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## Analysis of independent National Health Insurance ownership of informal workers: Study of market traders in Gowa District, Indonesia ☆



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### KEYWORDS

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### Abstract

**Objective:** This study aimed to determine the factors associated with ownership of independent National Health Insurance (NHI) in market traders, Gowa District, Indonesia.

**Method:** This type of research was quantitative with a cross-sectional design. The population was 567 traders. Samples were 85 respondents: data collection using questionnaires, and data processing with Chi-square test analysis.

**Result:** The results indicated that 43 (50.6%) respondents had NHI, and 42 (49.45%) respondents did not. Based on the results obtained bivariate analysis knowledge ( $p = 0.003$ ), income ( $p = 0.039$ ), attitude ( $p = 0.000$ ), social support ( $p = 0.000$ ), age ( $p = 1.000$ ), education ( $p = 0.311$ ), perception ( $p = 0.234$ ) and access to care ( $p = 0.336$ ).

**Conclusion:** Factors related to the ownership of independent NHI traders in the Central Public Market Gowa were knowledge, income, attitude, and social support. It is recommended that market managers include traders in health insurance and the government improve the quality of the NHI program and increase socialization to informal sector traders.

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### Introduction

Realizing Universal Health Coverage is WHO global commitment since 2005,<sup>1</sup> including Indonesia, and as mandated by the 1945 Constitution, states develop national social security system.<sup>2</sup> Every citizen has the right to get access to use the resources in the field of health and medical care.<sup>3,4</sup> In achieving universal health, the Indonesian people must

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be committed through the National Health Insurance (NHI) program.<sup>5</sup> Due to having health insurance can improve the utilization of health services.<sup>6,7</sup>

Research in Ghana has found ways to get prescriptions, visit clinics, and seek formal health care, and the average person must register to require significant insurance. With the achievement of some health insurance to improve the formal health care sector following government objectives.<sup>8</sup> Therefore, the national health insurance membership is compulsory, that every citizen will be protected.<sup>9</sup> Presidential Regulation No. 111 article 6 states that all Indonesian citizens are required to be registered as health insurance participants.<sup>17</sup>

Universal Health Coverage is a target of The National Health Insurance program. Workers in the formal and informal sectors are required to become national health insurance participants.<sup>10</sup> Informal sector workers must register themselves and their families with national health insurance independently and pay premiums regularly. Implementing social security that has become the right of every citizen is a challenge from the government, especially for high informal sector workers in Indonesian.

Social Security Agency of Health noted that the number of participants by the end of 2019 reached 224.1 million, or 83% of Indonesia's total population of 269 million people. The government is targeting the entire population enrolled in the National Health Insurance program – Indonesia Health Card (JKN-KIS) in 2019. Some research suggests several variables associated with ownership of independent national health insurance. The economic situation of the informal sector and family support are the main factors for participating in independent national health insurance.<sup>10</sup> Independent NHI ownership is influenced by the following factors: age, education, income, medical history, and territory. Territory is the most dominant variable related to ownership of the NHI ( $p$ -value < 0.001; Exp  $B$  = 7.03; 95% CI: 5.06–9.77).<sup>11</sup>

The highest number of Informal Sector did not participate in the national health insurance participation are working as a small business trader. In Gowa, the number of health social insurance participants of the informal sector (Independent Workers) was 98,420 people or 18%, and Non-Workers was 13,994. According to the Head of Central People Market Management Sungguminasa, the number of traders as much as 823 consists of 69% or 567 permanent traders and 31% or 256 non-permanent traders. Based on the preliminary observation that has been done largely, Sungguminasa central public market traders do not have social health insurance.

## Methods

The type of research is quantitative research. The research used an analytical survey approach with a cross-sectional design, which is intended to find the relationship factors that became independent variables with the independent national health insurance ownership Informal sector in the central People Sungguminasa market in Gowa district.

The population in this study were fixed at the People Market traders as many as 567 vendors. The number of samples was 85 respondents, taken using a simple random sampling method. Data were obtained through direct interviews using questionnaires.

**Table 1** Distribution based on respondent characteristics.

Characteristics of respondents	<i>n</i>	%
<b>Gender</b>		
Male	37	43.5
Female	48	56.5
<b>Age</b>		
Productive (15–64 yrs)	84	98.8
Unproductive (>64 yrs)	1	1.2
<b>Education</b>		
No school	2	2.4
Elementary School	2	2.4
Junior High School	22	25.9
Senior High School	50	58.8
College	9	10.5
<b>Income</b>		
Enough (>IDR 2,647,767)	46	54.1
Low (<IDR 2,647,767)	39	45.9

Data processing was performed using SPSS and Microsoft Office Excel. The data were analyzed using univariate statistical analysis and Bivariate statistical test Chi-Square.

## Findings and discussion

The analysis showed the characteristics of respondents based on the gender, age, education, and income characteristics of traders in the market (Table 1).

Distribution of respondents from the table in mind that there are 37 or 43.5% for the male gender and 58 or 56.5% for the female sex. For the age categories, there are 84 or 98.8% for the category of 15–64 years, and there are 1 or 1.2% to the category of >64 years. For the category of education level, there are 2 or 2.4% were not in school, and there are 50 or 58.8% with a high school education level. For the category of the type of work, there are 84 or 98.8% working as self-employed, and there are 1 or 1.2% who chose other job categories. As for the category of income, brackets are pretty much as 46 (54.1%), while the lower class income 39 (45.9%).

Based on Table 2, it is known that in the productive age group was 84 people (98.8%), while respondents who are not earning as many as 1 (1.2%). Highly educated were as many as 59 people (69.4%) of respondents, while respondents in low education level were as many as 26 people (30.6%). Respondents who have enough income were as many as 46 people (54.1%), while respondents who have low incomes were as many as 39 people (45.9%). Well knowledgeable respondents were as many as 58 people (68.2%), while less knowledgeable respondents were about 27 people (31.8%). Respondents who have a positive attitude as many as 46 people (54.1%), while respondents who had a negative attitude that as many as 39 people (45.9%). The respondents who have a positive perception were as many as 44 people (51.8%), while respondents who have a negative perception were 41 (48.2%). Respondents in positive social support were as many as 47 people (55.3%), while respondents in negative

**Table 2** Distribution of respondents by variables studied.

Research variable	n	%
<b>Age</b>		
Productive	84	98.8
Not productive	1	1.2
<b>Education</b>		
High	59	69.4
Low	26	30.6
<b>Income</b>		
Enough	46	54.1
Low	39	45.9
<b>Knowledge</b>		
Well	58	68.2
Less	27	31.8
<b>Attitude</b>		
Positive	46	54.1
Negative	39	45.9
<b>Perception</b>		
Positive	44	51.8
Negative	41	48.2
<b>Social support</b>		
Positive	47	55.3
Negative	38	44.7
<b>Access to services</b>		
Close	20	23.5
Far	65	76.5
<b>Ownership Independent National Health Insurance (NHI)</b>		
Yes	43	50.6
No	42	49.4

social support were as many as 38 people (44.7%). Respondents who have close access to services were as many as 20 people (23.5%), while respondents who have a far access to service were as many as 65 people (76.5%). Respondents who have independent national health insurance are 43 people (50.6%), while respondents who do not have independent national health insurance are 42 people (49.4%).

As can be seen in Table 3, based on the results obtained bivariate analysis between age ( $p=1.000$ ), education ( $p=0.311$ ), perception (0.234), and access to services (0.336) value of  $p > 0.05$ . This shows that there is no correlation between age, education, perception of respondents, and access services with independent NHI ownership informal workers in the local markets Gowa.

Based on the analysis on the variable of knowledge ( $p=0.003$ ), income ( $p=0.039$ ), attitude ( $p=0.000$ ), and social support ( $p=0.000$ ) was obtained  $p < 0.05$  which indicates that there is a relationship of knowledge, income, attitudes, and social support to the ownership of independent NHI informal workers in the local markets Central Sungguminasa, Gowa.

Based on the results of research, many productive ages do not want to have NHI, although many people are aware of the risk of illness. In general, despite being able to buy insurance, young people will not voluntarily and consciously

buy insurance for the coming period, because experience shows they are rarely sick so young people will take risks. Conversely, the experience of paying for expensive medical care for an elderly or unproductive age wants to buy insurance. The results showed that there was no correlation between age and ownership of independent insurance.

In the utilization of health services, certainly, those who have higher education will use their thoughts to process the information obtained to facilitate their knowledge.<sup>12</sup> Still, the results of the analysis showed no relationship between education and the independent NHI ownership, and many highly educated respondents also do not have insurance. This is consistent with studies that researched by<sup>13</sup> with the results obtained by value  $p=0.104 > 0.05$ ; there is no relationship between education and willingness to be a participant of Health Insurance.<sup>14</sup>

Results also showed people's income affects people's awareness of insurance. The higher a person's income, the higher the awareness of society in insurance. Twenty-eight people (32.9%) are in the category of pretty and participate in the independent NHI. The study is in line with studies showing that there is a significant relationship between the level of income to public awareness in health insurance in the village of Poris Gaga with  $p$ -value  $0.002 < 0.05$ .<sup>15</sup> The income level of a person holding a high awareness of one's essential to health insurance. Affordability full insurance would be a burden for households with low socioeconomic status and household size large.<sup>16</sup>

The variables of this research knowledge, in line with research Siswoyo (2015), show that there is a significant relationship between knowledge and awareness in the informal sector workers who participated in NHI. High awareness level is generally owned by the group of older respondents (over 32 years), and most have a high level of knowledge of the NHI program. Sufficient knowledge of the NHI affects the behavior of public participation in the NHI. If the public is less knowledgeable about NHI will have an impact on people's attitude toward the program.

Attitudes are the views and feelings which is characterized by a tendency to be able to act on a specific object. There are 33 people (38.8%) who are in a positive category and participate in the independent NHI. This is because the respondents considered that the independent NHI has many benefits. That there is a significant relationship between the variables of attitude and ownership independent NHI in line with a study of 96 respondents indicated that there are influence attitudes toward membership in NHI ( $p=0.007$ ) in the community in Surakarta.<sup>17</sup>

Perception will be influenced by personality, culture, education, previous events, both positive and negative, which may often be encountered when getting services. Services received from the hope that is affecting the consumer on the quality of service (Puspita, 2016). Equity research aspects of the National Health Insurance Scheme in Ghana shows the perception of influence household decisions to enroll NHIS.<sup>18</sup>

Social support is part of the human resources that are characteristic of support reflects that despite having a predisposition to use health services, it will not act to use it unless he can use it. In theory, L. Green o participate and become an NHI member who encourages the emergence of attitudes and intentions is a factor of support from the

**Table 3** The relationship between age, education, income, knowledge, attitude, perception, social support and access to the services of the independent national health insurance ownership on traders of the market Sungguminasa Gowa.

Independent variables	Ownership independent NHI				Total		Statistic test
	Yes		No		N	%	
	n	%	n	%			
<b>Age</b>							1.000
Productive	42	49.4	42	49.4	84	98	
Not productive	1	1.2	0	0	1	1.2	
<b>Education</b>							0.311
High	32	37.6	27	31.8	59	69.4	
Low	11	12.9	15	17.7	26	30.6	
<b>Income</b>							0.039
Enough	28	32.9	18	21.2	46	54.1	
Low	15	17.6	24	28.2	39	45.9	
<b>Knowledge</b>							0.003
Well	36	42.4	22	25.9	58	68.2	
Less	7	8.2	20	23.5	27	31.8	
<b>Attitude</b>							0.000
Positive	33	38.8	13	15.3	46	54.1	
Negative	10	11.8	29	34.1	36	45.9	
<b>Perception</b>							0.234
Positive	25	29.4	19	22.4	44	51.8	
Negative	18	21.2	23	27.1	41	48.2	
<b>Social support</b>							0.000
Positive	35	41.2	12	14.1	47	54.1	
Negative	8	9.4	30	35.3	38	49.9	
<b>Access to care</b>							0.336
Close	12	14.1	8	9.4	20	23.6	
Far	31	36.5	34	40	65	76.8	

family, and also be a motivation for people. On social support variables are known that there were 28 people (41.2%) are in a positive category and participate in the independent NHI, this is because the respondents have a critical recognition that health maintenance work (trade) well.

Access to adequate services does not increase the willingness of people to become NHI participants. Although access to services is easy, external factors have made people eager to have health insurance. Research Determinants of health insurance ownership among women in Kenya shows the region of residence was associated with a lower likelihood of having insurance coverage. Women who live in the Central province (OR = 0.4;  $p < 0.01$ ) and Northeast (OR = 0.1;  $p < 0.5$ ) are less likely to be insured compared with their counterparts in Nairobi province.<sup>19</sup>

## Conclusions

Factors related to the ownership of the Health Insurance independent traders in the Central Public Market Gowa is knowledge ( $p = 0.003$ ), income ( $p = 0.039$ ), attitude ( $p = 0.000$ ), and social support ( $p = 0.000$ ).

## Suggestions

The market manager should include traders to follow the dissemination of national health insurance in order to know the importance of being a participant in Health Insurance.

Officers of Health Social Security Agency needs to improve dissemination to the public, especially in the informal sector traders so that people know and understand the NHI program was very useful for the community.

Social Security Agency of Health is advised to establish Kader NHI to perform specific functions, namely the function of socialization (social marketing), recruiting, reminders and collection of contributions by each cadre NHI forming a community group for characters of different communities.

## Conflict of interest

The authors declare no conflict of interest.

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