

Factors Influencing the Utilization of Health Services for JKN-KIS Participants (Study: Grilled Pematang III.B Health Center, Mesuji Makmur District, Ogan Komering Ilir Regency)

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ABSTRACT

Keywords: utilization; health services; JKN-KIS participants.

This research aims to analyze the influence of the knowledge level of JKN-KIS participants, the attitudes of healthcare workers, and the accessibility of health facilities simultaneously on the utilization of health services by JKN-KIS participants at community health centers and their networks. The method employed in this study is quantitative, with a minimum sample size of 99 JKN-KIS participants from the work area of Pematang Panggang III.b Health Center in Mesuji Makmur District, Ogan Komering Ilir Regency. This study involves two types of hypothesis testing: the Partial Significance Test (T-test) and the Simultaneous Test (F-test). The data analysis techniques used include descriptive statistical analysis and multiple linear regression analysis. The results indicate that the level of knowledge among JKN-KIS participants does not have a significant impact on the utilization of health services at Pematang Panggang III.b Health Center and its networks. In contrast, the accessibility of health facilities has a positive and significant effect on the health service utilization of JKN-KIS participants. Overall, the knowledge level, attitudes of healthcare workers, and accessibility of health facilities have a positive and significant impact on the utilization of health services at the health center.



Introduction

The establishment of Government Regulation No. 38 of 2007, concerning the distribution of government functions between provincial and district/city governments, ensures that regional governments can execute their authorities with certainty (Alim et al., 2023). This authority encompasses the duties and responsibilities of regional administrations to promote public welfare. These regional governments are mandated to manage both essential and optional matters (Erdiwan et al., 2020). Article 6, paragraph (2) specifies that provincial and district/city governments are obligated to perform certain

government functions linked to fundamental services, with healthcare being one of these key areas (Aridah et al., 2022).

The Constitution of the Republic of Indonesia ensures the rights of its citizens, encompassing the right to both physical and mental well-being, as well as access to healthcare services. The government's responsibilities in delivering health services and social security are further outlined in Law No. 40 of 2004 regarding the National Social Security System and Law No. 36 of 2009 concerning Health. (Asri, 2022).

Expanding beyond national frameworks, the United Nations, through Article 25 of the 1948 Universal Declaration of Human Rights, asserts that "everyone has the right to an adequate standard of living, including health and well-being for themselves and their families, encompassing food, clothing, housing, medical care, and necessary social services."

In 2005, Indonesia introduced Askeskin, a health insurance scheme aimed at low-income families and informal workers. (Syamsul et al., 2021). Askeskin was subsidized by the government, ensuring access to healthcare and protecting individuals from financial risks associated with medical expenses. The program, which covered essential outpatient and inpatient services, marked the beginning of Indonesia's journey toward universal healthcare, with a target to reach 60 million people. (Baros, 2015). Services offered included maternal care, immunizations, mobile health services for remote areas, and access to medications. (Basith & Prameswari, 2020).

In 2008, the Askeskin program was replaced by Jamkesmas, aimed at providing healthcare access to those living just above the poverty line through community health centers and hospitals. (Brooks et al., 2017). Jamkesmas also provides comprehensive pregnancy services, such as antenatal care, institutional delivery, and postnatal care. Following the implementation of Jamkesmas, a national strategy was developed that refers to the 2004 Social Security framework to achieve Universal Health Coverage. The scheme aims to provide social health insurance that covers health care, life insurance, work-related injury, and care for the elderly. Most civil servants, police, and military personnel were already covered by the program when it was adopted in 2004, so the scheme was created to improve the health of the poor. In 2014, to demonstrate its commitment to safeguarding health rights, the Indonesian Government introduced the National Health Insurance Program (JKN-KIS), aimed at providing coverage for all citizens of Indonesia. (Dorjdagva et al., 2017). The primary aim of the National Health Insurance Program (JKN) is to ensure health protection through healthcare benefits that address basic health needs, available to all individuals who have made contributions or whose contributions are funded by the government. (Ulfa et al., 2017).

The mission of the JKN-KIS program is to guarantee healthcare services based on individuals' medical needs while preventing financial hardship due to medical costs.

This issue similarly affects the utilization of healthcare services by BPJS participants, with low trust leading to fewer healthcare visits.

A similar study conducted at the Campalagian Health Center in Polewali Mandar Regency revealed that despite having the highest number of BPJS participants, utilization

rates remained low. Interviews with participants revealed dissatisfaction with the service quality, leading to a preference for self-medication until conditions worsened. In line with the previous research above, in a study conducted by (Hidana et al., 2018). In comparison, the Gayamsari Health Center study showed a decline in health service utilization, which was attributed to low public awareness about healthcare and the health center's suboptimal services. Geographical barriers and a lack of clear information about health services were identified as contributing factors to this decline.

Related to this, based on the total number of BPJS Kesehatan patient visits at the Pematang Panggang III.b Health Center at the end of December 2022, there were 6,321 visits or 4.68% per month. This means that at least 15% of JKN - KIS participants at the Pematang Panggan III.b Health Center has not utilized health services. When compared to the total number of people registered as JKN - KIS participants in the Pematang Panggan III.b Health Center working area of 11,259 people, this indicates that not all of the Pematang Panggang III.b community, Mesuji Makmur District, Ogan Komering Ilir Regency have utilized the program.

This research seeks to analyze the impact of JKN-KIS participants' knowledge levels, healthcare workers' attitudes, and the performance of health facilities on the utilization of health services by JKN-KIS participants at the Community Health Center and its network. The findings are intended to provide valuable insights for the local government of Ogan Komering Ilir Regency, particularly for the Pematang Panggang III.b Community Health Center in Mesuji Makmur District. This information will assist in planning and developing policies to address various issues affecting all community members, especially concerning the utilization of health services for JKN-KIS participants, ensuring that the implemented programs and policies effectively improve the quality of health services at primary healthcare facilities.

Method

The method used in this study is quantitative. In this scenario, quantitative researchers test a theory by detailing specific hypotheses and then collecting data to support or refute these hypotheses. The main source of data for this study was JKN-KIS participants in the work area of the Pematang Panggang III.b Health Center, Mesuji Makmur District, Ogan Komering Ilir Regency (Nugroho & Haritanto, 2022). The unit of analysis in this study was the JKN-KIS participant community who utilized health services at the Pematang Panggang III.b Health Center, Mesuji Makmur District, Ogan Komering Ilir Regency. The population in this study were JKN-KIS participants who utilized health services at the Pematang Panggang III.b Health Center, Mesuji Makmur District, Ogan Komering Ilir Regency, totaling 11,259 people. (OKI Regency Health Office Profile Book, 2023).

The technique used for sampling is accidental sampling, where the sampling is done by chance. In this case, the sample must be a JKN-KIS participant. This accidental sampling technique is used because it makes it easier for the author to obtain data directly at the research site and also because of the wide expanse and large population in the

working area of the Pematang Panggang III.b Health Center, Mesuji Makmur District, OKI Regency.

The minimum sample of JKN – KIS Participants in the working area of Pematang Panggang III.b Health Center, Mesuji Makmur District, Ogan Komering Ilir Regency is as follows:

$$n = \frac{11.259}{1 + 11.259 (0,1)^2} = \frac{11.259}{113,59} = 99.11 \text{ or } 99 \text{ Samples}$$

Dimensions of Health Service Utilization are 1) Motivating factors, namely a description of the fact that respondents tend to use different health services. Indicators of motivating factors are the beliefs of JKN participants and health service facilities sought when sick; 2) Ability factors, namely a description of the circumstances or conditions that make respondents able to take action to meet their needs for health services. Indicators of ability factors are JKN/KIS participants receiving home visits/health visits; 3) Need factors, namely a description of the assessment of health conditions felt by respondents, the extent of fear of illness, and the severity of pain suffered. Indicators of need factors are seeking treatment at the Community Health Center because it is free and seeking treatment at the Community Health Center because of good service and quality medicine.

This primary data was obtained by conducting direct interviews with respondents, using a questionnaire based on the dimensions of utilization of health services above. The respondents were JKN-KIS participants who utilized health services at the Pematang Panggang III.b Health Center, Mesuji Makmur District, Ogan Komering Ilir Regency. The method used by researchers to test the validity of the instrument was by calculating the correlation value between the data on each statement with the total score using the Pearson product-moment correlation technique formula.

Table 1
Results of the Validity Test of Health Worker Attitude Variables

No	Statement Items	rating	table	Information
1	SP1	0.617	0.1663	Valid
2	SP2	0.671	0.1663	Valid
3	SP3	0.794	0.1663	Valid
4	SP4	0.678	0.1663	Valid
5	SP5	0.782	0.1663	Valid
6	SP6	0.692	0.1663	Valid

Source: SPSS Data Processing Results, 2024

Furthermore, the results of the validity test on the statement items on the variable of health facility accessibility can be seen in Table 3.4 and it is known that of the 5 statements tested on 99 respondents, all statement items were declared valid.

Table 2
Results of the Validity Test of the Health Facility Achievement Variable

No	Statement Items	rating	table	Information
1	KF1	0.757	0.1663	Valid
2	KF2	0.801	0.1663	Valid

3	KF3	0.700	0.1663	Valid
4	KF4	0.753	0.1663	Valid
5	KF5	0.779	0.1663	Valid

Source: SPSS Data Processing Results, 2024

Meanwhile, the results of the validity test of the health service utilization variable can be seen in Table 3.5 below. Based on Table 3.5, of the 6 statement items tested on 99 respondents, all statement items were declared valid

Table 3
Results of Validity Test of Health Service Utilization Variables

No	Statement Items	rating	table	Information
1	PP1	0.693	0.1663	Valid
2	PP2	0.708	0.1663	Valid
3	PP3	0.680	0.1663	Valid
4	PP4	0.772	0.1663	Valid
5	PP5	0.737	0.1663	Valid
6	PP6	0.754	0.1663	Valid

Source: SPSS Data Processing Results, 2024

The reliability test for the instruments in this study was conducted using IBM SPSS Statistics 25 software. An instrument is considered reliable if the Cronbach's Alpha value is greater than 0.60. This analysis is performed through the scale menu under the reliability analysis option within the software.

Table 4
Results of the Research Questionnaire Reliability Test

No	Statement Items	Cronbach's Alpha	Reliability Coefficient	Conclusion
1	Level of Knowledge (X1)	0.797	0.60	Reliable
2	Attitude of Health Workers (X2)	0.636	0.60	Reliable
3	Health Facilities Accessibility (X3)	0.618	0.60	Reliable
4	Utilization of Health Services (Y1)	0.765	0.60	Reliable

Source: SPSS Data Processing Results, 2024

Based on the results of the data reliability test using Cronbach's Alpha coefficient as presented in Table 3.6 above, it can be seen that all variables are reliable, with the instrument reliability coefficient value greater than 0.60. Thus, the statement items in the research instrument have met the recommended reliability value.

The list of hypotheses in this study is as follows:

H0: The level of knowledge of JKN-KIS participants does not affect the use of health services at Community Health Centers and their networks.

H1: The level of knowledge of JKN-KIS participants has a positive and significant influence on the use of health services at Community Health Centers and their networks.

H0: The attitude of health workers does not influence the use of health services at the Community Health Center and its network.

H1: The attitude of health workers has a positive and significant influence on the use of health services at the Community Health Center and its network.

H0: The accessibility of health facilities for JKN-KIS participants does not affect the use of health services at Community Health Centers and their networks. The accessibility of health facilities for JKN-KIS participants has a positive and significant impact on the use of health services at Community Health Centers and their networks.

H0: Level of participant knowledge, Attitude of health workers, and Accessibility of health facilities for JKN-KIS participants, there is no simultaneous effect on the use of health services at Community Health Centers and their networks.

H1: The level of participant knowledge, Attitude of health workers, and Accessibility of health facilities on JKN-KIS participants have a simultaneous and significant positive effect on the use of health services at Community Health Centers and their networks.

This study employs two types of hypothesis testing: the Partial Significance Test (T-test) and the Simultaneous Test (F-test). The data analysis techniques used include descriptive statistical analysis and multiple linear regression analysis.

Results and Discussion

Classical Assumption Test Results

The classical assumption tests in this study include the normality test, heteroscedasticity test, and multicollinearity test. The research data used in these classical assumption tests has been converted to interval data. The conversion from ordinal data to interval data was performed using the Measurement Successive Interval (MSI) technique. The results of this interval data conversion can be found in the appendix.

Normality Test Results

In statistics, normality tests are conducted to assess whether a dataset follows a normal distribution and to estimate the probability that its underlying variables are normally distributed. This test assesses whether the collected data follows a normal distribution, which is necessary for parametric analysis. If the data fails to meet this requirement, non-parametric methods are used instead. In this study, the Kolmogorov-Smirnov test is applied to evaluate normality. Data is deemed normally distributed if the Asymp. Sig. (2-tailed) value exceeds 0.05; if not, it is considered non-normally distributed. The results of the normality test for this study are presented in Table 5.29 below.

Table 5
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		99
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	1.58617618
Most Extreme Differences	Absolute	,087

	Positive	,087
	Negative	-,072
Test Statistics		,087
Asymp. Sig. (2-tailed)		,065c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Primary Data Processing Results, 2024

According to the results of the Kolmogorov-Smirnov test, the Asymp. The sig (2-tailed) value is 0.065, which is above the P-Value (α) threshold of 0.05, suggesting that the data in this study is normally distributed. Additionally, the study utilizes the Normal Probability Plot method, which compares the cumulative distribution of the observed data with that of a normal distribution. A normal distribution appears as a straight diagonal line, with data points evaluated against this line. If the data follows a normal distribution, the points will closely align with the diagonal (Ghozali, 2018). The outcomes of the Normal Probability Plot test are illustrated in Figure 2 below.

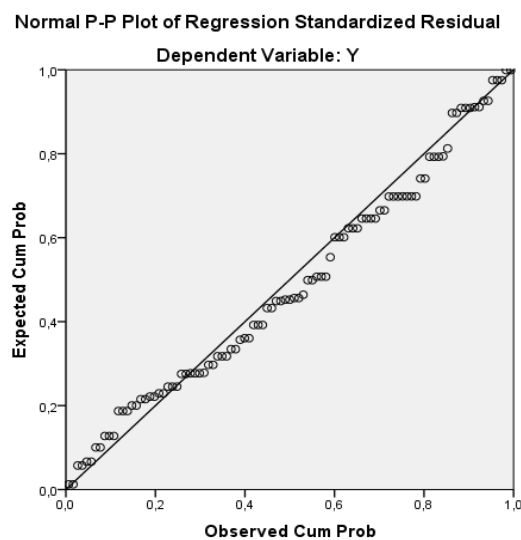


Figure 2
Normality Probability Plot Results

Heteroscedasticity Test Results

Before conducting multiple regression analysis, the data must exhibit homoscedasticity. This means that the variance of the residuals remains constant as the data points shift along the best-fit line, whether in a positive or negative direction. Homoscedasticity can be evaluated by plotting the standardized residuals against the unstandardized predicted values.

According to Herawati et al. (2020), The heteroscedasticity test is another essential requirement for simple or multiple linear regression analysis. Its purpose is to determine if there are any signs of heteroscedasticity in the data, which occurs when the variance of the residuals differs across observations. Ideally, the test should show no signs of

heteroscedasticity. This is typically assessed by examining the pattern of the scatterplot. The provisions are as follows:

1. If there is no discernible pattern, with points scattered both above and below the zero line on the Y-axis, this indicates an absence of heteroscedasticity.
2. Conversely, if a distinct pattern emerges, such as points forming a regular shape (e.g., wavy or expanding and then contracting), this suggests the presence of heteroscedasticity.

The results of the heteroscedasticity test can be seen in Figure 3 below:

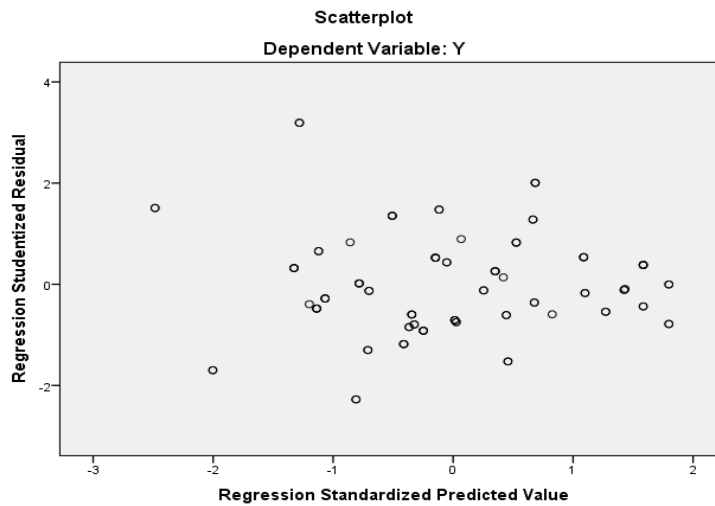


Figure 3
Scatterplot Results

By analyzing the scatterplot above, it can be observed that variables X1, X2, and X3 do not exhibit heteroscedasticity, as the points are distributed randomly without forming a distinct pattern, with the points scattered both above and below the Y-axis. Therefore, it can be concluded that this regression model does not display heteroscedasticity.

Multicollinearity Test Results

The purpose of the multicollinearity test is to identify any correlation between the independent variables within the regression model. In this study, multicollinearity is assessed through the tolerance value or the variance inflation factor (VIF). Multicollinearity can be detected by examining the VIF values from the regression analysis results. If the VIF exceeds 10, it indicates a high level of multicollinearity. The estimated tolerance value or VIF calculated using the SPSS 26.0 software is presented in the table below.

Table 6
Multicollinearity Test Results

Model	Unstandardized Coefficients	Standardize d	t	Sig.	Collinearity Statistics
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	Coefficients				Tolerance	VIF
	B	Std. Error	Beta			
1 (Constant)	1,175	1,153		1,019	,311	
X1	,084	,075	,098	1,117	,267	3,089
X2	,796	,094	,612	8,501	,000	2,076
X3	,435	,114	,274	3,810	,000	2,078

a. Dependent Variable: Y

Source: Primary Data Processing Results, 2024

Table 6 indicates that the tolerance value for variable X1 is 0.324, for variable X2 is 0.482, and for variable X3 is 0.481. All three tolerance values for the independent variables exceed 0.10. Additionally, the VIF values are 3.089 for X1, 2.076 for X2, and 2.078 for X3, all of which are below 10. Based on these results, it is evident that the tolerance values for all independent variables are greater than 0.10, and the VIF values are also less than 10, indicating no symptoms of correlation among the independent variables. Therefore, it can be concluded that there are no signs of multicollinearity among the independent variables in the regression model.

Multiple Linear Regression Analysis Results

Data analysis in this study uses multiple linear regression analysis. The analysis of each variable is explained in the following table.

Table 7
Multiple Linear Regression Coefficient Results

Model	Coefficients				t	Sig.
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
1 (Constant)	1,175	1,153		1,019	,311	
X1	,084	,075	,098	1,117	,267	
X2	,796	,094	,612	8,501	,000	
X3	,435	,114	,274	3,810	,000	

a. Dependent Variable: Y

Source: Primary Data Processing Results, 2024

Based on the table above, the following simple regression equation is obtained:

$$Y = 1.175 + 0.084X1 + 0.796X2 + 0.435X3$$

Information:

Y: Utilization of Health Services by JKN-KIS participants

X1: Participants' Knowledge Level

X2: Attitude of Health Workers

X3: Health Facilities Accessibility

The interpretation of the multiple regression equation regarding the influence of the variables of participant knowledge level (X1), health worker attitudes (X2), and accessibility of health facilities (X3) on the dependent variable, namely the utilization of health services for JKN-KIS participants (Y), can be explained as follows:

1. The constant value of 1.175 indicates that when the variables of participant knowledge level (X1), health worker attitudes (X2), and accessibility of health facilities (X3) are all considered to be zero, the utilization of health services for JKN-KIS participants (Y) is 1.175.
2. The regression coefficient for the participant knowledge level variable (X1) is 0.084. This implies that if the knowledge level increases by one unit while other independent variables remain unchanged, the utilization of health services for JKN-KIS participants (Y) will rise by 0.084.
3. The regression coefficient for the health worker attitude variable (X2) is 0.796. This indicates that if the attitude of health workers increases by one unit while the other independent variables are held constant, the utilization of health services for JKN-KIS participants (Y) will increase by 0.796.
4. The regression coefficient for the accessibility of health facilities variable (X3) is 0.435. This means that if access to health facilities increases by one unit while other independent variables stay the same, the utilization of health services for JKN-KIS participants (Y) will increase by 0.435.

Hypothesis Testing

To find out whether the hypothesis is accepted or rejected, it is necessary to test the significance of the influence between the variables using the t-test and if the number of dependent variables is two or more, then the F-test is required. The conditions of this study have 3 independent variables, namely the level of participant knowledge (X1), the attitude of health workers (X2), and accessibility of health facilities (X3), and 1 dependent variable, namely the utilization of health services for JKN-KIS participants (Y), then a T-Test and F-Test are required to state whether a hypothesis is accepted or not.

T-test Results

The results of the hypothesis test were carried out to see the significance of the influence of the variables participant knowledge level (X1), health worker attitude (X2), and health facility accessibility (X3) partially towards the dependent variable, namely the utilization of health services for JKN-KIS participants (Y). With a sample size of 99 respondents, and 3 independent variables, the t table obtained is 1.66071.

Hypothesis 1 (H1)-The level of knowledge of JKN-KIS participants (X1) is suspected of having no influence or having a positive and significant influence on the use of health services (Y) at Community Health Centers and their networks.

Ho: The level of knowledge of JKN-KIS participants (X1) is suspected of not affecting the use of health services (Y) at Community Health Centers and their networks.

H1: The level of knowledge of JKN-KIS participants (X1) is thought to have a positive and significant influence on the use of health services (Y) at Community Health Centers and their networks.

Table 8
Results of the t-test on the influence of the level of knowledge of JKN-KIS participants on the use of health services

Model		Coefficients			t	Sig.
		Unstandardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta		
1	(Constant)	1,175	1,153		1,019	,311
	X1	,084	,075	,098	1,117	,267

a. Dependent Variable: Total Var Y

Source: Primary Data Processing Results, 2024

The criteria for making hypothesis decisions are based on the significance value (sig). If the sig value is greater than 0.05, H0 is accepted and H1 is rejected. Conversely, if the sig value is less than 0.05, H0 is rejected and H1 is accepted. Additionally, if the count is less than the ttable value of 1.66071, H0 is accepted and H1 is rejected; if the count exceeds the ttable, H0 is rejected and H1 is accepted. According to the t-test results from SPSS version 26.0, the significance value for the knowledge level variable (X1) is 0.267, with a count of 1.117. Since the sig value of 0.267 is greater than 0.05 and the count of 1.117 is less than 1.66071, it can be concluded that the knowledge level of JKN-KIS participants (X1) does not affect the utilization of health services (Y) at the Pematang Panggang III.b Health Center in Mesuji Makmur District. Therefore, for hypothesis 1 (H1), H0 is accepted and H1 is rejected.

Hypothesis 2 (H2) - The attitude of health workers (X2) is suspected of having no influence or having a positive and significant influence on the use of health services for JKN-KIS participants (Y) at Community Health Centers and their networks.

Hey: The attitude of health workers (X2) is thought to not influence the use of health services for JKN-KIS participants (Y) at Community Health Centers and their networks.

H1: The attitude of health workers (X2) is thought to have a positive and significant influence on the use of health services for JKN-KIS participants (Y) at Community Health Centers and their networks.

Table 9
Results of the t-test on the influence of officers' attitudes towards Utilization of Health Services

Model		Coefficients			t	Sig.
		Unstandardized Coefficients	Standardized Coefficients			
		B	Std. Error	Beta		

1	(Constant)	1,175	1,153		1,019	,311
	X2	,796	,094	,612	8,501	,000

a. Dependent Variable: Total Var Y

Source: Primary Data Processing Results, 2024

The criteria for deciding on this hypothesis rely on the significance value (sig). If the sig value exceeds 0.05, H0 is accepted, and H2 is rejected. Conversely, if the sig value is less than 0.05, H0 is rejected, and H2 is accepted. Furthermore, if the count is less than the ttable value of 1.66071, H0 is accepted and H2 is rejected; however, if the count exceeds the ttable, H0 is rejected and H2 is accepted. According to the results from the SPSS version 26.0 analysis using the t-test, the significance value (sig) for the variable regarding officer attitudes (X2) is 0.000, with a count of 8.501. Since the sig value of 0.000 is less than 0.05 and the count of 8.501 is greater than 1.66071, it indicates that the attitude of officers (X2) positively and significantly influences the utilization of health services (Y) at the Pematang Panggang III.b Health Center, Mesuji Makmur District. Thus, for hypothesis 2 (H2), it can be concluded that H0 is rejected and H1 is accepted

Hypothesis 3 H3 H3)-Achievement of health facilities for JKN-KIS participants (X3) is thought to have no effect or a positive and significant effect on the use of health services (Y) at the Community Health Center and its network.

Hey: Achievement of health facilities for JKN-KIS participants (X3)) is thought to have no effect on the use of health services (Y) at the Community Health Center and its network.

Achievement of health facilities for JKN-KIS participants (X3)) has a positive and significant influence on the use of health services (Y) at the Community Health Center and its network.

Table 10
Results of the t-test on the effect of health facility accessibility on the use of health services

		Coefficients				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,175	1,153		1,019	,311
	X3	,435	,114	,274	3,810	,000

a. Dependent Variable: Y

Source: Primary Data Processing Results, 2024

The hypothesis decision criteria are determined based on the significance value (sig). If the sig value is greater than 0.05, H0 is accepted, and H3 is rejected. Conversely, if the sig value is less than 0.05, H0 is rejected, and H3 is accepted. Additionally, if the count is less than the ttable value of 1.66071, H0 is accepted and H3 is rejected; however, if the count exceeds the ttable, H0 is rejected and H3 is accepted. According to

the results from the SPSS version 26.0 t-test, the significance value (sig) for the variable of health facility accessibility (X3) is 0.000, with a count of 3.810. Since the sig value of 0.000 is less than 0.05, and the count of 3.810 is greater than 1.66071, it is confirmed that health facility accessibility (X3) has a positive and significant effect on the utilization of health services (Y) at the Pematang Panggang III.b Health Center, Mesuji Makmur District. Therefore, for hypothesis 3 (H3), H0 is rejected, and H3 is accepted.

F-test results

To determine whether two or more independent variables have a significant simultaneous effect on the dependent variable, an F test is conducted. The criteria for accepting or rejecting the F test results stipulate that the significance value (Sig) must be less than 0.05. Additionally, the F count value should be greater than the F table value (F count > F table).

With a sample size of 99 respondents and three independent variables—knowledge level (X1), attitudes of health workers (X2), and accessibility of health facilities (X3)—the obtained F value is 2.14. The results of the F test using SPSS version 26.0 are presented in Table 5.35 below.

Table 11
F-Test Estimation Results

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	793,790	3	264,597	101,948	,000b
	Residual	246,564	95	2,595		
	Total	1040,354	98			

a. Dependent Variable: Total Var Y

b. Predictors: (Constant), Total Var X3, Total Var X2, Total Var X1

Source: Primary Data Processing Results, 2024

Table 11 shows that the criteria for passing the F test are satisfied, as the significance value is 0.000, which is less than 0.05, and the calculated F value is 101.948, exceeding the F table value of 2.14. Therefore, hypothesis 4 is accepted. This indicates that the level of knowledge (X1), the attitudes of health workers (X2), and the accessibility of health facilities (X3) have a significant and positive simultaneous impact on the utilization of health services for JKN-KIS participants at the Pematang Panggang III.b Health Center in Mesuji Makmur District.

Results of the Determination Coefficient Test (R Square)

The determination coefficient test (R square) aims to evaluate the proportion or percentage of the total variation in the dependent variable that is explained by the independent variable. In this analysis, multiple regression is employed, so the Adjusted R Square is utilized. The results of the determination coefficient test, or R Square (R²), calculated using SPSS version 26.0, are shown in Table 5.36 below.

Table 12
Results of the Determination Coefficient Test (R Square)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,873a	,763	,756	1.6110264
a. Predictors: (Constant), Total Var X3, Total Var X2, Total Var X1				
b. Dependent Variable: Total Var Y				

Source: Primary Data Processing Results, 2024

The correlation coefficient (R) between the level of knowledge (X1), attitudes of health workers (X2), and accessibility of health facilities (X3) about the utilization of health services by JKN-KIS participants (Y) yielded an R-value of 0.837. This indicates a strong positive relationship between the dependent and independent variables.

The contribution of the variables knowledge level (X1), health worker attitude (X2), and health facility accessibility (X3) to the utilization of health services for JKN-KIS participants (Y), represented by the coefficient of determination (R Square), is 0.763. This means that 76.3% of the variation in the utilization of health services can be explained by these variables, while the remaining 23.7% is influenced by other factors not explored in this study.

The Influence of the Level of Knowledge of JKN-KIS Participants on the Utilization of Health Services at the Pematang Panggang III.b Health Center, Mesuji Makmur District and its Network

According to the results obtained from data analysis with SPSS version 26.0 using the t-test, the significance value (sig) for the knowledge level variable (X1) is 0.267, and the t count is 1.117. Since the sig value of 0.267 is greater than 0.05 and the t count of 1.117 is less than 1.66071, it indicates that the knowledge level of JKN-KIS participants (X1) does not significantly impact the utilization of health services (Y) at the Pematang Panggang III.b Health Center, Mesuji Makmur District, and its network.

This finding contradicts Lawrence Green's perspective (1980), which posits that knowledge is a crucial predisposing or driving factor that affects an individual's behavior. Awareness regarding health centers can significantly shape community behaviors toward utilizing health center services. Knowledge is vital, as it shapes attitudes, leading to decisions about healthcare service selection. A higher level of knowledge within the community typically results in increased utilization of health services, whereas lower knowledge levels generally correlate with reduced usage of these services (Junaidi, 2013).

Respondents' ignorance about the benefits of health centers, what can be obtained from health services at health centers, and what programs and activities can be obtained by respondents in obtaining health services causes them not to want to use health services at health centers. For respondents who have high knowledge and do not use health centers because of the belief that they are not suitable for treatment at health centers and prefer midwife and hospital health services (Hidana et al., 2018).

The Influence of Health Workers' Attitudes on the Utilization of Health Services for JKN-KIS Participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District and its Network

From the data analysis conducted with SPSS version 26.0 using the t-test, the significance value (sig) for the variable related to officer attitudes (X2) is found to be 0.000, and the t count is 8.501. Since the sig value of 0.000 is less than 0.05, and the t count of 8.501 is greater than 1.66071, this demonstrates that the attitude of officers (X2) has a positive and significant impact on the utilization of health services (Y) at the Pematang Panggang III.b Health Center, Mesuji Makmur District, and its network. Furthermore, the coefficient of determination R (R Square) is 0.686, indicating that the attitudes of health workers account for 68.6 percent of the health service utilization by JKN-KIS participants, while the remaining 31.4 percent is attributed to other factors not explored in this study.

In line with the health service utilization model according to Andersen and Anderson (1979), the variable of health worker attitudes which is part of the community resource model is one of the determining factors in health service utilization.

Health centers play a crucial role in the JKN-KIS system for participants. When the services offered by these health centers are of high quality, a greater number of JKN-KIS participants are likely to utilize them; conversely, if the services are perceived as lacking, utilization may decrease (Hasbi, 2014). A common issue that arises in health centers is the demeanor and conduct of health workers, which can sometimes be perceived as unfriendly or not meeting expectations. Often, the relationship between health workers and patients is not well established, leading to diminished trust in the services offered. This situation significantly influences the willingness of the community, particularly JKN-KIS participants, to seek healthcare at these facilities (Alamsyah, 2014).

The findings of this study suggest that as the attitude of health workers toward patients at the Community Health Center improves, a greater number of individuals will take advantage of the health services available there. Conversely, if health workers exhibit poor attitudes, fewer individuals are likely to utilize these services.

The attitude of health workers is closely tied to their interactions with patients. Positive interpersonal relations foster trust and credibility through respectful behaviors, which include demonstrating empathy, maintaining confidentiality, being responsive, and providing attention to patients.

Listening to complaints and communicating effectively is also important in communicating, and trying to convey views, feelings, and hopes to others. Good human relationships will have a big role in effective counseling. Poor human relationships will reduce the effectiveness and technical competence of health services.

To achieve good health, the relationship between health services and patients must be well established. It is highly expected that every health worker can and tries to give sufficient attention to their patients personally provide full service listen to patient complaints and answer and provide information as clearly as possible about everything they want to know.

A friendly attitude plays an important role in serving patients. This attitude is to create a relaxed atmosphere in the patient so that the patient can convey their complaints and desires so that health workers will more easily understand them and avoid possible misunderstandings. A friendly attitude can be developed by a calm mood, forgetting annoying things, a smiling face, a warm tone of voice and not discriminating against consumers because every consumer is an important person.

The Influence of Health Facilities Accessibility on the Utilization of Health Services for JKN-KIS Participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District and its Network

Based on the data analysis using SPSS version 26.0 with the t-test, the significance value (Sig) for the variable of health facility accessibility (X3) is 0.000, and the count is 3.810. Since the sig value of 0.000 is less than 0.05 and the count of 3.810 is greater than 1.66071, it demonstrates that the accessibility of health facilities (X3) has a positive and significant impact on the utilization of health services (Y) at the Pematang Panggang III.b Health Center in Mesuji Makmur District and its network. With a coefficient of determination (R Square) of 0.45, it can be interpreted that health facility accessibility accounts for 45% of the utilization of health services for JKN-KIS participants at the Puskesmas. The remaining 55% is influenced by other factors not covered in this study.

Accessing healthcare facilities that are situated in areas with varied geographical conditions poses a significant challenge to delivering equitable health services within the jurisdiction of the Pematang Panggang III.b Health Center in the Mesuji Makmur District. When access is neither easy nor affordable, it becomes particularly difficult for the community, especially those with low incomes, to take advantage of the health services available. The low utilization rates of health services at the Pematang Panggang III.b Health Centers are influenced by how accessible these facilities are to the community. Individuals residing in urban areas with comprehensive health facilities, such as hospitals and clinics, can easily obtain health services. However, those in rural areas, where healthcare options are limited, often face obstacles in accessing available services.

The findings of this study align with the model proposed by Andersen and Anderson (1979) regarding the utilization of health services. Within their model, the accessibility of health facilities is categorized under the organizational model, serving as a critical factor in determining health service utilization. Health services should be readily available to the community and should not be obstructed by geographical, social, economic, organizational, or linguistic barriers. Green (2005) suggests that an individual's inclination to use health services is influenced by various supporting factors, including the distance to and accessibility of these services. Challenges in reaching health facilities can deter individuals from seeking care. Generally, the shorter the distance and travel time to health services, the higher the likelihood of their utilization. Addressing accessibility issues can be achieved by enhancing transportation infrastructure and support services for communities located far from health center facilities.

In this study, it was found that the accessibility of health facilities has a positive and significant effect on the utilization of health services for JKN-KIS participants at the

Pematang Panggang III.b Health Center, Mesuji Makmur District. Especially for distance, where the further a health facility is, the more reluctant residents are to come. If other studies show different results, for example, there is no relationship between the distance of residence and the utilization of health services for JKN-KIS participants, this difference may be because the location of the study was conducted in the city, where health facilities are much better and the area is not too large. So that most residents do not experience difficulty in accessing health facilities around their homes.

Health services should be accessible to all communities fairly and equally. Regardless of their financial situation, everyone should have the opportunity to access quality healthcare. Therefore, it is essential to extend the availability of existing health services so that all residents, including those in rural areas and low-income populations, can receive better care close to their homes. Since travel time to health facilities is a critical factor, these facilities must consider expanding their services, such as by extending operating hours, as current service times often overlap with people's work schedules. This way, individuals can find the time to seek healthcare after completing their daily work commitments.

The Influence of the Level of Knowledge of JKN-KIS Participants, the Attitude of Health Workers, and the Accessibility of Health Facilities on the Utilization of Health Services for JKN-KIS Participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District and its Network

According to Andersen and Anderson (1979), various models serve as determinants in the utilization of health services, such as the social psychological model (knowledge level), the community resource model (health worker attitudes), and the organizational model (accessibility of health facilities). In this study, while the variable representing the knowledge level of JKN-KIS participants (X1) does not show a significant effect individually, the combined influence of knowledge (X1), health worker attitudes (X2), and accessibility of health facilities (X3) significantly and positively impact the utilization of health services by JKN-KIS participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District.

Although many previous studies indicate that higher levels of public knowledge correlate with increased use of health services, and lower knowledge levels lead to reduced utilization, this study found that the knowledge level of JKN-KIS participants did not affect their use of services at the Community Health Center. This finding is largely attributed to a perception that these facilities are not appropriate for their treatment needs, leading participants to prefer seeking care from midwives or private clinics.

The research findings indicated a significance value of 0.000, which is less than 0.05, and an F count of 101.948, exceeding the F table value of 2.14. This suggests that the level of knowledge (X1), health worker attitudes (X2), and accessibility of health facilities (X3) all have a significant and positive simultaneous impact on the utilization of health services by JKN-KIS participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District.

The R Determination Coefficient Test reveals that the combined influence of the knowledge level (X1), health worker attitude (X2), and accessibility of health facilities (X3) on the utilization of health services for JKN-KIS participants (Y) is represented by an R Square value of 0.763. This indicates that these variables account for 76.3% of the influence, while the remaining 23.7% is attributed to other factors not investigated in this study.

This is in line with the concept of Lawrence Green (1980) on factors used to diagnose behavior. According to Green, the level of knowledge (predisposing factor), accessibility of health facilities (facilitating factor), and the attitude of health workers (reinforcing factor) are things that influence behavior, especially behavior in utilizing health services at health facilities. (Febriawati et al., 2021) (Sonia et al., 2022). For instance, to maintain a healthy lifestyle, individuals often need not just knowledge and positive attitudes but also support in terms of facilities and accessibility. Additionally, they require role models from community leaders, religious figures, officials, and particularly health workers. Furthermore, legal frameworks are essential to reinforce community behaviors. Regulations or legislation that mandate pregnancy check-ups and facilitate access to these services are also necessary to ensure that pregnant women receive appropriate care.

Conclusion

Based on the results of the analysis as previously explained, it can be concluded related to the problems raised in this study, namely: The level of knowledge of JKN-KIS participants does not have a significant effect on the utilization of health services at the Pematang Panggang III.b Health Center, Mesuji Makmur District and its network. This is due to the belief/suggestion that they get more satisfaction from private services than at the Health Center. The attitude of health workers has a positive and significant effect on the utilization of health services for JKN-KIS participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District, and its network by 68.6 percent, and the remaining 31.4 percent is influenced by other variables not examined in this study.

The accessibility of health facilities has a positive and significant effect on the utilization of health services for JKN-KIS participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District, and its network by 45 percent, and the remaining 55 percent is influenced by other variables not examined in this study. The level of knowledge of JKN-KIS participants, the attitude of health workers, and the accessibility of health facilities simultaneously have a positive and significant effect on the utilization of health services for JKN-KIS participants at the Pematang Panggang III.b Health Center, Mesuji Makmur District, and its network by 76.3 percent, and the remaining 23.7 percent is influenced by other variables not examined in this study.

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