

# Analysis of Factors of Utilization of JKN Program Services in Pancur Batu District

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## ABSTRACT

The JKN program in Pancur Batu District, Deli Serdang Regency, has not been running optimally, with a low number of participants utilizing health services. This is due to various factors, including access, service quality, and public understanding. This study aims to identify the relationship between factors that influence the utilization of health services in the area. The method used is a quantitative approach with a cross-sectional design, involving 97 respondents selected by simple random sampling. Data were collected through questionnaires and analyzed using chi-square analysis. The results showed a significant correlation between the use of JKN services and education level ( $p = 0.015$ ), availability of facilities and infrastructure ( $p = 0.009$ ), accessibility ( $p = 0.002$ ), and complaints of illness ( $p = 0.011$ ). In contrast, no significant correlation was found between employment status ( $p = 0.805$ ) and salary ( $p = 0.622$ ) with service utilization. The conclusion of this study is that increasing the utilization of the JKN program requires a holistic approach, which includes improving access to health facilities, improving service quality, and educating the public about the benefits of the JKN program.

**Keywords:** JKN Program, utilization factors, JKN participants

## INTRODUCTION

According to the concept developed by the World Health Organization (WHO), Universal Health Coverage (UHC) is a situation where every individual has access to the health services they need, at any time, without experiencing any financial hardship or technical constraints. The Indonesian health system is currently transitioning to Universal Health Coverage (UHC), with the aim of providing health insurance for all Indonesian citizens (Herawati, Franzone, & Chrisnahutama, 2020).

The objective of the National Health Insurance (JKN) program, which began on January 1, 2014, is to ensure that every Indonesian citizen receives free medical services, including preventive, promotive, curative, rehabilitative, and palliative services. JKN functions as a social health insurance policy. However, there are still several obstacles in implementing strategic planning, such as excess capitation funds, unclear regulations, and participation rates (Sihole and Lesmana, 2024).

According to the Coordinating Ministry for Human Development and Culture in 2023, the goal of the National Health Insurance (JKN) Optimization program in 2023 is to achieve the target of the National Medium-Term Development Plan (RPJMN) of 98% of the Indonesian population registered in the JKN-KIS program in 2024. BPJS Kesehatan plays an important role in increasing access to health services, especially through easy access at primary clinics and first-level facilities (Siregar et.al 2024).

Indonesia's health system is beginning to transition towards UHC. One of the implementations carried out by the Indonesian Government is by launching the National Health Insurance (JKN) program in 2014 as a commitment to providing protection in health rights for all Indonesian people.(Herawati, 2020). The percentage of Indonesian population with health problems showed a growth rate between 2018 and 2020. In 2018, 64 out of 100 Indonesians (64.1%) had health insurance. Two years later, the figure increased to 69 out of 100 residents (69.29%) (Central Bureau of Statistics, 2020).

Although the coverage of JKN participants continues to increase from year to year, its implementation still faces various challenges such as suboptimal service quality, inequality of access, and lack of public understanding of service procedures. This problem is also seen from the low utilization of BPJS Kesehatan services in various regions, especially in remote areas. One area that experienced a similar thing was Pancur Batu District in Deli Serdang Regency. Based on data from the Tuntungan Health Center in 2022, out of a total of 85,704 residents in the operational area of the health center, only 30,702 people (42.9%) were registered as JKN participants. This figure shows that the utilization of the JKN program in Pancur Batu is still relatively low. The low level of utilization can be caused by various factors, such as a lack of public understanding of BPJS services, inadequate quality of health services, limited accessibility, and other socio-economic factors.

The JKN program is still in its early stages and has experienced many setbacks, including various challenges and obstacles. The perception of the upper class community towards poor service quality, uniformity of service for all participants, and long waiting times are among the main reasons why the class community does not have a high enough price for themselves. To measure consumer satisfaction, it is important to compare the quality of service received with what they expected. When consumers expect a certain level of service and the service they receive exceeds their expectations, therefore they will feel very satisfied (Yanuarti et al., 2021).

## METHOD

This study uses a quantitative method with a cross-sectional design to evaluate the variables that influence the utilization of the National Health Insurance Program (JKN) by the community in Pancur Batu District, Deli Serdang Regency. This study was conducted in April 2025. In this study, 30,702 people living in Pancur Batu District were active JKN participants. The sample size was determined using the Lemeshow (1997) minimum sample size formula which resulted in a minimum sample size of 97 respondents. The sampling technique used was simple random sampling and the sample size was the number of active JKN participants. To obtain data, a structured questionnaire was used that had been tested for validity and reliability. To determine the relationship between the variables studied and the utilization of health services, the data were analyzed using the chi-square test.

## RESULTS

The results of the data collected for this study involved 97 active JKN participants in Pancur Batu District. The majority of respondents were under 30 years old, highly educated, employed, and earned more than IDR 2,300,000 per month. The results of the analysis using the chi-square test showed a significant relationship between the utilization of JKN services and education level ( $p = 0.015$ ), availability of health facilities ( $p = 0.009$ ), accessibility ( $p = 0.002$ ), and complaints of illness ( $p = 0.011$ ). People with higher education, easy access to services, adequate facilities, and lower levels of complaints of illness tend to be more active in utilizing JKN services. On the other hand, no significant relationship was found between employment status ( $p = 0.805$ ) or income level ( $p = 0.622$ ) and utilization of services, indicating that the economic aspect is not the main factor in the utilization of JKN services in this area.

**Table 1. Characteristics of Respondents Based on Utilization of JKN Health Services in Pancur Batu District**

	<b>Characteristics</b>	<b>n</b>	<b>%</b>
<b>Age</b>	> 30 Years	44	45.4%
	≤ 30 Years	53	54.6%
	<b>Amount</b>	97	100%

<b>Gender</b>	Man	48	49.5%
	Woman	49	50.5%
<b>Amount</b>		97	100%
<b>Education</b>	Tall	77	79.4%
	Low	20	20.6%
<b>Amount</b>		97	100%
<b>Work</b>	Work	63	64.9%
	Doesn't work	34	35.1%
<b>Amount</b>		97	100%
<b>Income</b>	> 2,300,000.00	53	54.6%
	≤ 2,300,000.00	44	45.4%
<b>Amount</b>		97	100%

Table 1 shows that there were 97 respondents who participated in this study, of which 44 people (45.36%) were aged 30 years or older, while 53 people (54.64%) were under or equal to 30 years. In terms of gender, the composition was almost balanced between men (49.5%) and women (50.5%). Most (79.4%) had secondary education or above, while 20.6% had low education. In terms of employment, those who worked (64.9%), while the group who did not work (35.1%). The respondents' income was divided fairly evenly, with (54.6%) earning more than Rp 2,300,000 per month and (45.4%) below, reflecting the economic conditions of the Pancur Batu District community.

**Table 2. Relationship between Education Level and Utilization of JKN Health Services in Pancur Batu District**

<b>Education</b>	<b>Utilization of JKN Program Health Services</b>						<b>pvalue</b>
	<b>Utilise</b>		<b>Not Taking Advantage</b>		<b>Amount</b>		
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	

<b>Tall</b>	<b>60</b>	<b>77.9</b>	<b>17</b>	<b>22.1</b>	<b>77</b>	<b>100</b>	<b>0.015</b>
<b>Low</b>	<b>15</b>	<b>75.0</b>	<b>5</b>	<b>25.0</b>	<b>20</b>	<b>100</b>	
<b>Total</b>	<b>75</b>	<b>152.9</b>	<b>22</b>	<b>47.1</b>	<b>97</b>	<b>100</b>	

Table 2 above shows that out of 97 respondents, 77 people are highly educated, 60 people (77.9%) utilize JKN health services, while 17 people (22.1%) do not utilize JKN health services. Meanwhile, out of 20 respondents with low education levels, 15 people (75.0%) utilize JKN health services, and 5 people (25.0%) do not utilize JKN health services. The results of the chi-square analysis show a p value of 0.015. Because  $p < 0.05$ , it can be said that there is a significant relationship between education level and utilization of JKN health services in Pancur Batu District.

**Table 3. Relationship between Occupation and Utilization of JKN Health Services in Pancur Batu District**

<b>Work</b>	<b>Utilization of JKN Program Health Services</b>						<b>pvalue</b>
	<b>Utilise</b>		<b>Not Taking Advantage</b>		<b>Amount</b>		
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	
<b>Work</b>	<b>53</b>	<b>84.1</b>	<b>10</b>	<b>15.9</b>	<b>63</b>	<b>100</b>	<b>0.805</b>
<b>Doesn't work</b>	<b>30</b>	<b>88.2</b>	<b>4</b>	<b>11.8</b>	<b>34</b>	<b>100</b>	
<b>Total</b>	<b>83</b>	<b>172.3</b>	<b>14</b>	<b>27.7</b>	<b>97</b>	<b>100</b>	

Table 3 illustrates that out of 97 respondents, 63 respondents were employed, 53 respondents (84.1%) used JKN services, while 10 respondents (15.9%) did not use JKN services. Out of 34 respondents who were unemployed, 30 respondents (88.2%) used JKN services, and 4 respondents (11.8%) did not use JKN services. Chi-square analysis showed  $p = 0.805$ . Since  $p > 0.05$ , there is no significant relationship between employment status and utilization of JKN health services in Pancur Batu District.

**Table 4. Relationship between Income and Utilization of JKN Health Services in Pancur Batu District**

<b>Income</b>	<b>Utilization of JKN Program Health Services</b>					

	Utilise		Not Taking Advantage		Amount		pvalue
	n	%	n	%	n	%	
> 2,300,000.00	44	83.0	9	17.0	53	100	0.622
≤ 2,300,000.00	39	88.6	5	11.4	44	100	
<b>Total</b>	<b>83</b>	<b>171.6</b>	<b>14</b>	<b>28.4</b>	<b>97</b>	<b>100</b>	

Table 4 above shows that out of 97 respondents, with 53 respondents having income above Rp2,300,000.00, 44 people (83.0%) utilized the services and 9 people (17.0%) did not utilize the services. Meanwhile, out of 44 respondents with income ≤ Rp2,300,000.00, 39 people (88.6%) utilized the services and 5 people (11.4%) did not utilize the services. The results of the chi square analysis showed a p value = 0.622. Because  $p > 0.05$ , there is no significant relationship between income level and utilization of JKN health services in Pancur Batu District.

**Table 5. Relationship between Availability of Facilities and Utilization of JKN Health Services in Pancur Batu District**

Availability of Facilities	Utilization of JKN Program Health Services				Amount	pvalue	
	Utilise		Not Taking Advantage				
	n	%	n	%			
<b>Good</b>	<b>78</b>	<b>93.9</b>	<b>5</b>	<b>6.1</b>	<b>83</b>	<b>100</b>	<b>0.009</b>
<b>Bad</b>	<b>5</b>	<b>35.7</b>	<b>9</b>	<b>64.3</b>	<b>14</b>	<b>100</b>	
<b>Total</b>	<b>83</b>	<b>129.6</b>	<b>14</b>	<b>70.4</b>	<b>97</b>	<b>100</b>	

Table 5 shows that out of 97 respondents, 83 respondents assessed the facilities in good condition, 78 respondents (93.9%) utilized health services, while 5 respondents (6.1%) did not utilize health services. Out of 14 respondents assessed the facilities in poor condition, only 5 respondents (35.7%) utilized health services and 9 respondents (64.3%) did not utilize health services. Chi-square analysis showed  $p = 0.009$ . Since  $p < 0.05$ , there is a significant relationship between the availability of facilities and the utilization of JKN health services in Pancur Batu District.

**Table 6. Relationship between Accessibility and Utilization of JKN Health Services in Pancur Batu District**

Accessibility	Utilization of JKN Program Health Services						pvalue
	Utilise		Not Taking Advantage		Amount		
	n	%	n	%	n	%	
Easy	56	94.9	3	5.1	59	100	0.002
Difficult	27	71.1	11	28.9	38	100	
Total	83	166	14	34	97	100	

Table 6 shows that out of 97 respondents, and 59 respondents who reported easy access to services, 56 respondents (94.9%) utilized the services, while 3 respondents (5.1%) did not utilize the services. On the other hand, out of 38 respondents who experienced difficulty in access, 27 respondents (71.1%) utilized the services and 11 respondents (28.9%) did not utilize the services. Chi-square analysis  $p = 0.002$ . Since  $p < 0.05$ , there is a significant relationship between accessibility and utilization of JKN health services in Pancur Batu District.

**Table 7. Relationship between Perception of Illness and Utilization of Health Services for JKN Participants in Pancur Batu District**

Perception of Pain	Utilization of JKN Program Health Services						pvalue
	Utilise		Not Taking Advantage		Amount		
	n	%	n	%	n	%	
Tall	23	59.0	16	41.0	39	100	0.011
Low	48	82.8	10	17.2	58	100	
Total	71	141.8	26	58.2	97	100	

Table 7 shows that out of 97 respondents, there were 39 respondents with high levels of pain complaints, and 23 respondents (59.0%) utilized the services and 16 respondents (41.0%) did not utilize the services. Out of 58 respondents with low levels of pain complaints, 48 respondents (82.8%) utilized the services and 10 respondents (17.2%) did not utilize the services. The results of the chi-square analysis showed a  $p$  value = 0.011. Because  $p > 0.05$ , there is a significant relationship between pain complaints and the utilization of JKN health services in Pancur Batu District.

## **DISCUSSION**

### **Relationship Between Education Level and Utilization of JKN Health Services in Pancur Batu District**

Education level is significantly associated with service utilization ( $p=0.015$ ;  $PR=1.50$ ). Respondents with >high school education are more likely to use services due to better insight into the importance of health. Educational interventions need to be focused on low-educated groups to increase awareness.

The results of the study illustrate a significant relationship between education level and utilization of health services for JKN participants in Pancur Batu District. Respondents with higher education levels are consistently more active in utilizing health service benefits compared to respondents with lower education levels. This is in accordance with the results of research by Fajriani et al. (2024) which shows a significant relationship between education and utilization of health service resources. Higher levels of education can increase public understanding of health and access to health information, which will encourage them to be more proactive in utilizing available resources.(Fajriani, 2024). However, it is important to underline that education is not just about diplomas, but also related to health literacy, trust in medical services, and the ability to navigate the complex JKN system.

### **The Relationship Between Work and the Utilization of JKN Health Services in Pancur Batu District**

Employment status did not have a significant effect ( $p = 0.850$ ;  $PR = 0.95$ ), because respondents who were employed and unemployed both utilized the service. The difference was statistically insignificant, so it cannot be concluded that employment status influences service utilization behavior. In Pancur Batu, many people work as farmers, gardeners, or small-scale MSME actors. This informal work does not guarantee formal health insurance from employers, so dependence on JKN is quite high, although it is not visible from the employment status data. The results of the study illustrate that there is no significant relationship between work and health benefits received by JKN employees in Pancur Batu District. Respondents with permanent jobs utilize the same health benefits as respondents who do not have permanent jobs. This study is in line with Stiyawan (2023) that there is a relationship between work and the use of health services ( $p$ -value = 0.002) in JKN Participants in Jejawi District because

workers will use health services to check their health conditions due to risk factors for health disorders that can arise from the work environment.

### **The Relationship Between Income and Utilization of JKN Health Services in Pancur Batu District**

Income and service utilization were not significantly correlated ( $p = 0.622$ ;  $PR = 0.94$ ). Although statistically, the income group  $\leq 2,300,000$  rupees used a slightly higher number of services than the income group  $> 2,300,000$  rupees, the difference was not significant. Income was not significantly related to JKN utilization. However, JKN is subsidized and does not require high direct costs, so its utilization tends to be evenly distributed. This means that economic inequality is not too striking in the context of JKN basic services. The results of the study illustrate that there is no significant relationship between the level of payment and the use of health services by JKN employees in Pancur Batu District. High and low income respondents do not differ in terms of health service utilization.

These results are in accordance with Herlinawati's research (2021) which states that there is no significant correlation between the research results and the health benefits of BPJS participants at the Pegambiran Health Center, Cirebon City with a  $p$  value of 0.148 ( $p > 0.05$ ) (Herlinawati, 2022).

### **The Relationship Between Availability of Facilities and Utilization of JKN Health Services in Pancur Batu District**

Adequate facilities and infrastructure have a significant effect ( $p=0.002$ ;  $PR=1.340$ ) on service utilization. Comfortable and complete facilities will increase patient confidence in using health services. The results of the study stated that there is a significant relationship between the availability of facilities and infrastructure and health utilization by JKN employees in Pancur Batu District. Complete and adequate health facilities include comfortable examination rooms, modern health equipment, and the availability of essential medicines to increase public confidence and comfort in overcoming health service problems. These results are in line with research (Mustadifah & Idrawati, 2021) where most of the people who participated chose health centers. The main reason is because health centers have many basic health services in one place. One example is how the basic part of the health building looks.

### **The Relationship Between Accessibility and Utilization of JKN Health Services in Pancur Batu District**

The results of the study stated that there was a significant relationship between accessibility and the use of JKN health services in Pancur Batu District ( $p = 0.002$ ;  $PR = 1.34$ ). As many as 94.9% of respondents who stated easy access to the health center utilized health services, while only 71.1% stated that it was difficult. This shows that easy access directly influences people's tendency to utilize JKN services. These results are very relevant. Distance, road conditions, and transportation greatly determine visiting behavior. Although JKN covers medical costs, transportation costs and travel time are a burden for rural communities. Ziana Aubi Basith et al. (2020) also found a relationship ( $p\text{-value} = 0.000$ ) between ease of access to the Gayamsari Health Center and how often people use its services. These facts support each other. Things like how far away the health service is, the time it takes to get there, and how people get there make it difficult for them to move (Basith & Prameswari, 2020).

### **The Relationship Between Perception of Pain and Utilization of JKN Health Services in Pancur Batu District**

Based on the results of the study, it is explained that there is a significant relationship between the perception of pain and the utilization of health services by JKN participants. Respondents with low perception of pain utilized more services (82.8%) compared to those with low perception of pain (59.0%). This reflects that the high level of perception of pain encourages someone to be more active in seeking health services, both for treatment and monitoring of conditions.

The results of the analysis show that the perception of pain is the dominant factor related to visits, these results are in line with research which states that the perception of pain is related to visits to patients at the Vita Medistra Clinic in Pematangsiantar City (Putri et al., 2020).

## **CONCLUSION**

This study revealed that education level, availability of facilities, accessibility, and disease perception significantly influence the utilization of JKN health services in Pancur Batu District. In contrast, employment status and income did not show a significant influence. The findings of this study highlight the need to improve the quality of services, access, and health education, especially for low-educated groups, to increase the use of equitable and sustainable JKN

services. From this study, it is hoped that policy makers can use this study as a guide when making more effective policies to increase the utilization of health services in the area.

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