

# Analysis of Factors Influencing the Willingness to Pay BPJS Kesehatan Contributions of Mandiri Participants in the Working Area of Bua Health Center, Luwu District

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## ABSTRACT

The willingness to pay BPJS Health contributions regularly and on time every month for independent participants is the most important component to make it easier for independent participants to utilize health services. This research aims to analysis the factors that influence the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency. The research was conducted in the working area of the Bua Health Center, Luwu Regency. The research design is *cross sectional study*. The total sample was 340 independent BPJS Health participants using sampling techniques *Simple Random Sampling*. Data were analyzed using tests *Chi-Square* and Multiple Logistic Regression test. Test results *Chi-Square* shows that there is a relationship between the number of family members ( $p=0,000$ ), income ( $p=0,000$ ), perception of the quality of health services ( $p=0,000$ ), history of catastrophic illness ( $p=0,000$ ), and ability to pay BPJS Health contributions ( $p=0,000$ ) with a willingness to pay BPJS Health contributions. Meanwhile, there is no relationship between knowledge ( $p=0,364$ ) and willingness to pay BPJS Health contributions. The results of the Multiple Logistic Regression test show that number of family members (OR=69,893) is the factor that most influences the willingness to pay BPJS Health contributions. It is recommended that the BPJS Health consider a contribution payment system for independent participants who are required to pay contributions collectively which includes all family members in one family who are registered as independent BPJS Health participants, so that independent participants who have large family members are not burdened and are willing to pay BPJS contributions Health regularly and on time every month.

**Keywords:** Willingness to Pay Contributions, Number of Family Members, Income, Independent Participants, BPJS Health.

## INTRODUCTION

Law of the Republic of Indonesia Number 36 of 2009 concerning Health, explains that health is a human right and one of the elements of welfare that must be realized in accordance with the ideals of the Indonesian nation as intended in Pancasila and the 1945 Constitution of the Republic of Indonesia. People have the same rights in gaining access to resources in the health sector, and obtaining safe, quality and affordable health services.<sup>1</sup>

Presidential Regulation of the Republic of Indonesia Number 12 of 2013 concerning Health Insurance, explains that health insurance is a guarantee in the form of health protection so that participants receive health care benefits and protection in meeting basic health needs provided to every person who has paid contributions or whose contributions are paid by the government. The Social Health Security Administering Body is a legal entity established to administer health insurance programs, and health insurance participation is mandatory for all Indonesian citizens.<sup>2</sup>

BPJS Health membership is divided into two types, namely Contribution Assistance Participants (PBI), and Non-PBI Assistance Recipient Participants. PBI Health Insurance participants are people who are classified as poor, and poor people as participants

in the health insurance program registered by the government and whose contributions are paid by the government, while non-PBI health insurance participants are participants who are not classified as poor and disadvantaged, which consists of workers who receive wages and their family members, non-wage workers and their family members and non-workers and their family members.<sup>2</sup>

Participants who are not recipients of contribution assistance are referred to as independent BPJS Health participants, because the participants independently pay their health insurance contributions to BPJS Health. Whether it is health insurance contributions for worker participants who receive wages which are paid by employers and workers, or health insurance contributions for non-wage worker participants and non-worker participants which are paid by participants or other parties on behalf of participants.<sup>3</sup>

BPJS Health contributions are an obligation for health insurance participants, and participants pay contributions in accordance with established provisions. BPJS Health contributions are an amount of money paid regularly by participants, employers or the government for the health insurance program. Contribution Assistance Recipient Participants (PBI) have their health insurance contributions paid by the government, while Non-PBI Contribution Assistance Recipient Participants (Non PBI) health insurance contributions are paid independently every month.<sup>4</sup>

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The increasingly high health costs and the risk of illness that everyone has are the basis for someone to become a BPJS Health participant, by paying contributions every month. The willingness to pay BPJS Health contributions for independent participants is the most important component to make it easier to utilize health services. If a patient who is an independent BPJS Health participant has not paid the contribution, then the patient is required to pay off the unpaid contribution, and if they do not pay the contribution, the patient who is an independent BPJS Health participant cannot use BPJS Health as a guarantor for the cost of treatment at a health facility. This has an impact on patients who have to become general patients so that patients or the patient's family have to bear the burden of treatment costs themselves because they are no longer guaranteed by BPJS Health.<sup>5</sup>

BPJS Health participants in the categories of Non-Wage Recipient Workers (PBPU) and Non-Workers (BP) are required to pay contributions to BPJS Health no later than the 10th of each month. If the 10th falls on a holiday, then contributions are paid on the following working day. For participants in the category of Non-Wage Recipient Workers (PBPU) and Non-Workers (BP) who pay contributions after the 10th, their membership status will be temporarily suspended from the 1 (one) of the following month.<sup>6</sup>

Non-Wage Receiving Worker (PBPU) participants or informal worker participants have a greater potential or possibility compared to participants in categories other than Non-Wage Receiving Workers (PBPU) to be unwilling to make regular BPJS Health contribution payments. This happens because for formal workers, payments for BPJS Health contributions are managed by their place of work, which is deducted directly from their wages or salaries. Meanwhile, the informal sector must manage the payment of their own health insurance contributions.<sup>7</sup>

The Social Health Security Administering Agency recorded that the number of National Health Insurance (JKN) participants as of December 2022 reached 248,77 million people. This number is equivalent to 90,73% of Indonesia's entire population of 274,20 million people in 2022. With increasing participation, it turns out that not all independent participants have the will to carry out their obligations in paying monthly contributions regularly according to the specified time.<sup>8</sup>

Willingness to pay (*Willingness to Pay*) or commonly abbreviated as WTP, is a person's willingness to pay contributions to the national health insurance program according to the amount and time specified. The willingness to pay national health insurance contributions according to the time specified for independent participants is the most important component in the health financing system.<sup>9</sup>

Based on data from Palopo City BPJS Health in 2022, 74.933 people were registered as independent BPJS Health participants in Luwu Regency. The number of independent BPJS Health participants in Luwu Regency who are in arrears in payment of contributions is based on participant class, namely class 3 as many as 20.956 people, class 2 as many as 4.691 people and class 1 as many as 2.649 people. The amount of arrears in BPJS Health contributions for independent participants in Luwu Regency in 2022 is a total of IDR 18.864.108.466 in arrears.

Based on data from BPJS Health for Palopo City in 2022, it shows that the highest number of Puskesmas Work Areas in arrears in payment of BPJS Health contributions are independent non-wage worker participants (PBPU) and non-worker participants (BP) in Luwu Regency, namely in the Bua Health Center Work Area with 2.703 people, second place in the South Ponrang Community Health Center Working Area with 2.571 people, and third place in the Ponrang Community Health Center Working Area with 2.252 people.

Based on the background description above, the Bua Community Health Center Work Area is the Work Area with the lowest willingness

to pay BPJS Health contributions for independent participants in Luwu Regency. Therefore, researchers are interested in conducting research on "Analysis" Factors that Influence the Willingness to Pay BPJS Health Contributions for Independent Participants in the Bua Health Center Working Area, Luwu Regency."

## METHOD

This research is quantitative research and the type of research used is analytical survey using design *cross sectional*. This research was conducted in the working area of the Bua Health Center, Luwu Regency. The sample in this study was 340 independent BPJS Health participants in the Bua Health Center working area, Luwu Regency using sampling techniques *Simple Random Sampling*. Data processing and analysis was carried out using IBM SPSS Statistics 21 with bivariate analysis using tests *Chi-Square* to see the relationship between the independent variable and the dependent variable, as well as multivariate analysis using the Multiple Logistic Regression test to see the independent variable that has the most influence on the dependent variable with  $\alpha = 0,05$ . The research results will be presented in the form of tables and narratives. This research has received approval from the Health Research Ethics Commission (KEPK) of the Faculty of Public Health, Hasanuddin University with Number 4955/UN4.14.1/TP.01.02/2023 and Protocol Number: 14823012178 4955/UN4.14.1/TP.01.02/2023

## RESULTS

The characteristics of respondents based on age, gender, highest level of education, and employment among independent BPJS Health participants in the Bua Health Center work area, Luwu Regency can be seen in table 1.

Table 1 shows that the most research subjects were in the 30-39 year age group, 95 people (27.9%). Based on gender, there are more than 266 women (78.2%). Based on the most recent education, the majority of respondents had a high school education level of 120 people (35.3). Based on occupation, the most number of domestic workers was 199 people (58.5).

Table 2 shows that most respondents have a small number of family members, 252 people (74.1%), most have a high income category, 228 people (67.1%), most have sufficient knowledge, 287 people (84.4%), the majority have a positive perception as many as 250 people (73.5%), the majority do not have a history of catastrophic illness as many as 171 people (50.3%), the majority are able to pay BPJS Health contributions as many as 232 people (68.2%), and the majority were willing to pay BPJS Health contributions as many as 233 people (68.5%).

Table 3 shows that the results of bivariate statistical tests between 6 variable factors that influence the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency, obtained 5 variables, including the number of family members with a value  $p = 0,000$  ( $p <$  from the value  $\alpha = 0,05$ ), income variable with value  $p = 0,000$  ( $p <$  from the value  $\alpha = 0,05$ ), variable perception of the quality of health services with value  $p = 0,000$  ( $p <$  from the value  $\alpha = 0,05$ ), variable history of catastrophic illness with value  $p = 0,000$  ( $p <$  from the value  $\alpha = 0,05$ ), and the variable ability to pay BPJS Health contributions with value  $p = 0,000$  ( $p <$  from the value  $\alpha = 0,05$ ). This means that there is a significant influence between the variables of number of family members, income, perceived quality of health services, history of catastrophic illness, and ability to pay BPJS Health contributions on the willingness to pay BPJS Health contributions of independent participants in the Bua Health Center working area, Luwu Regency. Meanwhile, the knowledge variable has a value  $p = 0,364$  ( $p >$  from the value  $\alpha = 0,05$ ). This means that there is no significant influence between knowledge and the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.

**Table 1. Distribution of Respondent Characteristics for Mandiri BPJS Health Participants in the Bua Community Health Center Working Area, Luwu Regency in 2023.**

Characteristic Respondent	Frequency (n = 340)	Percent (%)
<b>Age</b>		
20-29 year	76	22.4
30-39 year	95	27.9
40-49 year	77	22.6
50-59 year	53	15.6
60-69 year	28	8.2
≥ 70 year	11	3.2
<b>Sex</b>		
Male	74	21.8
Female	266	78.2
<b>Education</b>		
Basic school	82	24.1
Junior high school	74	21.8
Senior high school	120	35.3
Higher Education	64	18.8
<b>Occupation</b>		
House hold mother	199	58.5
Fishery	2	0.6
Farmer	23	6.8
Driver	4	1.2
Stone worker	4	1.2
Carpenter	2	0.6
Business	106	31.2
<b>Total</b>	<b>340</b>	<b>100.0</b>

Source: Primary Data, 2023

**Table 2. Distribution of Respondents Based on the Variables studied in the Bua Community Health Center Working Area, Luwu Regency in 2023.**

Variable	Frequency (n = 340)	Percent (%)
<b>Number of family members</b>		
Big	88	25.9
Small	252	74.1
<b>Income</b>		
Low	112	32.9
High	228	67.1
<b>Knowledge</b>		
Less	53	15.6
Enough	287	84.4
<b>Perception toward quality of health services</b>		
Negative	90	26.5
Positive	250	73.5
<b>Chaatastropic illness history</b>		
Not have	171	50.3
Have	169	49.7
<b>Ability to Pay BPJS Health Contributions</b>		
Not able	108	31.8
Able	232	68.2
<b>Willingness to Pay BPJS Health Contributions</b>		
Not ready	107	31.5
Ready	233	68.5
<b>Total</b>	<b>340</b>	<b>100.0</b>

Source: Primary Data, 2023

**Table 3. Bivariate Analysis of Factors Affecting Willingness to Pay Contributions BPJS Health in the Bua Health Center Working Area, Luwu Regency in 2023.**

Variable	Willingness to Pay BPJS Health Contributions						P-Value
	Not Ready		Ready		Total		
	n	%	n	%	n	%	
<b>Number of family</b>							
Big	66	75,0	22	25,0	88	100	0,000
Small	41	16,3	211	83,7	252	100	
<b>Income</b>							
low	80	71,4	32	28,6	112	100	0,000
High	27	11,8	201	88,2	228	100	
<b>Knowledge</b>							
Less	20	37,7	33	62,3	53	100	0,364
enough	87	30,3	200	69,7	287	100	
<b>Perceptions of the Quality of Health Services</b>							
Negative	74	82,2	16	17,8	90	100	0,000
Positive	33	13,2	217	86,8	250	100	
<b>History of Catastrophic Illness</b>							
Not have	89	52,0	82	48,0	171	100	0,000
Have	18	10,7	151	89,3	169	100	
<b>Ability to Pay BPJS Health Contributions</b>							
Not able	85	78,7	23	21,3	108	100	0,000
Able	22	9,5	210	90,5	232	100	

Source: Primary Data, 2023

**Table 4. Multivariate Analysis of Variables that Most Influence the Willingness to Pay BPJS Health Contributions for Independent Participants in Work Areas Bua Health Center, Luwu Regency in 2023.**

Variable	Coef	S.E	Wald	P-Value	OR
Number of Family Members	4,247	0,994	18,246	0,000	69,893
Income	3,990	1,031	14,976	0,000	54,080
Perceptions of the Quality of Health Services	3,848	0,792	23,632	0,000	46,894
History of Catastrophic Illness	4,030	0,808	24,880	0,000	56,267
Ability to Pay BPJS Health Contributions	3,044	0,794	14,677	0,000	20,980

Source: Primary Data, 2023

Table 4 shows that the results of the multiple logistic regression test between 5 variables obtained number of family members with value  $p = 0,000$  and  $OR = 69,893$ . This means that the variable number of family members has the most influence on the willingness to pay BPJS Health contributions among independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, seen from the OR value of number of family members which is greater than the four variables, namely income, perceptions of the quality of health services, history of catastrophic illness, and ability to pay BPJS Health contributions.

## DISCUSSION

### The Influence of Number of Family Members on Willingness to Pay BPJS Health Contributions

The number of family members is all family members consisting of husband, wife, children and other family members who live together.<sup>10,22</sup>

Based on the research results, it shows that the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who have a small number of family members, are willing to pay BPJS Health contributions. Meanwhile, the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who have large family members, are not willing to pay BPJS

Health contributions. Independent BPJS Health participants who are not willing to pay BPJS Health contributions say that the greater the number of family members, the greater the amount of contributions that must be paid. Independent participants feel burdened by the payment of contributions which must be made collectively in one transaction for one family.

Based on the results of statistical tests in this research, values were obtained  $P\text{-Value} = 0,000$  which shows that the number of family members influences the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency.

The results of this research are in line with research conducted by Selamat *et al.*, (2020) in Malaysia, stated that the number of family members influences the willingness to pay for health insurance.<sup>11</sup>

### The Influence of Income on Willingness to Pay BPJS Health Contributions

Income is the income that people earn every month from the results of their activities or work. The income received by people certainly differs from one to another, this is due to the different types of work they do.<sup>9,23</sup>

Based on the research results, it shows that the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who have high income categories, are willing to pay BPJS Health contributions. Meanwhile, the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who have low income categories, are not willing to pay BPJS Health contributions.

Independent participants who have a high income category and are willing to pay BPJS Health contributions because independent participants say that the income they earn is deemed capable of paying BPJS Health contributions. Meanwhile, independent participants who have a high income category and are not willing to pay BPJS Health contributions because independent participants say they prefer to be general patients and seek treatment at a clinic or doctor's practice when they need health services.

Independent participants who have low income categories and are willing to pay BPJS Health contributions say that health conditions cannot be predicted, of course it will be difficult if when they are sick they don't have the money for treatment, therefore they pay BPJS Health contributions every month as a guarantee of health services for themselves and family members. Meanwhile, independent participants who have a low income category and are not willing to pay BPJS Health contributions, this is because there are still many needs that must be met by the family, so there is no income allocation for participants to use to pay BPJS Health contributions.

Based on the results of statistical tests in this research, values were obtained  $P\text{-Value} = 0,000$  which shows that income influences the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency.

The results of this research are in line with research conducted by Ogundejiet *et al.*, (2019) in Nigeria, stated that income influences the willingness to pay health insurance contributions.<sup>12</sup>

### The Influence of Knowledge on Willingness to Pay BPJS Health Contributions

Knowledge is the result of knowing and this occurs after people sense a particular object. Sensing occurs through the five human senses, namely the senses of sight, hearing, taste and touch. A person's knowledge is mostly obtained through the sense of hearing, namely the ears, and the sense of sight, namely the eyes.<sup>13,24</sup>

Independent participants who have sufficient knowledge and are willing to pay BPJS Health contributions say that independent participants are required to pay BPJS Health contributions every month and there are fines and BPJS cards are temporarily suspended if they are in arrears in paying BPJS Health contributions. Meanwhile, independent participants have insufficient knowledge and are willing to pay BPJS Health contributions because independent participants say they do not have sufficient knowledge, so independent participants only follow the BPJS Health regulations made by the government and based on the experience of independent participants that if they do not pay BPJS Health contributions, their membership card no longer active.

However, independent participants who have sufficient knowledge are most unwilling to pay BPJS Health contributions compared to independent participants who have less knowledge. This is because independent participants who have sufficient knowledge and are not willing to pay BPJS Health contributions say that using BPJS Health does not provide maximum service when in health care settings. Meanwhile, independent participants who had insufficient knowledge and were not willing to pay BPJS Health contributions said that they did not understand the consequences of being in arrears in BPJS Health contributions. Independent participants said that BPJS Health rarely carries out outreach. It can be said that socialization regarding BPJS Health has not been effective, so there are still quite a lot of participants who are not willing to pay BPJS Health Contributions in the Bua Health Center working area, Luwu Regency.

Based on the results of statistical tests in this research, values were obtained  $P\text{-Value} = 0,364$  which shows that knowledge has no effect on the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency.

The results of this research are in line with research conducted by Julianti and Wulandari (2022) which states that knowledge has no effect on the willingness to pay health insurance contributions.<sup>14</sup>

### The Influence of Perceived Quality of Health Services on Willingness to Pay BPJS Health Contributions

Etymologically, perception comes from Latin *perception* or *I perceive*, meaning the act of compiling, recognizing, then interpreting information received by the sensory senses so as to provide an understanding picture of the environment which includes all signals in the nervous system, which are the result of physical or chemical stimulation of the sensory organs. Perception is a person's process of knowing several things through their five senses.<sup>15</sup>

An important factor in service utilization is the quality of the service. An assessment of the quality of a good service arises if the patient's expectations for the service received have been met. Health services are the government's responsibility and must be provided fairly and equally because health is the main need of every human being.<sup>16,25</sup>

Based on the research results, it shows that the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency who have a positive perception of the quality of health services are willing to pay BPJS Health contributions. Meanwhile, the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who have negative perceptions, are not willing to pay BPJS Health contributions.

Independent participants who had positive perceptions and were willing to pay BPJS Health contributions said that the waiting room and examination room at the Puskesmas were clean and comfortable. Independent participants also said that the officers or health workers provided good service. Meanwhile, independent participants who had positive perceptions and were not willing to pay BPJS Health contributions said that independent participants rarely used health

services so that independent participants did not need to regularly pay BPJS Health contributions.

Independent participants who had negative perceptions and were willing to pay BPJS Health contributions said that independent participants had been disappointed with the services they received when accessing services using BPJS Health, independent participants said that the services they received were less than satisfactory. However, independent participants are still willing to pay BPJS Health contributions because independent participants can access health services at any time. Meanwhile, independent participants who had negative perceptions and were not willing to pay BPJS Health contributions said that there were differences in health services between BPJS Health patients and general patients, so independent participants preferred to be general patients when seeking treatment at health services.

Based on the results of statistical tests in this research, values were obtained  $P\text{-Value} = 0,000$  which indicates that the perception of the quality of health services influences the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency.

The results of this research are in line with research conducted by Nugrohoet *al.*, (2021) states that the perception of the quality of health services influences the willingness to pay health insurance contributions.<sup>17</sup>

### The Influence of a History of Catastrophic Illness on Willingness to Pay BPJS Health Contributions

Catastrophic diseases are diseases that require long and expensive medical treatment. Diseases included in the catastrophic grouping in the National Health Insurance Program include heart disease, kidney failure, cancer, stroke, liver cirrhosis, thalassemia, leukemia and hemophilia.<sup>18,26</sup>

Based on the research results, it shows that the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who have a history of catastrophic illness, are willing to pay BPJS Health contributions. Meanwhile, the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who do not have a history of catastrophic illness, are unwilling to pay BPJS Health contributions.

Independent participants who have a history of catastrophic illnesses and are willing to pay BPJS Health contributions said that independent participants realize that becoming a BPJS Health participant can reduce the cost burden for independent participants when treating the catastrophic illnesses they suffer. Meanwhile, independent participants who had a history of catastrophic illness and were not willing to pay BPJS Health contributions said that this was because independent participants were not satisfied with the services provided when using the BPJS Health membership card, while the catastrophic illnesses suffered by several independent participants required good treatment.

Independent participants who do not have a history of catastrophic illness and are willing to pay BPJS Health contributions said that independent participants cannot predict the condition of independent participants to remain healthy. So paying BPJS Health contributions is one of the anticipations for independent participants when they need health services. Meanwhile, independent participants who did not have a history of catastrophic illness and were not willing to pay BPJS Health contributions said that independent participants and their family members rarely used health service facilities, so independent participants preferred to be general participants when they needed health services. There are independent participants who regularly pay BPJS Health contributions, but after the treatment ends, independent participants are not willing to pay BPJS Health contributions again because the BPJS Health card is no longer used.

Based on the results of statistical tests in this research, values were obtained  $P\text{-Value} = 0,000$  which indicates that a history of catastrophic illness influences the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency.

The results of this research are in line with research conducted by Hildayantiet *al.*, (2020) stated that a history of catastrophic illness influences the willingness to pay health insurance contributions.<sup>19</sup>

### The Influence of the Ability to Pay BPJS Health Contributions on the Willingness to Pay BPJS Health Contributions

Ability to pay is the amount of money that society is able to pay to cover the costs of the services it receives. Ability is a consideration in spending one's income or expenses to purchase goods or other services.<sup>20,27</sup>

Based on the research results, it shows that the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency who are able to pay BPJS Health contributions are willing to pay BPJS Health contributions. Meanwhile, the majority of independent BPJS Health participants in the Bua Health Center working area, Luwu Regency, who are unable to pay BPJS Health contributions, are not willing to pay BPJS Health contributions.

Independent participants who are able to pay BPJS Health contributions and are willing to pay BPJS Health contributions say that paying BPJS Health contributions regularly is an anticipatory obligation when they need health services. Meanwhile, independent participants who were able and unwilling to pay BPJS Health contributions said that independent participants rarely used BPJS Health membership cards, and if they needed health services, independent participants preferred to become general patients because independent participants felt they could still afford medical expenses when they were sick.

Independent participants who are unable and willing to pay BPJS Health contributions said that if one day they need health services they will not have difficulty paying arrears of contributions and fines. Meanwhile, independent participants who were unable and unwilling to pay BPJS Health contributions said that the income in the families of independent participants was in the low category and there were still more important needs that had to be met first than paying BPJS Health contributions which independent participants did not need.

Based on the results of statistical tests in this research, values were obtained  $P\text{-Value} = 0,000$  which indicates that the ability to pay BPJS Health contributions influences the willingness to pay BPJS Health contributions in the Bua Health Center working area, Luwu Regency.

The results of this research are in line with research conducted by Hardy and Yudha (2021) which states that the ability to pay BPJS Health contributions influences the willingness to pay health insurance contributions.<sup>21</sup>

## CONCLUSION

1. The number of family members has a significant effect on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.
2. Income has a significant effect on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.
3. Knowledge does not have a significant effect on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.
4. Perceptions of the quality of health services have a significant effect on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.

5. A history of catastrophic illness has a significant effect on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.
6. The ability to pay contributions has a significant effect on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.
7. Number of family members is the variable that has the most influence on the willingness to pay BPJS Health contributions for independent participants in the Bua Health Center working area, Luwu Regency.

## REFERENCES

1. Republik Indonesia. Undang-Undang Republik Indonesia Nomor 36 Tahun 2009 Tentang Kesehatan. Jakarta; 2009.
2. Peraturan Presiden Republik Indonesia Nomor 12 Tahun 2013 Tentang Jaminan Kesehatan. 2013.
3. Semaun S, Juneda. Sistem Pengelolaan Badan Penyelenggara Jaminan Sosial (BPJS) Kesehatan Mandiri Kota Parepare (Analisis Hukum Ekonomi Islam). *J Syari'ah dan Huk.* 2018;16(2):284–306.
4. BPJS Kesehatan. Badan Penyelenggara Jaminan Sosial Kesehatan. Indonesia; 2021.
5. Syakhila I, Nurgahayu, Sulaeman U. Faktor Yang Berhubungan Dengan Atp Dan Wtp Dengan Penentuan Kelas Iuran Bpjs Kesehatan. *Wind Public Heal J.* 2021;1(5):427–36.
6. Peraturan Presiden Nomor 82 Tahun 2018 Tentang Jaminan Kesehatan. 2018.
7. Adani J, Permatasari P, Pulungan RM, Setiawati ME. Faktor-Faktor yang Berhubungan dengan Kepatuhan Pembayaran Iuran JKN pada Peserta Mandiri di Kota Depok Tahun 2019. *J Ilm Kesehat Masy.* 2019;11(4):287–95.
8. BPJS Kesehatan. Badan Penyelenggara Jaminan Sosial Kesehatan. Indonesia; 2022.
9. Istamayu AA, Solida A, Wardiah R. Determinan Kemauan Membayar (Willingness To Pay) Iuran Jaminan Kesehatan Nasional Pada Peserta Mandiri Di Kota Jambi. *J Ilm Nas.* 2022;4(2):10–21.
10. Batasan dan Pengertian MDK [Internet]. BKKBN. 2011 [cited 2023 Nov 13]. Available from: <http://aplikasi.bkkbn.go.id/mdk/BatasanMDK.aspx>
11. Selamat EM, Ghani SRA, Fitra N, Daud F. Systematic Review of Factors Influencing the Demand for Medical and Health Insurance in Malaysia. *Med Heal Insur.* 2020;10(2):1242–50.
12. Ogundeji YK, Akomolafe B, Ohiri K, Butawa NN. Factors influencing willingness and ability to pay for social health insurance in Nigeria. *PLoS One.* 2019;14(8):1–10.
13. Notoatmodjo S. Kesehatan Masyarakat Ilmu Dan Seni. Jakarta: Rineka Cipta; 2011. 382 p.
14. Julianti R, Wulandari DS. Analisis Faktor Yang Mempengaruhi Willingness To Pay Jaminan Kesehatan Di Banjarmasin Barat (Analysis of Factor Affecting Willingness to Pay Health Assurance In Banjarmasin Barat ). 2022;5(1):15–24.
15. Utami TN, Nanda M. Pengaruh Pelatihan Bencana Dan Keselamatan Kerja Terhadap Respons Persepsi Mahasiswa Prodi Ilmu Kesehatan Masyarakat. *JUMANTIK (Jurnal Ilm Penelit Kesehatan).* 2019;4(1):83–100.
16. Utami YT. Pengaruh Karakteristik Pasien Terhadap Kualitas Pelayanan Rawat Jalan di UPTD Puskesmas Penumpang Surakarta. *J Ilm Rekam Medis dan Inform Kesehat.* 2018;8(1):57–65.
17. Nugroho IH, Dewi A, Nazaruddin I. Analisis Faktor Yang Mempengaruhi Kemauan Membayar JKN Pada Pekerja Informal Di Kulon Progo. *J Manaj Kesehat Yayasan RSDr Soetomo.* 2021;7(1):59–71.
18. BPJS Kesehatan. Penyakit Katastropik Berbiaya Mahal Tetap Dijamin Program JKN-KIS. In: Budiman A, Ismawardani D, Izzati RL, Alhafiz, editors. *Media Info BPJS Kesehatan.* Edisi 104. Jaka: BPJS Kesehatan; 2021. p. 3.
19. Hildayanti AN, Batara AS, Alwi MK. Determinan Ability To Pay dan Willingness To Pay Iuran Peserta Mandiri BPJS Kesehatan di Kecamatan Takabonerate (Studi Kasus di Kabupaten Kepulauan Selayar). *J Kesehat Masy.* 2021;11(1):30–7.
20. Rezayatmand R, Pavlova M, Groot W. The impact of out-of-pocket payments on prevention and health-related lifestyle: A systematic literature review. *Eur J Public Health.* 2013;23(1):74–9.
21. Hardy IPDK, Yudha NLGAN. Kemauan Dan Kemampuan Membayar (Ability-Willingness To Pay ) Dalam Kepesertaan Jaminan Kesehatan Nasional Pada Sektor Informal Pedagang Pasar Tradisional Di Kota Denpasar 2017. *J Kesehat Terpadu.* 2018;2(2):96–100.
22. Azis ASFW, Darmawansyah, Razak A, Arifin A, Syafar M, Mallongi A. Analysis of Policy Implementation of The First 1000 Days of Life Program in Overcoming Stunting in Phcogj.com Maros District. *Pharmacogn J.* 2023;15(3): 405-410.
23. Hilda, Supriadi, Widiastuty HP, Arsyawina, Mallongi A. Development of Patient Safety Management Learning Model Based on Problem Based Learning Integrated Soft Skill Phcogj.com Higher Level Thinking for Health Students in Samarinda. *Pharmacogn J.* 2023;15(2): 418-423.
24. Syahriani N, Palutturi S, Birawida AB, Hidayanty H. Clean Water Supply as an Indicator for Healthy Island in Makassar City. *Open-Access Maced J Med Sci.* 2022 Feb 24; 10(E):320-325. <https://doi.org/10.3889/oamjms.2022.8350>.
25. Mallongi, A., Rauf, A., Astuti, R., Palutturi, S., & Ishak, H. (2023). Ecological and human health implications of mercury contamination in the coastal water. *Global Journal of Environmental Science and Management*, 9(2), 261-274. doi: 10.22034/gjesm.2023.02.06.
26. Ernyasih, Mallongi A, Daud A, Palutturi S, Stang, Thaha R, et al. Model Prediction of Potential Disease Effects from PM2.5 Emission Among School Children in Coming 30 years in South Tangerang. *Pharmacogn J.* 2023;15(3): 400-404.
27. Asrina A, Payapo R, Idris FC, Palutturi S, Mallongi A. Health Behavior and Social Support in Postpartum Mothers Treatment in Ba'ukup Tradition in Maluku. *Pharmacogn J.* 2023;15(3): 438-442.

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