

## Factors Correlated with Willingness and Compliance to Pay National Health Insurance Premium in Jember Regency

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### ABSTRACT

**Background:** Fulfillment of premium collectivity is related to willingness and compliance to pay BPJS Kesehatan premiums. Increasing participation in the informal sector is not in line with compliance in paying BPJS Health premiums. This study aims to analyze the influence of factors of willingness and compliance to pay premiums for BPJS Kesehatan independent participants in Jember Regency.

**Subjects and Method:** This was a cross sectional study conducted in 31 sub-districts in Jember Regency, East Java, in July-September 2020. Sampling of 200 BPJS Kesehatan Mandiri participants was conducted using random sampling. The dependent variable is willingness to pay and compliance to pay the BPJS Health premium. The independent variables include education, income, willingness to pay, imitation of the referral group and number of family members. Data were collected using a questionnaire. Data were analyzed using multiple linear regression, multiple logistic regression and path analysis with Stata 16.

**Results:** Factors that affect the willingness to pay are education ( $b = 45531.18$ ; 95% CI = 35335.1 to 55727.26;  $p < 0.001$ ) and ( $b = 2.13$  units; 95% CI = 1.41 to 2.86;  $p < 0.001$ ), income

( $b = 17469$ ; 95% CI = 7171.90 to 27766.09;  $p < 0.001$ ), and ( $b = 1.19$ ; 95% CI = 0.46 to 1.92;  $p < 0.001$ ). Compliance to pay is influenced by the willingness to pay factor ( $b = 4.19$ ; 95% CI = 2.19 to 8.04;  $p < 0.001$ ) and ( $b = 0.64$ ; 95% CI = 0.02 to 1.27;  $p = 0.044$ ) with an average willingness to pay Rp 44,792, imitation of the reference group ( $b = 2.59$ ; 95% CI = 1.39 to 4.85;  $p = 0.003$ ) and ( $b = 0.95$ ; 95% CI = 0.33 to 1.58;  $p = 0.003$ ) and the number of family members ( $b = 1.90$ ; 95% CI = 1.02 to 3.56;  $p = 0.044$ ).

**Conclusion:** Willingness to pay premiums is directly affected by education and income. Compliance with premium payments is directly affected by willingness to pay, imitation of the referral group, and the number of family members.

**Keywords:** willingness to pay, paying compliance, social cognitive theory

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### BACKGROUND

Indonesia provides health care and protection through an insurance program that has been implemented since 2014. National Health Insurance (JKN) according to Presidential Regulation Number 32 of 2014 is health protection to provide health care

benefits and protection in meeting basic health needs for participants who have pay premiums or premiums borne by the government which are organized nationally based on the principles of social insurance. The target of the Health Insurance (JK) program is a comprehensive national mem-

bership coverage in 2019 or Universal Health Coverage (UHC).

Health insurance is administered by a public legal entity with duties and responsibilities, namely the Social Security Administering Body (BPJS). In line with the Healthy Indonesia Program, the third pillar is that health insurance is mandatory and covers all Indonesian citizens, a legal entity, namely BPJS, was formed in 2013. BPJS Kesehatan applies several principles including mutual cooperation, public legal entities, mandatory membership, trust funds, and The results of the management of social security funds are used entirely for program development and for the benefit of participants (Mas'udin, 2017).

Based on data from BPJS Kesehatan, PPU coverage is 53,016,564 participants, PBPU coverage is 30,242,021 participants and non-workers are 5,011,660 participants (BPJS Kesehatan, 2019). Meanwhile, the total population of Indonesia is estimated to reach around 260 million people per 2018. Based on this data, only about 83% of the total population in Indonesia has not been involved in the health insurance scheme and has not registered with the BPJS (Prakoso, 2020).

Based on BPJS Kesehatan data for Jember Regency in 2018, the total population in Jember Regency in 2018 was 2,440,714 with a total membership of 1,500,328 people. In addition, the number of JKN independent participants in Jember Regency until 2018 is 8,126 independent participants, 18,485 members of the TNI and retired TNI, 4,664 members of the National Police and retirees, as many as 87,408 members of the transfer of health insurance. This shows that the independent participants of the JKN program for Jember Regency, namely those who are included in the group of non-wage recipients, are still very few of all registered

participants (Noormalasari & Sandra, 2015).

It is not only mandatory for workers in the formal sector, but informal workers are also required to participate in BPJS Kesehatan. Participation in informal workers or PBPU is a major challenge in achieving the target coverage and sustainability of a social security system. Participants who are involved in the agriculture, forestry and fisheries sectors are also included in the PBPU category included in the voluntary premium (Nguyen & Hoang, 2017).

PBPU or informal worker participants have greater potential or probability than category participants other than independent participants to not comply with BPJS Health premium payments.

Increasing participation is not in line with compliance in paying BPJS Health premiums. Compliance is obedience or disobedience to orders or rules, while compliance in paying premiums means the behavior of a person who is willing to pay the premium appropriately based on a predetermined time (Rosmanely, 2018). Willingness to pay is also closely related to compliance to pay premiums.

This study aims to analyze the factors that influence the willingness and compliance of paying premiums to the participants of the independent BPJS Kesehatan in Jember Regency.

## SUBJECTS AND METHOD

### 1. Study Design

A cross sectional study was conducted in Jember, East Java, from July to September 2020.

### 2. Population and Sample

The population in this study included BPJS Kesehatan Mandiri participants in the PPU and PBPU categories in Jember Regency. The number of samples is 200 research

subjects. Sampling was done using random sampling technique.

### 3. Variables

The dependent variable is willingness to pay premiums and compliance to pay premiums. The independent variables include education, income, willingness to pay, imitation of the referral group and number of family members.

### 4. Operational Definition of Variables

**Education** is the highest level of education that the research subject has achieved. The data scale is categorical, and for the purposes of data analysis, the data is converted into a dichotomy with the criteria 0 = Low (<Senior high school) 1 = High ( $\geq$ Senior high school)

**Income** is the maximum wage received by research subjects after working within a period of one month during the month of research. The data scale is continuous, and for the purposes of data analysis, the data is converted into categorical with the criteria 0 = Low (<IDR 2,170,917) 1 = High ( $\geq$  IDR 2,170,917).

**Willingness to pay** is the participant's willingness to spend money to pay the BPJS Health premium. The measurement scale is continuous.

**Imitation of a referral group** is an individual or group that is used as a reference reference by the research subject in obeying to pay the BPJS Health premium. The data scale is categorical, and for the purposes of data analysis, the data is converted into a dichotomy with the criteria 0 = Weak and 1 = Strong.

**The number of family members** is all family members of research subjects registered with BPJS Kesehatan. The data scale is continuous, and for the purposes of data analysis, the data is converted into categorical with the criteria 0 = Low ( $\leq$  2 people) 1 = High ( $\geq$  3 people).

### 5. Data Analysis

Univariate analysis was carried out to see the frequency distribution and percentage of characteristics of research subjects. Bivariate analysis was performed to determine the relationship between the dependent variable and the independent variable using the chi-square test. Multivariate analysis was performed using multiple linear regression analysis, multiple logistic and path analysis.

### 6. Research Ethics

Research ethics includes a submission sheet, anonymity, confidentiality, and ethical eligibility. The ethical feasibility in this study comes from the Health Research Ethics Committee of the Dr. Moewardi Hospital Surakarta with number 1275 / XI / HREC / 2020.

## RESULTS

### 1. Characteristics of Study Subjects

The characteristics of research subjects based on the results of the study include age, gender, marital status, education level, occupation and type of participation. Table 4.1 shows that most of the BPJS Kesehatan independent participants aged  $\geq$ 21 years - 58 years, it is about 184 people (92.0%). The majority of research subjects were female, as many as 120 people (60%). Characteristics of marital status, most of the BPJS Kesehatan Mandiri participants were married, as many as 145 people (72.5%). Most of the education level of the BPJS Kesehatan independent participants, namely SHS, amounted to 86 people (43.0%). Most of them are self-employed, as many as 54 people (27.0%). The type of participation in the research subjects was PBU as many as 110 people (55.0%).

### 1. Univariate Analysis

The results of the descriptive statistical test of continuous data which in the research variables include age, number of family

members, income and willingness to pay can be seen in table 2 as follows:

**Table 1. Characteristics of Study Subjects**

Characteristics	Criteria	Frequency (n)	Percentage (%)
Age	≥ 21 years - 58 years	184	92.0
	≤ 59 years	16	8.0
Gender	Male	80	40.0
	Female	120	60.0
Marital Status	Single	27	13.5
	Married	145	72.5
	Widow	16	8.0
	Widower	12	6.0
Education	No formal education	4	2.0
	PS	18	9.0
	JHS	32	16.0
	SHS	86	43.0
	Diploma	16	8.0
	College	44	22.0
Occupation	College student	7	3.5
	Temporary employees	11	5.5
	General employees	37	18.5
	Labor	14	7.0
	Repairman	4	2.0
	Farmer	11	5.5
	Fisherman	6	3.0
	Civil servants	8	4.0
	Entrepreneur	54	27.0
Type of Participation	Salaried Worker	90	45.0
	Non-Wage Workers	110	55.0

**Table 2 Distribution of variable frequencies in continuous**

Variable	N	Mean	SD	Min.	Max.
Age (year)	200	42.03	12.11	17	73
The number of family member (people)	200	2.85	1.24	1	6
Income (rupiah)	200	2,005,500	1,573,619	300,000	10,000,000
Willingness to pay (rupiah)	200	44792.5	40,228.97	0	160,000

Table 2 shows the results of statistical tests for each variable. This study involved 200 research subjects in BPJS Kesehatan independent participants. The results of this study indicate that the age of the BPJS Kesehatan independent participants is 17-73 years with a mean of 42.03 years. The variable average number of family members registered with BPJS Kesehatan Mandiri is 2.85 with a minimum of 1 family member

and a maximum of 6 people. The lowest income from BPJS Kesehatan participants is Rp. 300,000 and the highest is Rp 10,000,000 with an average of Rp 2,005,500. The willingness to pay for BPJS Kesehatan Mandiri participants shows that the lowest value is 0 and the highest value is Rp. 160,000 with an average willingness to pay Rp. 44,792.

## 2. Univariate Analysis

The results of the descriptive statistical test of continuous data which in the research

variables include age, number of family members, income and willingness to pay can be seen in table 2 as follows:

**Table 3. Univariate Analysis (Dichotomy Data)**

Variable	n	%
<b>Age</b>		
Non productive	16	8.0
Productive	184	92.0
<b>Education</b>		
< SHS	140	70.0
≥ SHS	60	30.0
<b>Occupation</b>		
Informal	155	77.5
Formal	45	22.5
<b>Income</b>		
<minimum wage (Rp. 2,170,917)	142	71.0
≥minimum wage (Rp. 2,170,917)	58	29.0
<b>Number of family member</b>		
Low	80	40
High	120	60
<b>History of illness</b>		
Seldom	157	78.5
Often	43	21.5
<b>Attitude to risk</b>		
Weak	68	34.0
Strong	132	66.0
<b>Imitation of a reference group</b>		
Weak	80	40.0
Strong	120	60.0
<b>Family Support</b>		
Weak	119	59.5
Strong	81	40.5
<b>The role of BPJS Health cadres</b>		
Active	81	40.5
Passive	119	59.5
<b>Compliance in paying</b>		
Low	91	45.5
High	109	54.5
<b>Willingness to pay</b>		
Low	123	61.5
High	77	38.5

Table 3 displays the results of the univariate analysis with dichotomous data. Based on the table above, 92% of the study subjects were of productive age and 8% were non-productive. Most of the study subjects, as many as 140 people do not attend school or less than junior high school, and 60 others have high school to tertiary education levels.

The occupational categories of the study subjects were informal workers, namely as many as 77.5% or 155 people and 45 other people had formal jobs. The amount of the regional minimum wage (UMR) in Jember Regency in 2019 is Rp. 2,170,917, it is known that 142 people have wages less than the UMR and 58 others

have wages above the UMR in Jember Regency.

A total of 120 study subjects had a large number of family members, namely 3-6 people. While the other 80 people have 1-2 family members. A total of 157 research subjects stated that they rarely experience pain, on the other hand 43 other people often experience illness.

The attitude towards risk of the study subjects showed that 132 people were willing to take risks and 68 people avoided risks. The imitation of the reference group was divided into 2 categories, namely weak and strong. Most of the research subjects chose to follow the attitude of a high group of 120 people and 80 others did not follow the reference group.

Family support from study subjects was mostly lacking, namely as many as 119 people and as many as 81 people received

strong family support. A total of 119 people considered the role of BPJS Health cadres in Jember Regency to be less active, while 81 others considered the role of BPJS Health cadres in Jember Regency to be active.

A total of 109 study subjects had strong compliance with paying, while 91 others had weak compliance with paying premiums. Meanwhile, the willingness to pay premiums from the research subjects was low, namely 123 people, and 77 people or 38.5% others had a high willingness to pay.

**3. Bivariate Analysis**

Bivariate analysis in this study aims to explain the relationship between the independent variable and the dependent variable. Bivariate analysis can be seen in table 4 as follows:

**Table 4. Bivariate analysis of the relationship of various variables to the willingness to pay the BPJS Health premium**

Variable	High		Low		Total		OR	p
	N	%	N	%	N	%		
<b>Education</b>								
< SHS	32	22.86	108	77.14	140	100	21.96	<0.001
≥ SHS	45	75.00	15	25.00	60	100		
<b>Income</b>								
< minimum wage	40	28.17	102	71.83	142	100	9.07	<0.001
≥ minimum wage	37	63.79	21	36.21	58	100		

Table 4 presents the results of the bivariate analysis of the relationship between education level and income on the willingness to pay for BPJS Health participants.

**a. The relationship between the willingness to pay the BPJS Health premium and education**

The results of the analysis show that there is a relationship between the level of education and the willingness to pay the BPJS Health premium. BPJS Kesehatan participants who have a higher education

level are 10.13 times more likely to be willing to pay the premium compared to BPJS Health participants who have a low level of education. It can be concluded that there is a significant relationship between the level of education and the willingness to pay the BPJS Health premium.

**b. The relationship between the willingness to pay the BPJS Health premium and income**

The results of the analysis show that there is a relationship between income and the willingness to pay BPJS Health premiums.

BPJS Kesehatan participants who have low incomes are 4.49 times more likely to be willing to pay the premium compared to BPJS Kesehatan participants who have high incomes. It can be concluded that there is a

significant relationship between the level of income and the willingness to pay the BPJS Health premium.

**Table 5 Bivariate analysis of the relationship between various variables on compliance with paying BPJS Health premiums**

Variable	High		Low		Total		OR	p
	N	%	N	%	N	%		
<b>Willingness to pay</b>								
Low	51	41.46	72	58.54	123	100	4.31	<0.001
High	58	75.32	19	24.68	77	100		
<b>Imitation of a reference group</b>								
Weak	32	40.00	48	60.00	80	100	2.69	<0.001
Strong	77	64.17	43	35.83	120	100		
<b>Number of family member</b>								
Low	35	43.75	45	56.25	80	100	2.07	0.013
High	74	61.67	46	38.33	120	100		

Table 5 presents the results of the bivariate analysis of the willingness to pay, imitation of the referral group, and the number of family members on the payment compliance of BPJS Kesehatan participants.

**a. Relationship between BPJS Health premium payment compliance and willingness to pay**

The results of the analysis show that there is a relationship between the willingness to pay premiums and compliance with BPJS Health premiums. *BPJS Kesehatan* participants who have a high willingness to pay premiums are 4.31 times more likely to comply with premiums than *BPJS Kesehatan* participants who have a low willingness to pay premiums. It can be concluded that there is a significant relationship between premium payment compliance with BPJS Health premium payment compliance.

**b. Relationship between BPJS Health premium payment compliance and referral group imitation**

The results of the analysis show that there is an imitation relationship between the

referral group and BPJS Health premium payment compliance. BPJS Kesehatan participants who have a strong imitation referral group are 2.69 times more likely to comply with paying the premium compared to BPJS Kesehatan participants who have a weak reference group imitation. It can be concluded that there is a significant relationship between the imitation of the referral group and the compliance with BPJS Health premiums.

**c. The relationship between BPJS health premium payment compliance and the number of family members**

The results of the analysis show that there is a relationship between the number of family members and compliance with BPJS Health premiums. *BPJS Kesehatan* participants who have a large number of family members ( $\geq 3$  people) are 2.07 times more likely to comply with paying the premium compared to BPJS Kesehatan participants who have a low number of family members. It can be concluded that there is a significant relationship between the number of

family members and compliance with BPJS Kesehatan premiums.

**4. Multivariate Analysis**

Multivariate analysis is used to describe the effect of each independent variable simultaneously on the dependent variable.

**Table 6. Results of multiple linear regression analysis of Willingness to pay BPJS Health premium**

Independent Variable	b	95% CI		p
		Lower Limit	Upper Limit	
Education (High)	45531.18	35335.1	55727.26	<0.001
Income (Low)	17469	7171.90	27766.09	<0.001

**a. Multiple linear regression analysis**

Multiple linear regression test in this study was to determine the effect of the independent variable on the dependent variable.

**b. Multiple Logistic Regression Analysis**

**Table 7. Results of multiple logistic regression analysis of compliance with paying BPJS Health premiums**

Independent Variable	OR	95% CI		p
		Lower Limit	Upper Limit	
Willingness to pay	4.19	2.19	8.04	<0.001
Education (High)	2.59	1.39	4.85	0.003
Imitation of a reference group	1.90	1.02	3.56	0.044

Table 6 presents the results of multiple linear regression analysis of the effect of education level and income on the willingness to pay for BPJS Health participants. The level of education shows an effect on the willingness to pay the BPJS Health premium and is statistically significant. Independent BPJS Kesehatan participants who have a higher education level increase the willingness to pay by 45531.18 units, higher than the independent BPJS Kesehatan participants who have a low education level (b= 45531.18; 95% CI= 35335.1 to 55727.26; p <0.001).

The income level shows an effect on the willingness to pay the BPJS Health premium and is statistically significant. Independent BPJS Kesehatan participants who have low income increase their willingness to pay by 17469 units, higher than BPJS Kesehatan independent participants who have low income (b= 17469; 95% CI= 7171.90 to 27766.09; p <0.001).

Table 7 presents the results of multiple logistic regression analysis on the effect of willingness to pay, imitation of the referral group and the number of family members on the pay compliance of BPJS Kesehatan participants. Willingness to pay shows a statistically significant effect on paying BPJS Health premiums compliance. Independent BPJS Kesehatan participants with high willingness to pay increased pay compliance by 4.19 times higher than independent BPJS Kesehatan participants who had low willingness to pay (b= 4.19; 95% CI= 2.19 to 8.04; p <0.001).

Imitation of the referral group shows a statistically significant effect on compliance with paying the BPJS Health premium. Independent BPJS Kesehatan participants who had high referral group imitations increased pay compliance by 2.59 times higher than the independent BPJS Kesehatan participants who had low refe-



rence group imitations (b= 2.59; 95% CI= 1.39 to 4.85; p= 0.003).

The number of family members shows an influence on the compliance of paying the BPJS Health premium. Independent BPJS Kesehatan participants who have a high number of family members increase pay compliance by 1.90 times higher than the independent BPJS Kesehatan partici-

pants who have a low number of family members (b= 1.90; 95% CI= 1.02 to 3.56; p= 0.044).

**c. Path Analysis**

Table 8 shows that there is an influence on the two dependent variables, namely willingness to pay and pay compliance.

**Table 8 results of the path analysis of willingness and compliance to pay the BPJS Health premium**

Dependent Variable	Independent Variable	b	95% CI		p
			Upper Limit	Lower Limit	
<b>Direct Effect</b>					
Willingness to pay	← Education (High)	2.13	1.41	2.86	<0.001
	← Income (Low)	1.19	0.46	1.92	<0.001
Payment compliance	← Willingness to pay (High)	1.43	0.78	2.08	<0.001
	← Imitation of a reference group (Yes)	0.95	0.33	1.58	0.003
	← Number of family member (≥ 3 people)	0.64	0.02	1.27	0.044
N observation= 200					
log likelihood= -223.22					

**a) Willingness to pay**

The level of education shows an effect on the willingness to pay the BPJS Health premium and is statistically significant. Independent BPJS Kesehatan participants who have a high level of education towards health needs will increase the willingness to pay logodd by 2.13 units, higher than BPJS Kesehatan independent participants who have a low level of education (b= 2.13; 95% CI= 1.41 to 2.86; p <0.001).

There is a large effect of income on the willingness to pay BPJS Kesehatan premiums and it is statistically significant. Independent BPJS Kesehatan participants who have low income for health service needs will increase the willingness to pay logodd by 1.19 units, higher than BPJS Kesehatan independent participants who have high income for health service needs (b = 1.19; 95% CI = 0.46 to 1.92; p <0.001).

**b) Compliance with payments**

There is an effect of the willingness to pay the BPJS Health premium on the compliance to pay the BPJS Health premium and it is statistically significant. Independent BPJS Kesehatan participants who have a willingness to pay a high BPJS Health premium on the need for health services will increase the compliance logodd of paying by 1.43 units higher than the independent BPJS Kesehatan participants who have a willingness to pay a low BPJS Health premium for health service needs (b= 1.43; 95% CI= 0.78 to 2.08; p <0.001).

There is an effect of referral group imitation on compliance with BPJS Health premiums and it is statistically significant. Independent BPJS Kesehatan participants who have strong reference group imitations towards health service needs will increase the compliance logodd to pay by 0.05 units

higher than BPJS Kesehatan participants who have weak reference group imitations towards health service needs ( $b = 0.95$ ; 95% CI = 0.33 to 1.58 ;  $p = 0.003$ ).

There is an effect of the number of family members on compliance to pay the BPJS Health premium and it is statistically significant. BPJS Kesehatan independent participants who have a large number of family members ( $\geq 3$  people) with regard to the need for health services will increase the logodds of paying compliance by 0.64 units, higher than BPJS Kesehatan independent participants who have a low number of family members towards health service needs ( $b = 0.64$ ; 95% CI = 0.02 to 1.27;  $p = 0.044$ ).

## DISCUSSION

### 1. The effect of education on the willingness to pay

The results of this study indicate that there is an effect between education on the willingness to pay the BPJS Health premium. It is known that the coefficient value ( $b$ ) is positive, so the effect of education on the willingness to pay the BPJS Health premium is a positive and statistically significant effect. This is in line with Azhar et al. (2018) which states that the level of education has a positive effect on the willingness to pay. Research subjects in Sarawak with a higher level of education were 2.42 times more likely to pay for health insurance.

According to Zhai et al. (2017), education is one of the factors that affects the knowledge of health insurance needed according to the conditions. The types and benefits of health insurance have been shown to increase the perception of equality and the high benefits that can be obtained from the national health care system in China. It is known from the results of data analysis that it shows a significant effect.

Adewole et al. (2017) showed that the educational status of the research subjects was the only predictor significantly associated with NHIS awareness. Research subjects with post-primary education have 10 times the chance of knowing NHIS than research subjects who have no education or only basic education.

### 2. The effect of income on WTP

The results of this study indicate that there is a direct influence between income and the willingness to pay the premium of BPJS Kesehatan Mandiri. It is known that the coefficient value ( $b$ ) is positive, so the effect of income on the willingness to pay the premium for BPJS Kesehatan Mandiri is statistically significant.

This is in line with Witati and Putri's (2020), which states that income has a positive relationship with willingness to pay. This means that the higher the family income, the higher the likelihood that informal workers will be willing to pay contributions from the Healthcare Social Security Administration (BPJS) assuming other factors are considered constant.

Thi et al. (2018) stated that there is a relationship between financial support (family member income) and the decision of the head of the household to be willing to pay for social insurance. The study shows that 48.8% of 391 households working in the informal sector with a high family income are willing to pay 921.9 thousand Vietnamese dong per household per year (US \$ 42) for social insurance in Vietnam.

In line with Ashari and Nurhayani's (2013), the level of income of a family is determined by family work and skills. High income levels will tend to choose the services to be used. However, this is not the case with people who have low income levels, basic needs are the main interest and health insurance is a need that is met after basic needs are met.

### **3. The effect of willingness to pay on pay compliance**

The results of this study indicate that there is an influence between the willingness to pay on the compliance of paying BPJS Kesehatan Mandiri premiums. It is known that the coefficient value (b) is positive, so the effect of willingness to pay on compliance with BPJS Kesehatan Mandiri premiums is statistically significant.

According to Widyanti (2018), compliance in paying dues means the behavior of a person who is willing to pay dues appropriately based on a predetermined time. Compliance with paying dues can increase the collectivity of BPJS Kesehatan.

In line with Sunjaya et al. (2020), compliance with paying premiums in low-income communities is generally low. Participants classified as poor and vulnerable to poor should be registered as beneficiaries. As a result, participants are unable to pay contributions. A person's compliance is influenced by one's intention to pay contributions.

Workneh et al. (2017) show that the willingness of household members to renew (94.5%) CBHI membership is one of the predictors of member compliance, with a strong positive statistical association. The level of compliance of members to CBHI regulations is quite good at the program implementation stage.

### **4. Effect of reference group imitation on pay compliance**

The results of this study indicate that there is an influence between the imitation of the referral group on compliance with paying BPJS Kesehatan Mandiri premiums. It is known from the value of the coefficient (b) is positive, then there is an effect of imitation of the referral group on compliance with paying BPJS Kesehatan Mandiri premiums which is statistically significant.

According to Fadlallah et al. (2018), when community members feel solidarity in paying the premium, other members are more likely to join the scheme. Community solidarity can demonstrate demonstration of community behavior.

This is in line with Puspitasari (2017), which shows that the closest people and peers have an important role in influencing someone to follow the JK program through information about JK. The role of this behavior can be used as a model for compliance with BPJS Health premiums.

According to research conducted by Barida, (2016) imitation behavior is someone's behavior by imitating what he interprets through observation of a model that becomes the object of his observation. A person performs the principle of imitating an action by understanding the objectives of the action and directed by the achievement of the target goals.

### **5. The effect of the number of family members on pay compliance**

The results of this study indicate that there is an influence between the number of family members on compliance with paying BPJS Kesehatan Mandiri premiums. It is known from the value of the coefficient (b) is positive, so the effect of the number of family members on compliance with BPJS Kesehatan Mandiri premiums is statistically significant.

According to Witati and Putri (2020), the more the number of family members, the more the household needs to meet the needs of life. The impact faced is that the larger the number of family members, the more premiums must be paid.

This is in line with Adebayo et al. (2015) which states that they find that in the CBHI scheme larger households are willing to pay a higher amount than relatively smaller households. If larger households exit the scheme this is likely

due to the enormous financial burden that households face when they seek health care.

According to Sunjaya et al. (2020) non-compliance in paying contributions is caused by the large number of family members that the head of the family must bear. The greater the number of family members, the larger the number of contributions that must be paid. People feel that if someone is not sick too often, there is no need for routine expenses. In addition, they feel that the cost of accessing health services is still affordable.

#### **AUTHOR CONTRIBUTION**

Nazilla Ade Nurlia as the main researcher played a role in coordinating the research, conducting all stages of the research, and completing the research paper. Bhisma Murti plays a role in developing ideas, research designs, research frameworks, and research data processing. Didik Gunawan Tamtomo played a role in suggesting research discussions and writing techniques.

#### **CONFLICT OF INTEREST**

There is no conflict of interest.

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