

Factors Related To Health Insurance BPJS PBI Ownership Among Household Members

Yosalli^{1*}, Heni Rusmitasari², Suyitno³, Sariana⁴, Maretalinia⁵

¹Hospital Administration Program, Faculty of Health, Universitas Muhammadiyah Sumatera Barat, Padang, Indonesia

²Department of Public Health, Faculty of Public Health, Universitas Muhammadiyah Semarang, Semarang City, Indonesia

³Public Health Program, Faculty of Health Science, Institute Kesehatan dan Teknologi Graha Medika, Kotamobagu, Indonesia

⁴Participant Service Quality Sector, BPJS Kesehatan Prabumulih Branch, Prabumulih City, Indonesia

⁵Ph.D. program in Demography, Institute for Population and Social Research, Mahidol University, Thailand

ARTICLE INFO

Keywords:

BPJS PBI,
Health Insurance,
IPUM PMA 2020 Data

Email :

yosalli05@gmail.com
heni.rusmitasari@unimus.ac.id
nameseno@gmail.com
sariana.c.s.g@gmail.com
mareta.linia.21@gmail.com

ABSTRACT

This study aims to examine factors related to household members having BPJS PBI health insurance in Indonesia. A multistage cluster sample design was used to describe a probability sample of households and eligible females. The data were collected from the IPUMS PMA 2020 in Indonesia data. Based on chi-square analysis shows that the wealth quintile; middle, and poor, and residence; rural have a high association with ownership of BPJS PBI in Indonesia, while sex of a household member, age group, marital status, wealth quintile, and residence do not have significant association. The results of this study show that people who are poor and have a moderate level of wealth, stay in the rural, as children in the household, and live in marital status affect the ownership of BPJS PBI. These results can be used to formulate a strategy for strengthening health insurance ownership.

Copyright © 2023 Eduhealth Journal. All rights reserved is Licensed under a [Creative Commons Attribution- NonCommercial 4.0 International License](#) (CC BY-NC4.0)

1. INTRODUCTION

Most of the world's population does not have health insurance, especially in poor and developing countries [1]. To achieve universal world health insurance coverage is also a political challenge that must be carried out by all sectors in various countries in the world [2]. Until now, several developing countries use health insurance schemes with contributions [3]. This is because the country's economy is unable to bear all health costs for its people [4].

Specifically, the role of basic health services is very important for UHC with 100% coverage of the people in its working area having health insurance [5]. Then in terms of system, achieving UHC requires tiered instructions from the government, a clear system and the public's willingness to use available health insurance [6]. Some subsidized government insurance must be given to the poor people and right on target [7].

It is easier for everyone who lives in urban areas to have health insurance compared to those in rural areas [8]. However, usually those who live in rural areas have more subsidized insurance [9]. Subsidies are also given to the elderly, orphans and other poor criteria determined by the state [10].

In Indonesia, health insurance is fully managed by the state through an institution called the "Social Security Agency for Health" or more commonly abbreviated as BPJS Kesehatan. For poor people, the central government through BPJS Health creates a contribution recipient program in which each poor person will be covered by the regional government for their monthly contribution. Everyone

who gets this type of BPJS will get class 3 services at health facilities. This study aims to examine the characteristic factors that influence household members to have BPJS PBI health insurance in Indonesia.

2. METHOD

The cross-sectional secondary data from the IPUMS PMA 2020 in Indonesia data was used in general of this study. The open data was available in this link: <https://pma.ipums.org/pma/about.shtml>. A multi-stage cluster sample design to describe a probability sample of household and eligible female. In specific, this study was not analyzed the eligible female. The study only took the household variables like; Ownership of BPJS PBI, sex of household member, age group, marital status, relationship to head of household, wealth quintile, and residence. Some of variable in household sample were not used. The data analysis used in this study was univariate, bivariate and binary logistic regression using the STATA 17 application with a license from Mahidol University Thailand.

3. RESULTS AND DISCUSSION

Table 1. Characteristic of respondents

Variables	Frequency	Percent
Ownership of BPJS PBI		
No	31,672	82.99
Yes	6,490	17.01
Sex of household member		
Male	19,165	50.22
Female	18,997	49.78
Age groups		
Teenager	5,357	14.04
Reproductive age	22,503	58.97
Elderly	7,815	20.48
Very old	2,487	6.52
Marital status		
Currently not married	16,166	42.36
Currently married	21,996	57.64
Relationship to head of household		
Head	12,089	31.68
Child	12,165	31.88
Others	13,908	36.44
Wealth quintile		
Poor	17,007	31.68
Middle	7,197	31.88
Rich	13,888	36.39
Residence		
Rural	17,560	46.01
Urban	20,602	53.99

According to table 1 shows the number of ownerships of BPJS PBI was 17,01% with sex; male and female balanced. Majority of the were in reproductive age. About 57.64% of them currently married. The relationship the respondents who were interviewed were head and child in the household. Wealth quintile status shows 13.68% poor, 31.88 middle and 36.39 rich. 53.99% of them live in urban.

Table 2. Result of chi-square analysis

Variables	Ownership of BPJS PBI		Total (%)	P value
	No (%)	Yes (%)		
Sex of household member				0.373

Male	15,873 (50.12)	3,292 (50.72)	19,165 (50.22)	
Female	15,799 (49.88)	3,198 (49.28)	18,997 (49.78)	
Age groups				0.498
Teenager	4,442 (14.03)	915 (14.10)	5,357 (14.04)	
Reproductive age	18,727 (59.13)	3,776 (58.18)	22,503 (58.97)	
Elderly	6,448 (20.36)	1,367 (21.06)	7,815 (20.48)	
Very old	2,055 (6.49)	432 (6.66)	2,487 (6.52)	
Marital status				0.452
Currently not married	13,444 (42.45)	2,722 (41.94)	16,166 (42.36)	
Currently married	18,228 (57.55)	3,768 (58.06)	21,996 (57.64)	
Relationship to head of household				0.007
Head	9,992 (31.55)	2,097 (32.31)	12,089 (31.68)	
Child	10,027 (31.66)	2,138 (32.94)	12,165 (31.88)	
Others	11,653 (36.79)	2,225 (34.75)	13,908 (36.44)	
Wealth quintile				0.016
Rich	14,379 (45.40)	2,698 (41.57)	17,007 (44.75)	
Middle	5,852 (14.48)	1,345 (20.72)	7,179 (18.86)	
Poor	11,441 (36.12)	2,447 (37.70)	13,888 (36.39)	
Residence				0.130
Rural	14,629 (46.19)	2,931 (45.16)	17,560 (46.01)	
Urban	17,043 (53.81)	3,559 (54.84)	20,602 (53.99)	

Based on chi-square analysis shows the information about two variables were relationship to head of household and wealth quintile have significant association with ownership of BPJS PBI in Indonesia. Sex of household member, age group, marital status, wealth quintile and residence no have significant association with ownership of BPJS PBI in Indonesia.

Table 3. Result of binary logistic regression

Variable	Ownership of BPJS PIB		
Sex of household member (ref. male)	AOR	95% C.I.	p-value
Female	1.018	0.95-1.09	0.593
Age groups (ref. teenager)			
Reproductive age	0.990	0.90-1.08	0.825
Elderly	1.059	0.94-1.18	0.316
Very old	1.067	0.92-1.23	0.365
Marital status (ref. currently not married)			
Currently married	1.117	1.04-1.20	0.003
Relationship to head of household (ref. head)			
Child	1.127	1.02-1.23	0.003
Others	0.928	0.85-1.01	0.074
Wealth quintile (ref. rich)			
Middle	1.258	1.17-1.35	<0.0001
Poor	1.204	1.12-1.28	<0.0001
Residence (ref. urban)			
Rural	1.121	1.06-1.19	<0.0001

Table 3 shows the binary logistic regression wealth quintile; middle and poor and residence; rural have high association with ownership of BPJS PBI in Indonesia. Currently married and child as relationship to head of household have moderate relationship with ownership BPJS PIB in Indonesia.

The currently married individuals and children related to the head of household have a moderate relationship with the ownership of BPJS PBI in Indonesia. This suggests that being from a certain socioeconomic status or living in a rural area is a significant predictor of BPJS PBI ownership in

Indonesia. Another research has shown that children who are related to the head of the household or their spouse are more likely to be enrolled in BPJS PBI. It is most likely due to high decision-making power and management control over household finances that registration is done when the government has the opportunity [11].

In addition, individual wealth quintile is also an important factor related to BPJS PBI ownership. Individuals with a low wealth quintile are more likely to have their own BPJS PBI than individuals with a high wealth quintile, this is because data collection is carried out by the government free of charge and specifically aimed at the less fortunate [12]. In addition, people in the moderate bottom wealth quintile receive government subsidies from BPJS PBI, which may explain the lower level of ownership among the poor wealth quintile [13]. This result proven by the implementation of the PBI BPJS for Health in the first year succeeded in increasing the likelihood of the poor and near-poor getting outpatient treatment at public health facilities compared to other facilities. The PBI BPJS Health program is able to increase the tendency of special populations of inpatients to use public health facilities compared to other facilities not covered by the BPJS scheme program such as the practice of health workers/traditional medicine/others [14].

It is difficult for individuals who live in rural areas to have better access to information about BPJS PBI. They are highly unlikely to register independently with the government. In addition, those who are in areas that are difficult to reach and remote often face challenges in accessing health services and information about BPJS. To increase BPJS PBI ownership, efforts are needed to increase access to information on health insurance benefits and participation in the BPJS program. In addition, steps should be taken to increase access to health services in remote and hard-to-reach areas, making it easier for the community to cover the costs of contributions and benefits from the health insurance programs [15].

Despite efforts to improve health access for the poor in Indonesia through various health insurance schemes, there remains a significant gap in the utilization of health services and health outcomes between the poor and non-poor populations. This study highlights the need for sustained efforts to improve the effectiveness and efficiency of health insurance schemes targeted at the poor, while also addressing the structural and social factors that contribute to health inequalities more broadly. In light of these challenges, it is clear that an integrated and comprehensive approach to healthcare policy is needed in Indonesia, one that considers not only the specific challenges of the healthcare system but also the broader social and economic determinants of health. This will require collaboration across multiple sectors and levels of government, as well as engagement with civil society and other stakeholders. By taking a more holistic approach to healthcare policy, Indonesia can work towards achieving its goal of universal health coverage and improving the health and well-being of all its citizens.

4. CONCLUSION

In sum, this study shows that people who are poor and moderate at the level of wealth, stay in rural, currently marriage, and as a child in the household have an effect on the ownership of BPJS PBI health insurance. This shows that the government's target has met the target, namely providing BPJS PBI for underprivileged people. In order to achieve UHC, it is hoped that all people must have health insurance. The visible problem is that many rich people still have BPJS PBI health insurance. This shows the granting of insurance rights to the wrong target of implementation the policy from the government. It is hoped that the government will improve the management of BPJS PBI health insurance in Indonesia.

REFERENCES

- [1] M. Liu *et al.*, "Determinants of health insurance ownership in Jordan: a cross-sectional study of population and family health survey 2017–2018," *BMJ Open*, vol. 11, no. 3, p. e038945, Mar. 2021, doi: 10.1136/bmjopen-2020-038945.
- [2] C. J. Ho, H. Khalid, K. Skead, and J. Wong, "The politics of universal health coverage," *Lancet*, 2022.
- [3] O. Enabulele, "Achieving universal health coverage in Nigeria: moving beyond annual

- celebrations to concrete address of the challenges,” *World Med. Heal. Policy*, vol. 12, no. 1, pp. 47–59, 2020.
- [4] A. Banerjee, A. Finkelstein, R. Hanna, B. A. Olken, A. Ornaghi, and S. Sumarto, “The challenges of universal health insurance in developing countries: experimental evidence from Indonesia’s National Health Insurance,” *Am. Econ. Rev.*, vol. 111, no. 9, pp. 3035–3063, 2021.
 - [5] Y. Assefa, P. S. Hill, C. F. Gilks, M. Admassu, D. Tesfaye, and W. Van Damme, “Primary health care contributions to universal health coverage, Ethiopia,” *Bull. World Health Organ.*, vol. 98, no. 12, p. 894, 2020.
 - [6] W. Tao *et al.*, “Towards universal health coverage: lessons from 10 years of healthcare reform in China,” *BMJ Glob. Heal.*, vol. 5, no. 3, p. e002086, 2020.
 - [7] P. Hazell and P. Varangis, “Best practices for subsidizing agricultural insurance,” *Glob. Food Sec.*, vol. 25, p. 100326, 2020.
 - [8] I. P. Widiarti and H. Idris, “Factors Associated with Independent National Health Insurance Ownership among Reproductive Aged Women in Indonesia,” *Makara J. Heal. Res.*, vol. 26, no. 1, p. 1, 2022.
 - [9] D. Erlangga, S. Ali, and K. Bloor, “The impact of public health insurance on healthcare utilisation in Indonesia: evidence from panel data,” *Int. J. Public Health*, vol. 64, pp. 603–613, 2019.
 - [10] M. Muttaqien *et al.*, “Why did informal sector workers stop paying for health insurance in Indonesia? Exploring enrollees’ ability and willingness to pay,” *PLoS One*, vol. 16, no. 6, p. e0252708, 2021.
 - [11] S. M. Adioetomo and E. L. Pardede, “Older Persons in Indonesia: Sources of Income and Social Protection,” in *Handbook of Aging, Health and Public Policy: Perspectives from Asia*, Springer, 2022, pp. 1–16.
 - [12] S. Wenang *et al.*, “Availability and accessibility of primary care for the remote, rural, and poor population of Indonesia,” *Front. Public Heal.*, p. 1285, 2021.
 - [13] J. Schaefer, S. Wenang, A. Afdal, A. G. Mukti, S. Sundari, and J. Haier, “Population-based study on coverage and healthcare processes for cancer during implementation of national healthcare insurance in Indonesia,” *Lancet Reg. Heal. Asia*, vol. 6, p. 100045, 2022.
 - [14] D. Rolindrawan, “The impact of BPJS health implementation for the poor and near poor on the use of health facility,” *Procedia-Social Behav. Sci.*, vol. 211, pp. 550–559, 2015.
 - [15] D. Yang, Y. Acharya, and X. Liu, “Social health insurance consolidation and urban-rural inequality in utilization and financial risk protection in China,” *Soc. Sci. Med.*, vol. 308, p. 115200, 2022.