RELATIONSHIP BETWEEN SOCIO-DEMOGRAPHIC FACTORS AND PERCEPTION OF THE NATIONAL HEALTH INSURANCE PARTICIPATION IN PANDAN HEALTH CENTER, CENTRAL TAPANULI, INDONESIA

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ABSTRACT

Background: Increasing participation in the national health insurance is an indicator of universal coverage. According to the national health insurance roadmap, it is expected that people who have not been enrolled in the national health insurance will immediately register as participants. The coverage of national health insurance participation was low in the working area of Pandan Health Center, Central Tapanuli. This study aimed to determine the relationship between the socio-demographic factors and perception of the national health insurance participation at Pandan Health Center, Central Tapanuli.

Subjects and Method: A cross-sectional study was conducted at Pandan Health Center, Central Tapanuli, from February to May 2018. A sample of 100 families of national health insurance participants was selected in this study. The dependent variable was national health insurance participation. The independent variables were perceived benefit and perceived barrier. Data were analyzed using logistic regression.

Results: Perceived benefit increased the participation in national health insurance, and were statistically significant (aOR= 13.52; 95% CI= 1.60 to 114.05; p= 0.017). Perceived barrier decreased the participation in national health insurance, and were statistically significant (aOR= 0.37; 95% CI= 0.01 to 0.51; p= 0.008).

Conclusion: Perceived benefit increases and perceived barrier decreases the participation of national health insurance.

Keywords: sociodemography, perception, participation, national health insurance.

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BACKGROUND

The National Health Insurance is a program from the Government of the Republic of Indonesia in the form of social protection guarantees for the community in order to obtain health care benefits and protection in meeting basic needs in the health sector. The guarantee is given to everyone who has paid dues or to participants who are Contribution Assistance Recipients whose contributions are paid by the government. Health insurance in the National Social Security System, is implemented on the principle of social insurance with mandatory participation for all Indonesians, which requires public participation in the form of paying health insurance contributions fairly based on the participants' financial capacity (UU RI, 2004).

The Social Security Administration as the implementing agency has carried out various activities to accelerate the National Health Insurance roadmap process so that universal

coverage can be achieved. Socialization in various mass media about benefits, payment methods, the amount of dues that can be chosen according to ability, has been carried out, but the expected results that there will be an increase in membership independently have not been seen clearly (Hermawati, 2013).

Many studies both foreign and local state that factors related to community participation in social security participation include age, gender, knowledge, education, ethnicity, and chronic diseases suffered. However, not many have investigated how community participation Social security participation is influenced by socio-demographic factors (age, education and income) and perceptions (perceptions of vulnerability to disease, perceptions of the severity of the impact felt if sick, perceptions of threats to health problems, perceptions of the benefits of the National Health Insurance program, and perceptions of obstacles that might be experienced). As a participant in the National Health Insurance program (Widhiastuti, 2015).

Based on the above background, the formulation of the problem in this study is what are the sociodemographic factors (age, education and income), perceptions (perceptions of disease susceptibility, perceptions of the severity of the impact felt if sick, perceptions of threats to health problems, perceptions of the benefits of the National Health Insurance program, and perceptions of obstacles that may be experienced as National Health Insurance participants) relate to the independent participation of the National Health Insurance program.

The purpose of this study was to determine the relationship between socio-demographic factors (age, education and income) and perceptions (perceived susceptibility, perceived severity, perceived threats, perceived benefits, and perceived barrier) with National Health Insurance participation independently in the community in the working area of the Pandan Health Center, Pandan District, Central Tapanuli Regency. The research hypothesis is that there is a relationship between sociodemographic factors and perceptions of National Health Insurance participation independently in the community in the working area of Pandan Health Center.

SUBJECTS AND METHOD

1. Study Design
This cross-sectional study was conducted at Pandan Health Center, Central Tapanuli, Indonesia, from February to May 2018.

2. Population and Sample
The population in this study were all heads of families who lived and settled at Pandan Health Center, Central Tapanuli, Indonesia, as many as 6,484 families (*BPS Tapanuli Tengah*, 2017) and the sample was the head of the family from the community in the Pandan Community Health Center area of independent National Health Insurance participants. and heads of families who are not National Health Insurance participants as many as 100 families and are willing to participate as subjects by signing informed consent.

3. Study Variables
The dependent variable is national health insurance participation. The

independent variables of this study were socio-demographic (age, education and income) and perceptions (perceptions of disease susceptibility, perceptions of the severity of the impact felt if sick, perceptions of threats to health problems, perceptions of the benefits of the National Health Insurance program, and perceptions of obstacles that might be experienced as National Health Insurance participants).

4. Operational Definition of Variable

Age is the age of the subject calculated from the date of birth to the time of the study expressed in years and measured by interviews. Age was categorized as adults (<45 years) and elderly (≥45 years).

Education is the last formal education of the subject. Education is categorized into low (below high school) and higher education (above high school).

Income is the average amount of family income in one month that is measured. Income is categorized into <UMR (< Rp. 2,052,157) and UMR (≥ Rp. 2,052,157).

Perception of vulnerability is the view of the head of the household evaluating the types of health problems that may threaten health with positive (score > 62.5%) and negative (score < 62.5%).

Severity perception is the view of the head of the family about the severity of the health problems faced if a family member is sick with positive (score > 62.5%) and negative (score < 62.5%).

Threat perception is the view of the head of the family about the perceived threat if a family member has a health problem with positive (score >62.5%) and negative (score <62.5%).

Perception of benefits is the view of the head of the family about the benefits of participating in the national health insurance program, with positive measurement results (score >62.5%) and negative (score < 62.5%).

Perception of barriers is the view of the head of the family about the obstacles that might be obtained if they participate in the national health insurance program with positive (answer score > 62.5%) and negative (answer score < 62.5%).

5. Study Instrument

The instrument used in this study is a questionnaire that has been tested for validity and reliability.

6. Data Analysis

Data analysis used was bivariate test with chi-square and multivariable test with logistic regression test.

RESULTS

1. Sample Characteristics

Based on Table 1 shows that most of the subjects are elderly as many as 60 people (60%), with a high level of formal education as many as 85 people (85%), and the majority earning >minimum wage which is Rp 2,052,157.

Based on Table 2 shows that almost all subjects have a positive perception of disease susceptibility (98%), the severity of the impact felt if sick (88%), and the perception of the benefits of the national health insurance program (80%), except for the perception of threats to health problems (52%). This finding is expected to increase the chances of people's desire to become participants in the national

health insurance independently. This possibility is also reinforced by the finding that the perception of barriers that may be experienced as participants in the national health insurance is negative (88%).

Table 1. Sample Characteristics by Socio-Demographic

Sample Characteristics	n	%
Age		
Adult (> 45 years old)	40	40
Elderly (≥ 45 years old)	60	60
Education		
Low (< SHS)	15	15
High (≥ SHS)	85	85
Income		
< minimum wage (<Rp 2,052,157)	11	11
≥ minimum wage (≥Rp 2,052,157)	89	89

Table 2. Study Subjects' Perceptions toward National Health Insurance

Subject Perception	n	%
Vulnerability Perception		
Positive	98	98
Negative	2	2
Severity Perception		
Positive	88	88
Negative	12	12
Threat Perception		
Positive	52	52
Negative	48	48
Benefits Perception		
Positive	80	80
Negative	20	20
Perception Barriers		
Positive	12	12
Negative	88	88

Table 3. Type of National Health Insurance Participation

National Health Insurance Participation	n	%
Independent National Health Insurance participants	37	37
Not an Independent national health insurance Participant	63	63

Based on Table 3, it can be seen that the majority of subjects were not participants in the national health insurance independently as many as 63 people (63%).

2. Bivariate Analysis

Based on Table 4 shows that the variables perceived benefits (OR= 15.55; 95% CI= 0.46 to 0.72; p= 0.001) and perceived barriers (OR= 11.30; 95% CI= 0.07 to 0.86; p = 0.001) increased the chances of participating. Participation in national health insurance independently in the working area of Pandan Health Center, and this result is statistically significant. The results of the bivariate test obtained 3 variables that had a p value of <0.25 which were used as candidates for the multivariate test.

Table. 4 Bivariate analysis of socio-demographic factors and National Health Insurance membership independently

Independent Variable	National Health Insurance Fidelity		OR	95% CI		p
	Participant	Not participant		Lower limit	Upper Limit	
Age						
≥ 45 years old	23	37	1.15	0.70	1.28	0.899
< 45 years old	14	26				
Education						
High	30	55	0.62	0.41	1.40	0.582
Low	7	8				
Income						
≥ minimum wage	35	54	2.92	0.54	2.03	0.205
< minimum wage	2	9				
Vulnerability Perception						
Positive	37	61	0.38	0.33	0.72	0.529
Negative	0	2				
Severity Perception						
Positive	34	54	1.89	0.57	3.28	0.527
Negative	3	9				
Threat Perception						
Positive	22	30	1.61	1.13	2.35	0.349
Negative	15	33				
Benefits Perception						
Positive	36	44	15.55	0.46	16.72	0.001
Negative	1	19				
Perception Barriers						
Positive	10	2	11.30	8.07	12.85	0.001
Negative	27	61				

Table 5. Multivariate analysis of socio-demographic factors and National Health Insurance membership independently

Variable	aOR	95% CI		p
		Lower limit	Upper limit	
Income	2.83	0.54	14.90	0.221
Benefits Perception	13.52	1.60	114.05	0.017
Obstacle perception	12.71	1.97	82.01	0.008

N observation= 100
-2 log likelihood= 102.51
Negelkerke R²= 0.35%

Based on Table 5 shows that perceived benefits (aOR= 13.52; 95% CI= 1.60 to 114.05; p= 0.017) and perceived barriers (aOR= 12.71; 95% CI= 1.79 to 82.01; p = 0.008) increase the chances of participating national health insurance, and this result is statistically significant.

DISCUSSION

1. The relationship between age and national health insurance participation

These results indicate that age increases people's participation in national health insurance, but this result is statistically non significant (OR= 1.15; 95% CI = 0.70 to 1.28; p= 0.889). This is in line with Sakinah (2014) which states that age is not related to public awareness of health insurance. Another similar research was conducted by Afifi (2009). This study is not in line with Gani's (2014), which states that age is related to health risks so that it can trigger inner awareness to participate in health insurance participation. Sampling in this study was carried out based on community visits to the health center, so that there was no significant difference in health risk between subjects aged > 45 years and < 45 years, where they experienced more low health risks.

2. The relationship between education level and national health insurance participation

The results of this study indicate that higher education reduces people's participation in national health insurance, and this result is not statistically significant (OR= 0.62; 95% CI= 0.41 to 1.40; p= 0.582). Hermawati (2013) and Wijaya (2013) research shows that the higher a person's education, the higher the awareness of participating in health insurance. The level of education affects the individual's awareness of planning and controlling actions to understand the risks to his health. The higher the level of education, the more knowledge will increase and the need for health services will also increase. This will increase the desire to become a participant in health insurance.

3. The relationship between income and national health insurance participation

The results showed that high incomes increased people's participation in national health insurance, but this result was not statistically significant (OR= 2.92; 95% CI= 0.54 to 2.03; p= 0.205). This is different from the results of Afifi's research in Sakinah (2014) and Gunistiyo (2006) which show that high incomes have an effect on awareness of health insurance participation, and vice versa.

Djuhaeni et al. (2010) also show that informal workers have the ability and willingness to participate in funding their health. Those with low incomes will meet their daily basic needs before deciding to become participants in health insurance. The researcher's assumption is because the National Health Insurance program is a social health insurance, where participation is mandatory for all Indonesian people in meeting basic needs for proper health. The implementation of this program has been adapted to the economic capacity of the people without distinguishing the socio-demographic factors of the community.

4. The relationship between perceptions of vulnerability and national health insurance participation

The results showed that the perception of vulnerability decreased people's participation in national health insurance, and this result was not statistically significant (OR= 0.38; 95% CI =

0.33 to 0.724; p= 0.72). The results of this study are in line with Calvocoressi et al. (2004) which states that women who have a high susceptibility have less awareness to carry out a mammography screening program compared to women who have a low perception of susceptibility. The results of this study are not in line with Sarafino's (2006) research on the Health Belief Model (HBM) which states that individuals' perceptions of the possibility of experiencing health problems will affect their behavior to seek treatment or prevention. The level of vulnerability is also influenced by the level of perceived threat to health problems experienced.

5. The relationship between perceived severity and national health insurance participation

The results showed that the perception of severity increased people's participation in the national health insurance, but this result was not statistically significant (OR= 1.89; 95% CI= 0.57 to 3.28; p= 0.527). Based on the Health Belief Model in Sarafino (2006), states that individuals begin to evaluate every type of problem that may develop and can worsen their health. This means that the individual's perception of the possibility of being exposed to health problems will affect behavior, especially to prevent or seek treatment. Individuals who feel they have severe health problems will be faster to take action for treatment. The researcher assumes that this may be due to the policy of the local government that frees the cost of health services at the Puskesmas for all residents of Central Tapanuli Regency and free of charge for health services at the General Hospital owned by the Regional Government for the poor.

6. The relationship between perceptions of threats and national health insurance participation

The results showed that the perception of threat increased people's participation in national health insurance, but this result was not statistically significant (OR= 1.61; 95% CI= 1.13 to 2.35; p= 0.349). Based on the Health Belief Model, the perception of threats to health problems is one component of this theory which is directly related to the tendency of people to perform health behaviors, namely to have an influence on participation (Dalinjong and Laar, 2012; Gaqavu and Mash, 2019).

7. The relationship between perceived benefit and National Health Insurance participation

The results showed that the perception of benefits increased the community in participating in national health insurance, and this result was not statistically significant (OR= 15.55; 95% CI= 0.46 to 16.72; p= 0.001). This is in accordance with the results of research on the motivation for independent national health insurance participation in Surakarta City which states that 80% of subjects are aware of the benefits of the importance of health in life and as many as 86% stated participation in national health insurance so that their health is guaranteed (Tiaraningrum, 2014).

8. The relationship between perceived barrier and national health insurance participation

The results showed that perceptions of barriers increased people's participa-

tion in national health insurance, and this result was not statistically significant (OR= 11.30; 95% CI = 8.07 to 12.85; p= 0.001). The results of this study are in accordance with research conducted by Ari and Astiti (2014) which states that there is a relationship between the role of individual perceptions of insurance and the health belief model in the decision-making process using life insurance. According to the Health Belief Model in Sarafino (2006) where the occurrence of behavioral changes in the subject is influenced by the belief in the perceived barriers. Negative perception of obstacles will encourage changes in the subject's behavior. These changes are supported by the discovery of positive perceptions of threat, perception of vulnerability and perception of severity and the success of socialization received by the subject.

9. Risk factors for participation in national health insurance

The results showed that perceived benefits (aOR= 13.52; 95% CI= 1.60 to 114.05; p= 0.017) and perceived barriers (aOR= 12.71; 95% CI= 1.79 to 82.01; p= 0.008) increased the chances of participating in health insurance coverage. nationally, and this result is statistically significant. The results of this study are in line with Gamelia and Wijayanti (2013), which states that the perception of benefits has an effect of 2.94 times to encourage someone to carry out preventive behavior well.

Due to the limitations of the researcher, not all variables related to national health insurance participation can be independently investigated in this study, so it is hoped that further research will examine other variables related to national health insurance participation independently in the community atPandan Health Center, Central Tapanuli. This study recommends the Regional Government of Central Tapanuli Regency to make efforts that can change public perceptions of the benefits of the national health insurance program.

AUTHOR CONTRIBUTION

Faisal is the only researcher in determining the topic, searching, collecting data, reviewing documents, and analyzing.

CONFLICT OF INTEREST

There is no conflict of interest in this study.

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