol style="list-style-type: none"> <li>a. Overall service satisfaction</li> <li>b. Revisiting interest</li> <li>c. Willingness to give recommendations to the other party.</li> </ol>

The study used SEM-PLS model analysis which consists of measurement models (outer model) and structural (inner model). The analysis is done with SmartPLS software.

## 5. Results and Discussion

### 5.1 Analysis

#### 5.1.1 Respondent Profile

The most respondents were women at 147 or 53.8%. The highest age range of 26-36 years is 68 or 24.9%. The respondents' area of residence was dominated by North Samarinda at 203 or 74.4%. The most professions are civil servants as many as 59 or 21.6%.

#### 5.1.2 Descriptive Statistics

The healthcare service quality variable was obtained on average of 4,309 which indicates that the category of respondents agreed. The employee performance variable obtained an average of 4,469 which indicates that the respondent category agrees. The customer satisfaction variable obtained an average of 4,374 which indicates the category of respondents agreeing.

#### 5.1.3 Measurement Model Testing

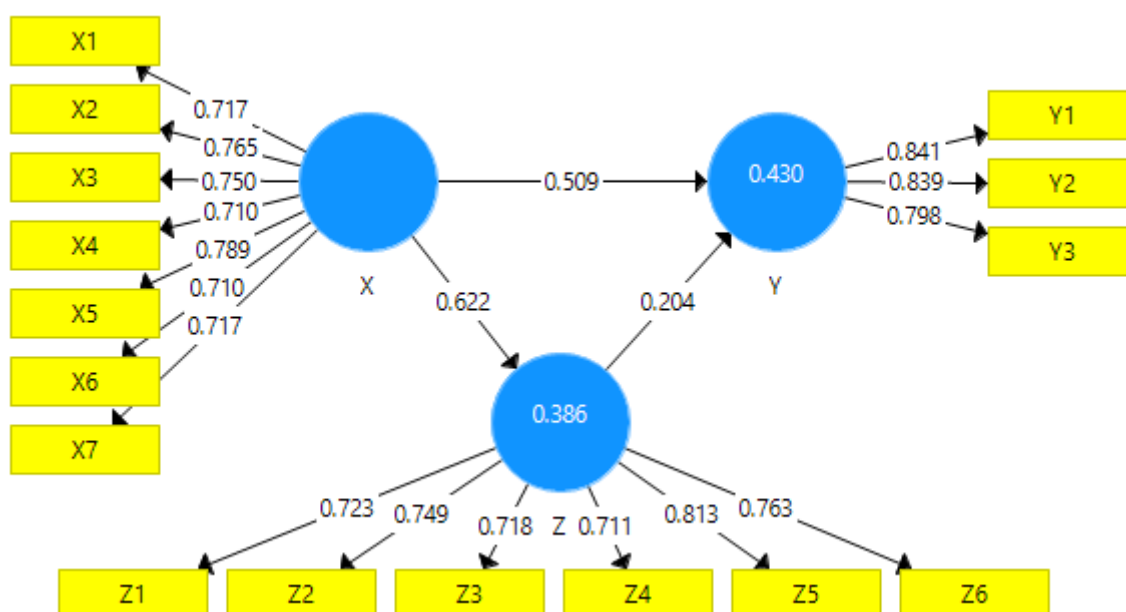


Figure 5.1 Data Processing with PLS

Source: Processed Research Data (2022)

### 1. Convergent Validity

Table 5.1 Convergent Validity Test Results

Indicators	X	Z	Y
<b>Healthcare Service Quality (X)</b>			
Waiting time (X1)	0.717		
Medicine (X2)	0.765		
Effectiveness (X3)	0.750		
Soft interaction (X4)	0.710		
Hard interaction (X5)	0.789		
Equipment condition (X6)	0.710		
Ambient condition (X7)	0.717		
<b>Employee Performance (Z)</b>			
Giving enough time (Z1)		0.723	

Asking about symptoms (Z2)	0.749
Explaining (Z3)	0.718
Involving in decisions (Z4)	0.711
Treating with care and concern (Z5)	0.813
Taking problem seriously (Z6)	0.763

#### Customer Satisfaction (Y)

Overall service satisfaction (Y1)	0.841
Revisiting interest (Y2)	0.839
Willingness to make recommendations to other parties (Y3)	0.798

Source: Processed Research Data (2022)

The test results obtained loading factor values from all indicators of more than 0.700 so that they meet convergent validity.

## 2. Discriminant Validity

**Table 5.2 Discriminant Validity Test Results**

Indicators	X	Z	Y
<b>Healthcare Service Quality (X)</b>			
Waiting time (X1)	<b>0.717</b>	0.411	0.359
Medicine (X2)	<b>0.765</b>	0.436	0.455
Effectiveness (X3)	<b>0.750</b>	0.516	0.522
Soft interaction (X4)	<b>0.710</b>	0.462	0.480
Hard interaction (X5)	<b>0.789</b>	0.507	0.531
Equipment condition (X6)	<b>0.710</b>	0.430	0.437
Ambient condition (X7)	<b>0.717</b>	0.427	0.469
<b>Employee Performance (Z)</b>			
Giving enough time (Z1)	0.438	<b>0.723</b>	0.340
Asking about symptoms (Z2)	0.478	<b>0.749</b>	0.370
Explaining (Z3)	0.458	<b>0.718</b>	0.389
Involving in decisions (Z4)	0.448	<b>0.711</b>	0.413
Treating with care and concern (Z5)	0.488	<b>0.813</b>	0.393
Taking problem seriously (Z6)	0.474	<b>0.763</b>	0.424
<b>Customer Satisfaction (Y)</b>			
Overall service satisfaction (Y1)	0.577	0.508	<b>0.841</b>
Revisiting interest (Y2)	0.483	0.389	<b>0.839</b>
Willingness to make recommendations to other parties (Y3)	0.508	0.380	<b>0.798</b>

Source: Processed Research Data (2022)

Discriminant validity test results using cross loading value obtained loading factor in the column of each variable (bold) is the highest value compared to the value of cross loading other variables so that it meets discriminant validity.

## 3. Construct Validity

**Table 5.3 Average Variance Extracted (AVE) Results**

Variable	Average Variance Extracted
Healthcare Service Quality (X)	0.544
Employee Performance (Z)	0.683
Customer Satisfaction (Y)	0.558

Source: Processed Research Data (2022)

The overall test result of the variable has an AVE value of more than 0.5 so that it meets the validity of the construct.

#### 4. Compositer Reliability

**Table 5. 4 Composite Reliability Test Results**

Variable	Cronbach's Alpha	Composite Reliability
Healthcare Service Quality (X)	0.860	0.893
Employee Performance (Z)	0.769	0.866
Customer Satisfaction (Y)	0.841	0.883

Source: Processed Research Data (2022)

The test results show that the composite reliability and Cronbachs Alpha values are more than 0.70 so that all variables are reliable.

#### 5.1.4 Structural Model Testing

##### 1. Coefficient of Determination ( $R^2$ )

**Table 5. 5 Coefficient of Determination Test Results**

Free variables	Bound variables	R Square
Healthcare Service Quality (X)	Employee Performance (Z)	0.386
Healthcare Service Quality (X)	Customer Satisfaction (Y)	0.430
Employee Performance (Z)		

Source: Processed Research Data (2022)

The test results show that healthcare service quality (X) can explain employee performance (Z) of 0.386 or 38.6 percent, while the rest is explained by other variables outside the study healthcare service quality (X) and employee performance (Z) can explain customer satisfaction (Y) of 0.430 or 43 percent. While the rest are explained other variables outside the study.

##### 2. Effect Size ( $F^2$ )

**Table 5.6 Effect Size (f-square) Test Results**

Variable	X	Z	Y
Healthcare Service Quality (X)		0.630	0.279
Employee Performance (Z)			0.045
Customer Satisfaction (Y)			

Source: Processed Research Data (2022)

The results of the healthcare service quality (X) test on employee performance (Z) of 0.630 showed a major influence on the structural level. Healthcare service quality (X) on customer satisfaction (Y) of 0.279 shows a moderate influence at the structural level. Employee performance (Z) on customer satisfaction (Y) of 0.045 shows a moderate influence at the structural level.

##### 3. Predictive Relevance ( $Q^2$ )

**Table 5. 7 Predictive Relevance Test Results**

Variable	Sso	SSE	$Q^2 (=1-SSE/SSO)$
Healthcare Service Quality (X)	1911.0	1911.0	
Employee Performance (Z)	1638.0	1295.9	0.209
Customer Satisfaction (Y)	819.0	593.9	0.275

Source: Processed Research Data (2022)

The test results showed an influence on employee performance (Z) of 0.209 and on customer satisfaction (Y) of 0.275. That is, the Q-Square value is more than 0, so the structural model has predictive relevance.

#### 4. Goodness of Fit

**Table 5. 8 Goodness of Fit (GoF) Test Results**

Variable	Communality	R Square	GoF
Healthcare Service Quality (X)	0.544		
Employee Performance (Z)	0.683	0.386	
Customer Satisfaction (Y)	0.558	0.430	
Average	0.595	0.408	0.493

Source: Processed Research Data (2022)

The test result was obtained by 0.493 which shows the goodness of fit value belongs to a large category, so the structural model is in good condition.

#### 5. Estimation of Path Coefficient (Test t)

**Table 5.9 Hypothesis Test Results**

Influence	Line Coefficient	Stdev	T Stat	P	Ket.
X -> Y	0.509	0.054	9.386	0.000	Significant
Z -> Y	0.204	0.061	3.344	0.001	Significant
X -> Z	0.622	0.052	12.029	0.000	Significant
X -> Z -> Y	0.127	0.045	2.852	0.005	Significant

Source: Processed Research Data (2022)

The test results show that all variables have a P value of  $< 0.05$  so that healthcare service quality (X) has a significant positive effect on customer satisfaction (Y). Employee performance (Z) has a significant positive effect on customer satisfaction (Y). Healthcare service quality (X) has a significant positive effect on employee performance (Z). Healthcare service quality (X) has a significant positive effect on customer satisfaction (Y) through employee performance (Z).

#### 5.2 Discussion

##### 5.2.1 The Effect of Healthcare Service Quality on Customer Satisfaction at Mitra Keluarga Clinic

The test results show that healthcare service quality has a positive and significant effect on customer satisfaction. Based on the results of the study, the aspect that needs to be improved by Mitra Keluarga Clinic is the waiting time indicator. What Mitra Keluarga Clinic can do is to make it easier for customers to carry out online registration procedures with the aim of minimizing service waiting times.

##### 5.2.2 The Effect of Employee Performance on Customer Satisfaction at Mitra Keluarga Clinic

The test results show that employee performance has a positive and significant effect on customer satisfaction. Based on the results of the study, the aspect that needs to be improved by Mitra Keluarga Clinic is the indicator involving in decision on the employee performance variable. This is because patients tend to want to be involved in determining treatment decisions so that doctors at Mitra Keluarga Clinic can provide alternative treatment options, treatments, or explanations of the impact that occurs.

##### 5.2.3 The Effect of Healthcare Service Quality on Employee Performance at Mitra Keluarga Clinic

The test results show that healthcare service quality has a positive and significant effect on employee performance. Based on the results of the study, the aspect that needs to be improved by Mitra Keluarga Clinic is the equipment condition indicator on the healthcare service quality variable. This is because the condition of adequate and well-maintained facilities and equipment will make the services provided can run smoothly.

#### 5.2.4 The Effect of Healthcare Service Quality on Customer Satisfaction through Employee Performance at Mitra Keluarga Clinic

The test results show that healthcare service quality has a positive and significant effect on customer satisfaction through employee performance. Based on this presentation, Mitra Keluarga Clinic can make improvements to the quality of health services that will improve employee performance so that it is able to provide satisfaction for each customer.

### 5.3 Managerial Implications

**Table 5. 10 Managerial Implications**

Variable	Before Research	After Research
Healthcare Service Quality	The registration procedure is only during service hours.	Can do the registration procedure online through the WhatsApp application.
	The condition of medical facilities and equipment is inadequate and poorly maintained.	Carry out maintenance and maintenance of medical facilities and equipment periodically at least once a week.
Employee Performance	Sometimes it does not involve the patient in decision making.	Provide alternative treatment/treatment options to patients.

Source: Processed Research Data (2022)

## 6. Conclusions and Suggestions

### 6.1 Conclusion

1. Healthcare service quality has a positive and significant effect on customer satisfaction at Mitra Keluarga Clinic. So the first hypothesis ( $H_1$ ) is accepted.
2. Employee performance has a positive and significant effect on customer satisfaction at Mitra Keluarga Clinic. So the second hypothesis ( $H_2$ ) is accepted.
3. Healthcare service quality has a positive and significant effect on employee performance at Mitra Keluarga Clinic. So the third hypothesis ( $H_3$ ) is accepted.
4. Healthcare service quality has a positive and significant effect on customer satisfaction through employee performance as a mediator at Mitra Keluarga Clinic. So the fourth hypothesis ( $H_4$ ) is accepted.

### 6.2 Suggestion

#### 6.2.1 For Companies

1. Create an online registration procedure to minimize service waiting times so that the patients do not squeeze in the waiting room.
2. Carry out maintenance and maintenance on medical equipment, facilities, and surrounding environmental conditions which are carried out periodically in order to be able to provide comfort for customers.
3. Provide alternative treatment options and involve patients in decision-making.



### 6.2.2 For Further Research

1. Researchers can then conduct research by adding other free variables so that it is expected to increase customer satisfaction.
2. Researchers can then conduct research using the same variables but with different research methods to deepen the analysis.

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