



## Perception Towards Illness/Treatment and Satisfaction Towards Healthcare Services in the Advanced Level Referral Health Facility

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### Abstract

Since it was enacted in 2014, it has been reported that the number of JKN participants has increased every year. This increase was influenced by perceptions of illness, perceptions of treatment, and service satisfaction. This study aims to describe perception towards illness/treatment and satisfaction towards satisfaction of health services in the advanced level referral health facility (FKRTL) among national health insurance (JKN) participants and determine the relationship between sociodemographic characteristics and the perceptions and satisfaction. **Method:** This research is an analytic observational study with a survey data collection using a cross-sectional approach. The study used a convenience sampling technique with a minimum sample size of 400 respondents. The survey was conducted online to cover respondents from all areas of Indonesia. **Result:** The study showed that 220 respondents (55%) had positive perceptions of illness, 213 respondents (53.2%) had positive perceptions of treatment, meanwhile 217 respondents (54.2%) had a satisfied perception of health services. There was a significant relationship between income level and the perception of illness ( $p=0.048$ ). **Conclusion:** Most of the respondents have a positive perception of illness and medicine. In addition, some respondents were satisfied with the health services at the advanced-level referral health facility. The income level variable has a significant relationship with the perception of pain.

Keywords: *bpjs, illness, medicine, satisfaction*

### Introduction

On January 1, 2014, as a form of commitment to provide quality and comprehensive health services for all Indonesian people, the Indonesian government implemented the National Health Insurance (JKN) program <sup>1</sup>. This program is a movement for developing and fostering national social security organized by the social security development agency (BPJS), consisting of BPJS for Health and BPJS for Employment, through law number 24 of 2011 concerning health insurance administering bodies.

Based on government regulation No. 46 of 2015, the types of participation included in the old age security (JHT) program consist of wage and non-wage recipients. According to 2019 social security Statistics data, from 2015 to 2019, there were 224 million participants, or an average increase of 9.35% per year compared to the previous year. This number continues to grow until, at the end of 2021, it is reported that the number of registered health

insurance participants is 235 million participants. The number increase was dominated by the PBI segment (contribution assistance recipients) followed by *Jamkesda* and *PJKMU Askes* (Transition), private/BUMN/other employees, independent workers, and others <sup>4</sup>.

Several aspects, including perceptions of illness, perceptions of medicine, and service satisfaction, can influence the utilization of health services at JKN health service facilities <sup>5,6</sup>. Research by Amadea & Bambang states that the individual perception of illness variable ( $p=0.000$ ) influences JKN utilization. People with the correct perception of illness will make good use of health services and only delay once their illness worsens <sup>5</sup>. In addition to the perception of illness, Pertiwi & Hamidah found a relationship between individuals who utilize *BPJS* health service facilities and their perception of medicine <sup>7</sup>. Individuals with more positive perceptions of treatment are motivated to care more and consider

the benefits or sacrifices required in seeking the treatment.

Research results by Agustina reported a relationship in a statistical test between the level of satisfaction ( $p = 0.024$ ) and the utilization of health services at health facilities in the *Kalongan* area<sup>8</sup>. This aligns with the BPJS financial audit report, which notes that the JKN participant satisfaction index 2021 is 87.6%, an increase of 6.1% from the previous year<sup>4</sup>. A high level of satisfaction will form loyalty toward reusing medical services at the same health facility.

The perceptions of illness, perceptions of medicine, and service satisfaction influenced people's behaviour in utilizing the National Health Insurance (JKN). This factor certainly challenges the government to achieve the JKN membership target of 98% nationally in 2024. Based on this background, the researchers were motivated to research pain perception, treatment, and service satisfaction with health services at advanced referral health facilities.

## Methods

The research design is an analytic observational study with a survey cross-sectional data collection design online data collection for October – December 2022 throughout Indonesia. The research subjects consisted of Indonesians registered as JKN participants and had visited advanced referral health facility (FKRTL) that met predetermined inclusion criteria. The sampling method used was convenience sampling with inclusion criteria in the study covering people domiciled in Indonesia, respondents had used health services at advanced referral health facilities (general hospitals, exceptional hospitals, primary clinics), respondents had registered in the national health insurance program (JKN), respondents aged  $\geq 18$  years, participants willing to become research respondents by agreeing to informed consent. Meanwhile, the exclusion criteria included respondents not answering the online questionnaire thoroughly. The number of samples is determined based on the following formula<sup>9</sup>:

$$n = \frac{Z^2 \cdot p \cdot q}{e^2}$$

$$n = \frac{1.96^2 \times 0.5 (1-0.5)}{0.05^2}$$

$$n = 384.16 \text{ or at least } 385$$

Based on the results of calculations using this formula, the minimum sample size used in this study is 385 respondents (national health insurance patients at FKRTL) and rounded up to 400 respondents with a proportional distribution of

respondents based on population in each JKN region (regional IV) in Indonesia.

The questionnaire in this study consisted of 37 questions to measure perceptions of illness, perceptions of medicine, and satisfaction of JKN participants. The questionnaire will be developed based on a literature review of the questionnaire that has been used in previous studies, and modifications will be made as needed to achieve the research objectives. Then the researcher conducts a validity test on the questionnaire, including expert judgment and face validity. The judgment expert begins by inviting experts in the field of social pharmacy to provide input on questions or statements. Face validity test by selecting 30 respondents who meet the inclusion and exclusion criteria to complete the questionnaire.

## Result and Discussion

### Characteristics of Respondents

The total sample obtained in this study was 583 respondents. The total sample was then selected, and obtained as many as 400 data from respondents who met the inclusion criteria and 183 data from respondents who were excluded. The results of the study in table 1 show the characteristics of the respondents, including age, gender, domicile, education level, income level, marital status, number of family dependents, occupation, and type of health insurance.

Based on Table 1, it was found that in the first category, namely age, more JKN participants with an age range of 18-35 years were more responsive than those aged 36-74 years. In this study, 88.5% were aged 18-35, and 11.5% were aged 36-74. The difference in percentages is due to the media factor used in distributing the questionnaire, namely online via the website jot form and form, so this encourages early adulthood to more easily access existing questionnaire forms. Research by Restyandito and Kurniawan shows that age influences communication and information technology use ( $p < 0.05$ ). The older the respondents, the less their knowledge and experience in using communication equipment and information technology<sup>10</sup>.

The second is the gender category, the results show that women are 78.7% and men are 21.2%. Women are the most significant respondents compared to men. These results can be caused because women have more time to be at home due to their role as housewives compared to men who have to work outside the home as the head of the family<sup>11</sup>.

The third is the domicile category, for this category, the most came from regional I domiciles, namely 56%, and the least amount was from regional IV domiciles, which was 2.5%. This difference is because Regional 1 areas have a large population, so if the sum of all the provinces is obtained, a total percentage of 56.10% is obtained. In comparison, domicile IV only consists of 2 provincial areas, namely South Kalimantan and Central Kalimantan, causing the proportion of the percentage of representation of the respondents is tiny when compared to the other 4 domicile areas.

The fourth is the education level category. It can be seen that the highest number of JKN participants who are willing to be respondents are those with a tertiary education level, namely 87.2%, and the lowest respondent's educational level, namely junior high school, with 0.2%. Concerning health services, if someone has a higher education, they will have a broader view, and it is easier to be compelled to seek information on treatment and the types of health services provided <sup>12</sup>.

**Table 1** Data on Respondent Characteristics

Characteristics	N(400)	%
Age	18-35 years	354 88.5
	36 -74 years old	46 11.5
Type Sex	man	85 21.2
	woman	315 78.7
Domicile	regional I	224 56
	region II	58 14.5
	regional III	79 19.7
	regional IV	10 2.5
	regional V	29 7.2
Education Level	no school/elementary school	0 0
	junior high school	1 0.2
	senior high school	50 12.5
	college	349 87.2
Income Level	< Rp. 2,500,000/ month	85 21.2
	Rp. 2,500,000 -5,000,000/ month	195 48.7
	Rp. 5,000,000 -10,000,000/ month	86 21.5
	> Rp. 10,000,000/ month	34 8.5
Marital status	mary	121 30.2
	widower or widow	2 0.5
	single	277 69.2
Amount of dependent family	0 people	252 63
	1-3 people	117 29.2
	≥4 people	31 7.7
Work	work in the field of health	236 59
	working in the non-health field	64 16
	no work	100 25
	JKN insurance	370 92.5
Type insurance health	non JKN	0 0
	JKN insurance, and other health	30 7.5

The fifth is the income level category, JKN participants with an income range of Rp. 2,500,000 – 5,000,000/month are more respondents than income

levels >Rp. 10,000,000/month. In this study, the level of income was 48.7% Rp. 2,500,000/month and 8.5% income level >Rp. 10,000,000/month. People with incomes above our age will seek treatment at health service providers that are in accordance with their beliefs and experiences, which they consider to be better because high incomes tend not to be concerned about expensive costs in determining treatment and types of health service facilities <sup>13</sup>.

Sixth is marital status, in this category, the most significant number of respondents came from unmarried status, namely 69.2%, and the smallest were obtained from widower or widow status, namely 0.5%. Seventh is the number of dependents, it can be found in Table 1 that JKN participants who do not have dependents at 63% are the most respondents compared to JKN participants with dependents ≥4 people, which is only 7.7%. The age characteristics of the respondents in this study influence the percentage difference. It is known that most respondents in this study were in the early adult age category, namely 18-35 years. This age is productive, and he still focuses on their career and work rather than marriage <sup>14</sup>.

The eighth is the type of work, JKN participants with jobs in the health sector are more responsive than those in the non-health sector, in the results of this study, 59% work in the health sector and 16% work in the non-health sector. The type of work encourages individuals to consider their participation as JKN participants, this can be seen from the percentages, which show that the number of JKN participants is dominated by respondents who have jobs <sup>15</sup>.

Ninth is the type of health insurance, the results show that the category of JKN health insurance is 92.5% while JKN health insurance and other health insurance is 7.5%. From the following data, respondents with JKN insurance are larger than respondents with JKN and other insurance. These results indicate a good level of compliance related to the implementation of law number 40 of 2004 concerning the national social security system and law number 24 of 2011 concerning social security administrative bodies, which mandate that every Indonesian citizen is required to participate in the BPJS program.

### JKN Participants' Perceptions of Illness

Based on table 2 in question no. 1 shows that 3 respondents strongly disagree, 5 respondents disagree, 112 respondents agree, and 280 respondents strongly agree. Question no. 2 stated that

3 respondents strongly disagreed, 16 respondents disagreed, 172 respondents agreed, and 209 strongly agreed. Question no. 3 shows that there are 4 respondents strongly disagree, 14 respondents

disagree, 183 respondents agree, and 199 strongly agree.

**Table 2** Perception of Illness

No	Questions	n=400			
		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	Sick cause activity somebody disturbed	3 (0.75 %)	5 (1.25 %)	112 (28%)	280 (70%)
2.	Sick causes disturbance of physical, mental, social, and psychological functions	3 (0.75 %)	16 (4%)	172 (43%)	209 (52.25 %)
3.	If he is suffering from a disease that causes a feeling that is not comfortable, such as fever, pain, and weakness in the body	4 (1%)	14 (3.5 %)	183 (45.75)	199 (49.75 %)
4.	The disease affects life in an emotional way (e.g., making you angry, scared, annoyed, or depressed)	5 (1.25)	77 (19.25 %)	188 (47%)	130 (32.5 %)
5.	If I am sick, i.e. will look for a method to treat the condition of the body i	5 (1.25 %)	2 (0.5 %)	121 (30.25 %)	272 (68%)
6.	If I am sick, much treatment can help my recovery I	5 (1.25 %)	20 (5%)	203 (50.75)	172 (43%)
<b>Illness Perception Score (n=400)</b>					
Minimum Score					6
Maximum Score					24
Median					21

Question no. 4 states that there are 5 respondents strongly disagree, 77 respondents disagree, 188 respondents agree, and 130 strongly agree. For question no. 5, 5 respondents strongly disagree, 2 disagree, 121 respondents agree, and 272 strongly agree. Finally, on question no. 6, 5 respondents strongly disagree, 20 disagree, 203 agree, and 172 strongly agree.

**Table 3** Perception Level of Illness

Level of Perception of Illness	Score	Number of Respondents (n=400)	Percentage (%)
Positive	22-24	220	55
Negative	6-21	180	45

Based on table 3 shows that the majority of respondents have a positive perception of illness, namely 220 answers (55%). Meanwhile, only 180 respondents (45%) had negative perceptions. The perception of positive illness is determined based on the calculation of the final total score of the respondent's answers, and the score of these answers has a value greater than the predetermined median value. In contrast, the perception of negative illness is based on the value of the total score of the respondents below the median value. These results are consistent with a study by Irawan & Ainy, which found that most JKN patients in the Payakubung area had positive perception of illness (58.9%)<sup>16</sup>.

Positive perceptions of illness are essential in patient self-management to reduce complications and improve health status<sup>17</sup>. Research conducted by Puspata and Abdu states that there is a relationship between perceptions of illness and self-management in JKN patients in a health facility<sup>18</sup>.

## JKN Participants' Perceptions of Medicine

**Table 4** Perception of Medicine

No	Questions	n = 400			
		Strongly Disagree	Disagree	Agree	Strongly agreed
1.	Treatment is done for getting recovery and prevention of disease	3 (0.	6 (1.5 %)	155 (38.75 %)	236 (59%)
2.	I will get the benefit of the drug effectively if I consume it in a regular manner	4 (1%)	5 (1.25 %)	150 (37.5 %)	241 (60.25 %)
3.	Every treatment's benefit, however, can cause no effect if desired	3 (0.75 %)	35 (8.75%)	209 (52.25 %)	153 (38.25 %)
<b>Medicine Perception Score (n=400)</b>					
Minimum Score					3
Maximum Score					12
Median					11

The research results on question no. 1 stated that 3 respondents strongly disagreed, 6 respondents disagreed, 155 respondents agreed, and 236 strongly agreed. Question no. 2 shows that 4 respondents strongly disagree, 5 respondents disagree, 150 respondents agree, and 241 strongly agree. On question no. 3 shows that 3 respondents strongly disagree, 35 disagree, 209 agree, and 153 strongly agree.

**Table 5** Perception Level of Medicine

Level of Perception of Medicine	score	Number of Respondents (n=400)	Percentage (%)
Positive	12	213	53.2
Negative	3-11	187	46.7

Table 5 shows that the variable perception of treatment is mainly in the positive category, namely 213 answers (53.2%), compared to respondents who chose negative category answers, namely 187 (46.7%). These results are inconsistent with the study report obtained by Purnamasari, which states that a small proportion of JKN prolongs participants have a positive perception of medication adherence (48.5%)<sup>19</sup>. There are differences in the perception of individual treatment because everyone has their perspective. One is about striving for health and seeking help to maintain or restore a healthy status to oneself<sup>20</sup>.

The patient's perception of treatment is often associated with adherence to the prescribed medication. Negative perceptions lead to lower adherence rates, increasing mortality, morbidity and health care costs in chronic diseases<sup>21</sup>, is following a study by Rajpura which reported that positive perceptions about treatment had a significant relationship with care adherence in older adults with hypertension<sup>22</sup>.

### JKN Participant Satisfaction with Health Services

The research results on the tangible dimension for question no. 1 show that 2 respondents strongly disagree, 3 respondents disagree, 216 respondents agree, and 179 strongly agree. Question no. 2 states that 3 respondents strongly disagree, 13 respondents disagree, 208 respondents agree, and 176 strongly agree. The reliability dimension in question no. 1 shows that 2 respondents strongly disagree, 24 respondents disagree, 238 respondents agree, and 136 strongly agree. Question no. 2 states that 4 respondents strongly disagree, 48 respondents disagree, 212 respondents agree, and 136 strongly agree. The responsiveness dimension in question no. 1 stated that 6 respondents strongly disagreed, 34 respondents disagreed, 216 respondents agreed, and 144 strongly agreed. Question no. 2 shows that 4 respondents strongly disagree, 16 respondents disagree, 189 respondents agree, and 191 strongly agree.

**Table 6** Health Service Satisfaction

Dimensions		n = 400			
		Strongly Disagree	Disagree	Agree	Strongly Agree
Tangibles	1. Officer medical / non-medical good looking neat	2 (0.5 %)	3 (0.75 %)	216 (54%)	179 (44.75 %)
	2. Availability board instruction information about the direction and location of facility room in the health facility	3 (0.75 %)	13 (3.25 %)	208 (52%)	176 (44%)
Reliability	1. Health problems you can handle with good health facilities	2 (0.5 %)	24 (6%)	238 (59.5 %)	136 (34%)
	2. has been done professionally, quickly, and responsively	4 (1%)	48 (12)	212 (53%)	136 (34%)
Responsiveness	1. Officer helps patients with friendly moments of difficulty understanding procedures and channel service	6 (1.5 %)	34 (8.5 %)	216 (54%)	144 (36%)
	2. The pharmacy officer explains the dose and rules for drinking the drug clearly	4 (1%)	16 (4%)	189 (47.25 %)	191 (47.75 %)
Assurance	1. Guarantee that secrecy of patient information (social identity or sick condition of the patient) can awake with good	3 (0.75 %)	13 (3.25 %)	187 (46.75 %)	197 (49.25 %)
	2. Installation of pharmacy's supply medication needed by a patient	5 (1.25 %)	28 (7)	214 (53.5 %)	153 (38.25 %)
Empathy	1. Health workers give attention to patients proven by doctors listening to complaints and expressing patients	4 (1%)	20 (5%)	211 (52.75 %)	165 (41.25 %)
	2. Health workers at the health facility provide health advice to the patient	3 (0.75 %)	27 (6.75 %)	230 (57.5 %)	140 (35%)
<b>Service Satisfaction Score</b>					
Minimum Score					
Maximum Score					
Median					

For the assurance dimension question, no. 1 shows 3 respondents strongly disagree, 13 respondents disagree, 187 respondents agree, and 197 strongly agree. Question no. 2 stated that 5 respondents strongly disagreed, 28 disagreed, 214 respondents agreed, and 153 respondents strongly agreed. Finally, the Empathy dimension for question no. 1 shows that 4 respondents strongly disagree, 20 respondents disagree, 211 respondents agree, and 165 strongly agree. Question no. 2 shows that 3 respondents strongly disagree, 27 respondents disagree, 230 respondents agree, and 140 strongly agree.

**Table 7** FKRTL Service Satisfaction Level

Service Satisfaction Level	Score	Number of Respondents (n=400)	Percentage (%)
Satisfied	33-40	217	54.2
Not satisfied	10-32	183	45.7

Based on table 7 shows that as many as 217 answers (54.2%) of respondents expressed satisfaction with health services, while in the dissatisfied category, there were only 183 answers (45.7%). This result is inconsistent with the BPJS report for 2022, which noted an increase in the satisfaction level of BPJS Health participants, reaching 89.6%, up 2% from the 2021 results<sup>23</sup>. The quality of health facility services influences the increase in service satisfaction. Patients as service users expect quality services, in addition to the need for recovery from physical illness or an increase in their health status<sup>24</sup>.

### The Relationship between Illness Perceptions and Respondent Characteristics

**Table 8** The Chi-Square Test Relationship between Perceptions of Illness and Characteristics of Respondents

Dependent Variables	Independent Variables	P(<0.05)	Results
Illness Perception	age	0.095	not significant
	gender	0.243	not significant
	level of education	0.365	not significant
	income level	0.048	Significant
	marital status	0.427	not significant
	number of Family dependents	0.128	not significant
	work	0.353	not significant
	types of health insurance	0.340	not significant
			significant

A community's perception and concept of illness can influence health services utilization in a health

services facility, such as maternity clinics, private clinics, health centres, and hospitals. Perception of illness can be defined as an experience gained through the five senses, depending on the individual's motivation to act. If the individual's perception of illness is correct, then the individual tends to utilize health services<sup>25</sup>.

The chi-square test analysis in Table 8 shows that for the independent variables, age, gender, education level, marital status, number of family dependents, occupation, and type of health insurance have a P value above 0.05, meaning there is no significant relationship with the dependent variable. These results are inconsistent with research by Ma & Yan, who found that disease perception in breast cancer patients in China correlated with sociodemographic aspects, including variables such as marital status, education level, family history and severity level<sup>26</sup>.

Individuals with a higher level of education are more likely to believe that the duration of the disease will be short and that the disease can be controlled if treated routinely. In contrast, those with lower levels of education have less personal control in dealing with the impact of the disease received, thereby increasing a more negative perception. Married individuals are likelier to believe the disease will have less severe consequences and show higher personal control<sup>27,28</sup>.

Different analysis results were found on the income level variable. Namely, there was a significant relationship with the dependent variable of disease perception. A significant relationship can be seen based on the p-value = 0.048. These results describe that residents with high levels of income have positive perceptions of disease, and residents with low incomes have negative perceptions of disease. A study by Rangsit & Bornstein shows that socioeconomic status, such as income, influences disease perception in the type 2 diabetes mellitus population. Low-income groups think that type 2 diabetes has a more significant adverse effect on their lives and finances. Compared to the high-income group. The high-income group shows positive perceptions regarding understanding and skills in finding healthcare resources and obtaining adequate health information<sup>29</sup>.

### Relationship of Perceptions of Medicine to Respondent Characteristics

Perception of treatment is related to a person's response regarding the treatment experience experienced and the actions taken as a treatment step

<sup>30</sup>. Research conducted by Fischer reports that factors known to correlate with perceptions of medicine include sociodemographics (gender, age, level of education), clinical (duration of illness), and variables related to care (number of hospital visits) <sup>31</sup>. Based on Table 9, it is found that the independent variables of age, gender, education level, income level, marital status, number of family dependents, occupation, and type of health insurance have no significant relationship to the dependent variable of perception of medicine.

**Table 9** The Chi-Square Test Relationship between Perceptions of Treatment and Characteristics of Respondents

Dependent Variables	Independent Variables	P(<0.05)	Results
Perception of Medicine	age	0.639	not significant
	gender	0.360	not significant
	level of education	0.348	not significant
	income level	0.265	not significant
	marital status	0.914	not significant
	number of family dependents	0.849	not significant
	work	0.452	not significant
	types of Health insurance	0.258	not significant

Based on the p-value on each variable of more than 0.05. these results are inconsistent with the results of a study conducted by Theofilou which stated that there was a strong association between perceptions of treatment and sociodemographic characteristics <sup>32</sup>. The age group under 30 years is still physiologically healthy, so the possibility of using drugs is still tiny and rational, thus encouraging the formation of a better perception of treatment. The female sex seeks rational self-medication more often and has more frequent contact with her sick child. The level of education affects the perception of treatment, which encourages caution in choosing the type and course of treatment <sup>33,34</sup>.

Respondents who work generally have sufficient educational background, thus influencing the mindset in deciding which self-medication to take. Individuals with high incomes influence treatments that can potentially use more drugs than needed, especially treatment with patented drugs <sup>35</sup>.

## The Relationship between Service Satisfaction and Respondent Characteristics

Satisfaction with health services is a feeling that arises in response to the performance of the health services they receive by comparing them to the expected services <sup>36</sup>. In a health service, various individuals with different backgrounds visit a health facility. In the same case and with the same quality of service, patient satisfaction with the service can be different <sup>37</sup>. In general, many factors can influence patient satisfaction with the service received, including the patient's sociodemography, social position, age, economic level, educational background, and culture up to age <sup>38</sup>.

**Table 10** The Chi-Square Test on the Relationship between Health Service Satisfaction and Respondent Characteristics

Dependent Variables	Independent Variables	P(<0.05)	Results
Health Service Satisfaction	age	0.539	Not Significant
	gender	0.230	Not significant
	level of education	0.276	Not significant
	income level	0.393	Not significant
	marital status	0.553	Not significant
	number of family dependents	0.945	Not Significant
	work	0.325	Not significant
	types of health insurance	0.917	Not significant

Based on table 10 shows that the independent variables, age, gender, education level, income level, marital status, number of family dependents, occupation, and type of health insurance, have no significant relationship to the dependent variable, health service satisfaction. Meaninglessness can be known based on the P value of each variable > 0.05.

These results are consistent with those reported by Zarzycka, who stated that patient satisfaction with nursing care does not depend on sociodemographic or medical variables. The 2-factor UNIANOVA analysis showed that sociodemographic variables such as patient age, education, length of stay or number of hospitalizations did not have a statistically significant effect <sup>39</sup>. There is no relationship between age and satisfaction with health services because all patients, regardless of age group, need the attention of health workers who provide services <sup>40</sup>. In terms of gender,

women have a higher level of vulnerability and need for health services than men, even though both men and women tend to have the same level of satisfaction when receiving health services <sup>41</sup>.

The level of education, whether high or low, has no relationship with satisfaction because there is a long queue system to get health services at JKN facilities <sup>42</sup>. The monthly income level is not always directly proportional to the level of satisfaction because the implementation of JKN services is similar in each class <sup>43</sup>. Jobs that vary for each encourage mindsets and levels of satisfaction that tend to differ due to the health services received <sup>42</sup>.

## Conclusions

An overview of perceptions of illness, treatment, and satisfaction with health services at FKRTL, namely that 220 respondents (55%) had a positive perception of illness, 213 respondents (53.2%) had a positive perception of treatment, and 217 respondents (54.2 %) %) had a satisfied perception of health services. Based on the chi-square test, it was found that there was only a significant relationship between income level variables and perceptions of illness ( $p=0.048$ )  $<0.05$ .

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## Ethical Considerations

This research has received Ethical Clearance from the Ethics Committee of the Faculty of Medicine, Public Health, and Nursing, Gadjah Mada University, Yogyakarta, with the letter number KE/FK/1473/EC/2022.

## Authors' Contributions

DE, TMA designed the study; RA carried out the data collection; RA, DE, and TMA analyzed the data; RA, DE, TMA, and TP wrote and reviewed the manuscript; All authors read and approved the final version of the manuscript.

## Competing Interests

The author states that there is no competing interest in conducting this research.

## Abbreviation

BPJS: social security development agency

FKRTL: advanced level referral health facility

Jamkesda: regional health insurance

JHT: old age health insurance

JKN: national health insurance

PJKMU: general public health insurance program

Prolanis: chronic disease management program

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