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ELDERLY AND HEALTH INSURANCE (THE FAMILY PROTECTION FUNCTION FOR THE ELDERLY)

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ABSTRACT
Life expectancy in Indonesia has been increasing year by year. The management of the elderly still relies upon the family or communities. The family has limited capacity to manage the elderly, making the elderly more vulnerable. The family protection function implementation is so important. This study aims to examine how the implementation of family functions in Indonesia is associated with health insurance ownership and to assess how these factors relate to increasing life expectancy. The study used data from the 2019 Program Accountability Performance Survey. The eight family functions with a focus on the protection function have been implemented by the family for the elderly. The quantitative analysis with the cross-tabulation between implementing the protection function and the health protection ownership. The result is a family that has been implementing the protection function; 95.5 percent have health insurance, and those who haven't implemented the protection function, 6.2 percent don't have health insurance. Most of the families in Indonesia have been implementing health protection for the elderly. The probability of health insurance ownership in the elderly is young elderly (60-69 years), male, residing in urban areas, married, having 0-2 children, and still actively working. The policy implications are Elderly Family Development activities need to be accompanied by long-term financial literacy. Productive individuals should be encouraged to prioritize health insurance ownership for the elderly.

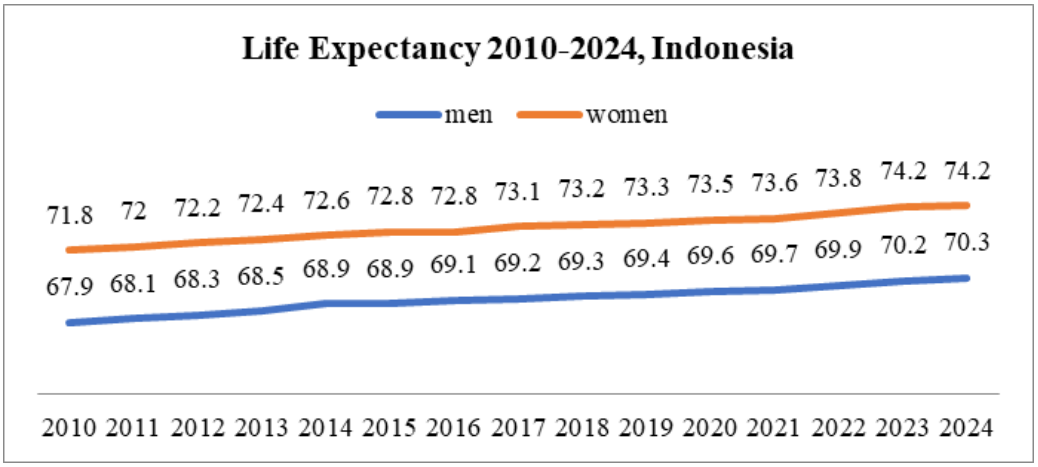
Keywords: aging population; elderly; health insurance; protection function.

INTRODUCTION
According to the 2020 Population Census data, the condition of the elderly in Indonesia is 9.78 percent, an increase of 2.19 percent compared to the 2010 Population Census, which was 7.59 percent. The condition shows that Indonesia has been transitioning towards an ageing population because the population aged over 60 years reaches above 7 percent of the whole population and is becoming an ageing population of more than 10 percent (BPS, 2019). According to the Central Agency on Statistics Indonesia (BPS), in 2024, the life expectancy in Indonesia reached 74.21 years for women, and 70.32 years for men, and this tends to increase from 2023 years, whereas 74.18 years for women and 70.17 years for men (BPS, 2025).

As a result of sustainable development, the elderly population continues to increase both in number and proportion. Improvements in health, access to education, employment, quality of life, and various other socioeconomic factors have contributed to increased life expectancy and decreased mortality rates (BPS, 2025). The aging process involves changes or declines in the structure and function of the elderly, including vision, hearing, the pulmonary system, and bone joints. Along with the decline in physiological functions, the immune system of the elderly also weakens, making them susceptible to various diseases (Oktavia, 2023). Although longevity is a great achievement for humans, it presents challenges for the elderly population because the likelihood of experiencing health losses increases with age (Cosco et al., 2017 in Salim, 2023).

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Figure 1: Life Expectancy in Indonesia, 2010-2024.



Source: BPS, 2025.

The demographic transition, which has been driven by development progress reflected in the expansion of education, health technology, industrialization, and urbanization, will reduce mortality and fertility rates. Furthermore, the decline of fertility and mortality will affect the change of the structure of the population from being predominantly children, because higher fertility becomes dominated by the working age population and the elderly. The changes in the age structure of the population have also resulted in an increase in the number of elderly (Ministry of National Development Planning/Bappenas, 2019). Voluntary national review (VNR): Empowering people and ensuring inclusiveness and equality., 2019). The gradual improvement in the health services has increased life expectancy and the percentage of the elderly population. It is estimated that the population aged above 60 years will increase to 1.2 billion in 2025 and then become 2 billion in 2050. Furthermore, in 2050, almost 75 percent of the elderly population will live in developing countries and will be burdening the health services system (Shrivastava et al., 2013). The elderly population (60 years and older) in Indonesia is projected to increase to 33.9 million (11.93 percent) in 2025, 50.3 million (16.31 percent) in 2035, 58.6 million (18.47 percent) in 2040, and 65.8 million (20.31 percent) in 2045 marking the importance of social, economic and health planning to improve the quality of life of the elderly (Ministry of Population and Family Development/BKKBN, 2025). Based on demographic aspects, 11.93 percent of Indonesia's population in 2025 is elderly, with an elderly dependency ratio of 11.00, which means that 100 productive-age residents support 11 elderly residents, with the majority of elderly living in households containing three generations and with nuclear families. The increasing number of elderly people can have a positive impact if they are healthy, active, and productive. However, this aging population also presents challenges that must be faced by the elderly themselves, their families, the community, and the government. The main challenge today is how to maintain the quality of life for the elderly, considering that increasing age is generally accompanied by a decline in physical abilities and health status, which results in a decrease in work capability (BPS, 2025).

The population structure can be considered an aging population if the proportion of elderly people aged 60 years and above has reached 10 percent or more (Adioetomo, 2018 in BPS, 2025). Based on these criteria, Indonesia is currently in an aging population structure; specifically, Indonesia has entered an aging population since 2021. Over the past five years (2020–2025), the percentage of elderly people in Indonesia has increased from 9.93 percent in 2020 to 11.93 percent in 2025 (BPS, 2025). Based on the strategic plan of the Ministry of Population and Family Development/BKKBN for 2025-2029, an aging population is still becoming a strategic issue in population management and control. If not properly prepared, the increase in the elderly population will increase the burden on the health and social protection systems. By preparing the elderly population as early as possible, Indonesia will be able to take advantage of the second demographic bonus, namely, elderly people who remain productive or at least do not become a burden on their families and the country (BKKBN, 2025). The risk and

vulnerabilities to health and welfare are found in the elderly cohort. Decreasing physical ability becomes one of the sources of risk with a person's increasing age (Bappenas, 2019). Based on age groups, toddlers and the elderly are the population groups that have the most complaints compared to other age groups, at 40.12 percent and 44.02 percent (BPS, 2025). According to the Indonesia Basic Health Research (Riskesdas) in 2018, the diseases suffered by the elderly are disease which are not contagious, such as heart disease, diabetes, stroke, rheumatism, and injuries (Ministry of Health of the Republic of Indonesia, 2018). Efforts to support elderly health focus on maintaining healthy, quality, and productive lives by encouraging personal hygiene, a balanced diet, physical activity, and an elderly-friendly environment (Dewi et al., 2024). The increasing number of elderly people will inevitably experience an increase in chronic non-communicable diseases such as heart disease, stroke, and diabetes, which will potentially increase economic and social costs (Sudiyasa et al., 2023).

Elderly care still relies on families and communities. Families have limitations in managing the lives of the elderly, making them more vulnerable, and the potential for problems will increase as the aging population impacts the development sector (BKKBN, 2020). Elderly people with retirement plans, such as health insurance, may not face daily needs in the future, but those without retirement plans will feel vulnerable; meanwhile, their physical and mental abilities are no longer productive (Cicih, 2016). Putri and Ilyas (2019) found that factors influencing the utilization of outpatient health services for the elderly include health insurance ownership, along with gender, education, occupation, residence, economic status, and health problems. Health services for the elderly should include promotive, preventive, and curative services. According to the Central Agency on Statistics Indonesia (BPS) (2020), elderly population statistics, the morbidity rate among the elderly tends to decrease every year, and in 2020, approximately 24 out of 100 elderly people fell ill once a month. Citizens have the right to health services. According to the World Health Organization (WHO), universal health coverage means everyone has access to the health services they need, anytime and anywhere, without financial constraints, including preventive, promotive, rehabilitative, and curative care (WHO, 2025). Health is a goal of the Sustainable Development Goals (SDGs), which focus on improving public health and overall well-being, starting with strengthening health systems. Health insurance plays a crucial role in ensuring people's access to outpatient and inpatient health services. With health insurance, people need not worry about the burden of costs when they become ill or require medical care. In addition to providing financial security, the national health insurance program ensures that every citizen, regardless of socioeconomic status, has an equal opportunity to receive adequate care. According to Susenas 2025 data, health insurance coverage among the elderly reached 81.62 percent (BPS, 2025). The elderly are vulnerable to becoming dependent on the younger generations living with them. Currently, 40 percent of the elderly live across three generations. This situation makes it difficult for the productive age population to provide maximum investment for the next generation and for themselves in old age (Djamhari et al., 2020).

The purpose of this study was to determine the support for implementing family functions in the elderly, specifically their preparedness for old age through health insurance funds. This study aims to examine how the implementation of family functions in Indonesia is associated with health insurance ownership and to assess how these factors relate to increasing life expectancy. Many studies have examined the elderly, but few have discussed the protection of their families through health insurance. Several previous studies have focused only on general economic resilience, and there is still little literature discussing health insurance ownership as a form of risk mitigation in facing old age. Most studies emphasize economic support and empathy, while only a few studies explore the relationship between family support and the independence of the elderly in daily life (Danguwole et al., 2017). Hafinur and Pujiyanto (2022) stated that the variables of gender, highest education, marital status, residence, internet access, health complaints, employment, savings, communication problems, and emotional disturbances are significantly related to health insurance ownership.

The scientific novelty of this study lies in the correlation between the relationship between family function and health insurance ownership and the use of national-scale secondary data, thus providing a sociological picture of the condition of the elderly in Indonesia.

METHOD

The study used data from the 2019 Program Accountability Performance Survey (SKAP) in the Family Module (BKKBN, 2019). The survey was held in 2019 in 34 provinces in Indonesia, which was designed to produce estimates of national and provincial-level parameters. The data collected by the enumerator was used on smartphone technology. In general, the purpose of a survey is to obtain information about performance indicators for the implementation of population, family planning, and family development programs.

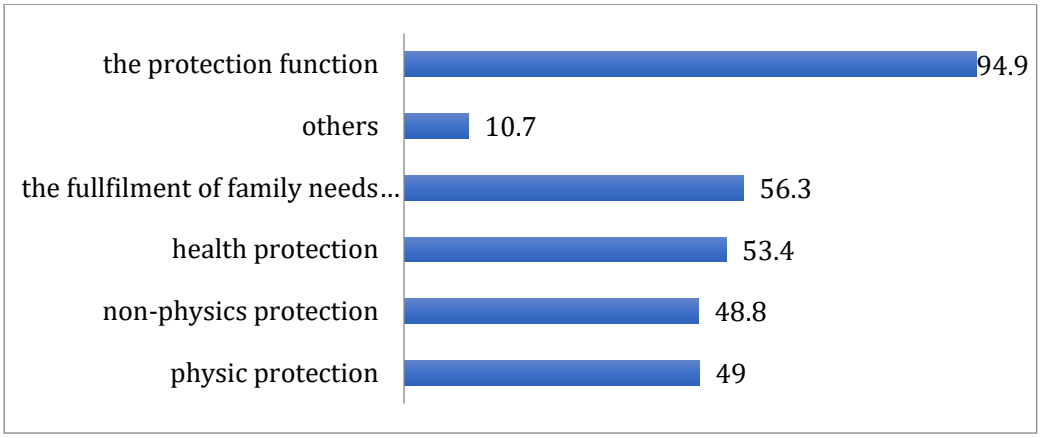
The sample in this survey was families that were included in the block census selected using the PPS (Probability Proportional to Size). The number of families in this survey was 69.662 families in 1.935 clusters, while the unit of analysis in this study was 12.392 families which are elderly 60 years and over. The variables used in this study consisted of ten variables, namely (1) gender; (2) education; (3) residence; (4) occupation; (5) wealth level; (6) married status; (7) number of children; (8) age group; (9) protection function; (10) ownership of health insurance. The elderly population, or senior citizens, is residents aged 60 years and over, consisting of young elderly (aged 60-69 years), middle elderly (aged 70-79 years), and old elderly (aged 80 years and over) (BPS, 2025).

The research used descriptive analysis. The descriptive analysis is used to provide an overview of all variables used and describe the characteristics of respondents related to the elderly and their health insurance with univariate analysis and provides useful information. The quantitative analysis with the cross-tabulation between implementing the protection function and the health protection ownership.

RESULTS AND DISCUSSION

The family must carry out its functions well to produce quality human resources. Families as producers of human resources must perform their functions well to produce quality human resources. The Ministry of Population and Family Development/BKKBN divides family function into eight functions consisting of 8 functions, including belief (the family fosters religious values, so that children become people with good morals and piety), socio-cultural (the socio-cultural function provides opportunities for families and all its members to develop the nation's diverse cultural wealth in one unity), affection (the family must be a place to create an atmosphere of love and affection in family life, society and nation and state), protection (the family must be a safe, comfortable and reassuring place for all its members), reproduction (the family regulates the reproduction of offspring in a healthy and planned manner so that the children born become quality future generations), socialization and education (the family as a place to develop interaction processes and a place to learn to socialize and communicate well and healthily), economic (the family is the main place in fostering and instilling values related to finance and managing the use of finances to meet the needs of life and realize a prosperous family), and environmental development function (the family has a role in managing life while maintaining the surrounding environment, both the physical and social environment, and the micro environment, meso and macro, the family's caring attitude towards the environment to provide the best for future generations). Figure 1 shows the protection function implementation for the elderly.

Figure 2: The Protection Function Implementation for the Elderly.



Source: SKAP 2019, processing.

The family has implemented the eight family functions with a focus on the protection function for the elderly. The protection function is physical protection, non-physical protection, health protection, and the fulfillment of family needs (feeding, clothing, housing). Almost 94.9 percent of families have been implementing the protection function. Fulfillment of family needs such as food, clothing, and housing is the highest at 56.3 percent, health protection is 53.4 percent, physical protection is 49 percent, and non-physical protection 48.8 percent.

Table 1: Health Insurance Ownership in Elderly Families according to Socio-Economic Characteristics.

Variable	Ownership Health Insurance				Total	
	Yes		No			
	n	%	n	%	N	%
Age Group						
Young Elderly (60-69 years)	6100	71.6	2776	71.7	8876	71.6
Middle-Aged Elderly (70-79 years)	1966	23.1	838	21.7	2804	22.6
Old Elderly (80 years and over)	455	5.3	256	6.6	711	5.7
Gender						
Male	7374	86.5	3426	88.5	10800	87.2
Female	1147	13.5	444	11.5	1591	12.8
Education Level Head of Family						
Low education	5548	65.1	3193	82.5	8741	70.5
Middle Education	2281	26.8	617	15.9	2898	23.4
Higher Education	692	8.1	60	1.6	752	6.1
Residence						
Rural	4205	49.3	2527	65.3	6731	54.3
Urban	4317	50.7	1343	34.7	5660	45.7
Wealth level						
Low	2409	28.3	1315	34	3724	30
Middle	4483	52.6	2254	58.2	6738	54.4
Upper	1629	19.1	301	7.8	1930	15.6

Marital status						
Married	7180	84.3	3358	86.8	10538	85
Divorced	70	0.8	27	0.7	97	0.8
Death divorced	1271	14.9	485	12.5	1756	14.2
Number of children						
0-2 children	8216	96.4	3794	98	12010	96.9
>2 children	305	3.6	76	2	381	3.1
Occupation: Head of Family						
Yes, working	5935	69.7	3258	84.2	9193	74.2
No working	2586	30.3	612	15.8	3198	25.8
Total	**8521**	**100**	**3870**	**100**	**12.391**	**100**

Source: SKAP 2019, processing.

Table 1 shows the ownership of health insurance, the highest is young elderly (71.6 percent), male (86.4 percent), low education (65.1 percent), lives in urban area (50.7 percent), have a middle wealth level (52.6 percent), married status (84.3 percent), have 0-2 children (96.4 percent) and still working (69.7 percent).

Table 2: Protection Function for Elderly Families.
("Yes" if at least one protection function was implemented and "No" if did not implement any protection function was implemented).

Variable	Ownership Health Insurance				P-value
	Yes, have		No have		
	N	%	n	%	
Implementing the protection function					
Yes	8134	95.5	3629	93.8	P<0.001
No	387	4.5	241	6.2	
Total	**8521**	**100**	**3870**	**100**	

Source: SKAP 2019, processing.

Table 2 shows the quantitative analysis with the cross-tabulation between implementing the protection function and the health protection ownership. The result is a family who has been implementing the protection function, 95.5 percent have health insurance, and those who haven't implemented the protection function 4.5 percent have health insurance. Meanwhile, a family who haven't implemented the protection function and don't have health insurance 6.2 percent.

DISCUSSION

The eight family functions are functions that become prerequisites, references, and patterns of life for every family in order to pursue a prosperous and quality family. The implementation of the family protection function implementation is so important because the family is the place that shelters its members (Deacon and Firebaugh (1988), in the BKKBN, 2017). Based on Law Number 36 of 2009 concerning Health, everyone has the right to health (Republic of Indonesia, 2009a). Health is crucial for human life. Health is a basic right for every citizen, as mandated by Article 28H of the 1945 Constitution of the Republic of Indonesia. The 2025-2029 National Medium-Term Development Plan (RPJMN) emphasizes improving public health as a priority in human development. The current challenges of health development in Indonesia are related to demographic and epidemiological transitions, resulting in an increasing number of adults and the elderly (BPS, 2025). According to the World Health Organization (WHO) (2025), health is not merely the absence of disease or infirmity, but also a state of balance between

physical, mental, and social functions. When someone is sick, the best way to recover is to treat themselves or see a doctor. Self-medication is the practice of taking medication based on a diagnosis of symptoms, as part of an effort to maintain health or prevent disease (Sitindon, 2020). People often self-medicate without a doctor's prescription due to several factors, including low income, easy access to medicinal products, living in a healthy environment, and a lack of interest in purchasing new medicines (Wulandini et al., 2024). Socioeconomic factors can influence people to self-medicate without a doctor's prescription due to the high cost of treatment at health facilities, especially for those without health insurance/BPJS (Social Security Agency), who can only afford retail medicines (Wulandini et al., 2024). The government has responsibility for the implementation of public health insurance through the national social system for individual health. The health insurance, based on Law Number 40 of 2004, is held with the aim of ensuring the participants receive the health care benefits and protection to fulfill basic health needs (Republic of Indonesia, 2004). The health insurance participants are people who pay contributions (BPJS non-PBI or non-BPJS/private) or whose contribution is paid by the government (BPJS PBI, Jamkesda). Individuals with chronic illnesses and disabilities generally incur additional costs to access healthcare (Arsenijevic et al., 2016, in Chrisnatalia et al., 2023), which can result in a greater financial burden.

Vulnerable age groups, namely children and the elderly, have higher health care needs due to their weaker physical condition and greater risk of disease (BPS, 2025). The elderly population experiences limited activity, frequent illness, forgetfulness, less friendly environments, and begins to feel less confident about their current physical condition. They also become less active in accessing health facilities, which affects their quality of life (Fridolin et al., 2022). Health insurance provides financial protection for the community in obtaining adequate health care. Through health insurance, the burden of medical costs can be minimized so that people do not hesitate to access medical services when experiencing health problems. Having health insurance has significant positive impacts, including increased public access to health facilities, reduced financial risks due to high medical costs, and encouraging equitable distribution of health services across various socioeconomic strata. Thus, health insurance functions not only as an instrument of individual protection but also as an important strategy in realizing an inclusive and equitable health system (BPS, 2025). Elderly residents with health insurance (National Health Insurance/Regional Health Insurance) are more likely to receive outpatient and inpatient care, indicating that having national health insurance is associated with increased utilization of health services in the elderly (Chrisnatalia et al., 2023). Elderly people are also vulnerable to psychological, physical, and financial neglect, so family caregivers are needed to prevent neglect (Ezalina, 2019). According to the protection function, 53.4 percent of families have been implementing the health protection function, and one of those being marked is health insurance. Health insurance is important for the elderly because if they do not have it, they will feel vulnerable, meanwhile their physical and mental health are not productive anymore. The study shows that from families who have been implementing health protection functions, 68.8 percent of the elderly had health insurance, and meanwhile 31.2 percent had no health insurance. This is in line with the research of Rahayu and Saefurrohim (2025), that health insurance ownership is significantly influenced by income, age group, education and employment status and in the age group >62 years, 59.4 percent have health insurance and 40.6 percent do not have health insurance, Mustikawati (2017) in her research found that 78.9 percent of the elderly in Panti Wredha do not have health insurance and 21.1 percent have health insurance.

Based on age group, young elderly (60-69 years) have the largest proportion (71.6 percent) in ownership of health insurance when compared with middle elderly (23.1 percent) and old elderly (5.3 percent). The decline in health insurance ownership with increasing age indicates limited access among middle-aged and older elderly groups. This is in line with research by Vel et al. (2025) that insurance coverage among the elderly in India is still low, with less than 1 percent of the elderly population having health insurance and 70 percent of the elderly relying on their children.

Based on gender, the proportion of male elderly who have health insurance is higher (86.5 percent) compared with women elderly (13.5 percent). This figure reflects that men are the main

heads of families in providing social protection guarantees. However, this inequality also provides an illustration of the condition of elderly women who statistically have a longer life expectancy than men but are actually in an unprotected position. This is in line with research by Rahayu and Saefurrohim (2025) that men have more insurance than women; Gusnita et al. (2022) namely that the value of male insurance premiums is greater than the value of female premiums due to several factors, namely the level of risk for men is greater than women, the mortality table used, interest rates and age; Yusuf (2016) in Sari (2025) mentions the gender gap in the lives of the elderly, related to aspects of work, health insurance and marital status where elderly women generally work less, have less health insurance and live longer with widow status. This is also caused by the level of education. Based on gender, there is still a fairly large gap in the level of education between men and women, namely, the percentage of elderly women who do not attend school is twice the percentage of men who do not attend school (Fitriyani et al, 2025).

Based on the level of education of the head of the family, it turns out that the elderly with lower education (elementary school completion and below) have the largest proportion (65,1 percent) of having health insurance compared with the secondary education (junior high school) and tertiary education (senior high school and university). It is possible because the lower education has BPJS PBI health insurance (recipients of contribution assistance/Indonesian citizens who are indicated as poor and underprivileged who are registered and funded through both the State Budget and Regional Budget) because BPJS PBI is intended for the poor and underprivileged, while those with middle and high education are likely to have BPJS non-PBI or non-BPJS (private). This effort is part of the implementation of Universal Health Coverage. This finding is in contrast to research by Rahayu and Saefurrohim (2025), which found that individuals with an education above high school are more likely to have health insurance than those with an education below high school. Those with higher education are more likely to have health insurance. Those with higher education are able to understand health needs, anticipate health expenses, make informed decisions, and have high-paying jobs that allow them to afford health insurance (Laksono et al, 2024). Education is important for participation in the National Health System because higher education can improve a person's ability to plan and mitigate future risks. On the other hand, higher education can increase knowledge about health insurance; therefore, a person will be aware of the benefits of health insurance (Maryanto et al, 2023).

Based on the residential area, the elderly who live in urban areas have a greater health insurance proportion (50.7 percent) than those who live in rural areas (49.3 percent). Although the difference is not significant, it may reflect the disparity in accessibility of health information and facilities between regions. Hasba et al. (2016) in his study found that the elderly in urban areas are well nurtured and cared for, at home or in a nursing home. Caring for the elderly is a moral obligation and responsibility for children to their parents. Elderly care patterns in cities require certainty of financial protection through insurance. Meanwhile, in rural areas, elderly people still work to support their families' finances.

Based on wealth level, middle-income seniors had the highest proportion of health insurance, at 52.6 percent, compared to those with lower and higher wealth levels. This middle-income group is not considered poor enough to receive BPJS PBI (Indonesian Health Insurance) coverage, but they are financially aware enough to pay non-PBI BPJS premiums.

Furthermore, based on marital status, currently married seniors have a higher proportion of health insurance coverage (84.3 percent) compared to those who are divorced and widowed/widowers. Intact marital status reflects social support and dual income within the household, while seniors living without a partner, either due to divorce or widowhood, must support themselves economically, namely by earning a living (Sudrajat et al., 2023). Therefore, economic inability will reduce their ability to pay insurance premiums.

Based on the number of children, the elderly who have 0-2 children have a greater proportion of health insurance (96.4 percent) compared to those who have more than 2 children (3.6 percent). It is possible because with a larger number of children, income is used for household consumption and ongoing child education costs, thus not prioritizing allocations for long-term health protection. This is in line with research by Djafar et al. 2023, which found that the number of family dependents had a positive effect on poverty in Ayula Utara Village, Bulango

Selatan District, Bone Bolango Regency, with a coefficient of determination of 7.80%. Positive results indicate that the greater the number of family dependents, the greater the impact on poverty in Ayula Utara Village, Bulango Selatan District, Bone Bolango Regency. This is because the greater the number of people whose needs must be met, the more difficult it is for those who need to be met within a family.

Based on the occupation, the elderly who work have a proportion of health insurance (69.7 percent) compared to those who do not work (30.3 percent). It shows that many elderly people still work to fulfill their needs. On the positive side, this active working status provides them with independent income that allows them to allocate funds to pay insurance premiums, or they receive insurance coverage automatically from their workplace if they work in the formal sector. The retirement age in Indonesia is still quite low at 58 years (relatively low compared to retirement ages in other countries, which range from 60-67 years), which can reduce the amount of pension benefits received, including health insurance. Therefore, increasing the retirement age is necessary to increase the working years of the elderly so that the elderly have the opportunity to accumulate more income for their retirement, and increase the pension benefits they will receive. Increasing the retirement age can be done to encourage people to work longer so that the negative impact of the high dependency ratio can be minimized (Fitriyani et al, 2025).

Determinants of health insurance ownership for the elderly in this study are gender, education of the head of the family, residential area, wealth level, marital status, number of children, and occupation of the head of the family. This result of the study is consistent with Styawan (2019). Styawan (2019) revealed that the achievement of Universal Health Coverage (UHC) for the elderly is relatively better, even though it has not been able to reach the entire elderly population in Indonesia. Determinants of health insurance ownership for the elderly population in Indonesia are residential area, gender, marital status, education, health complaint, and economic status.

This study provides a contribution regarding the relationship between the family protection function and health insurance ownership. There are several limitations in this study. First, the study uses secondary data from the 2019 Program Performance Accountability Survey (SKAP). Although this data is national in scale and representative, health regulations towards universal health coverage may have changed, and the latest insurance ownership is not included in the 2019 data. Second, this research only identifies relationships or associations between variables but cannot be used to test causal relationships (cause and effect). Third, the quantitative analysis in this study is still limited to univariate and bivariate descriptive analysis through cross-tabulation with the chi-square test ($P<0.001$), and multivariate analysis is not applied. Lastly, the variable of health insurance ownership in this analysis was categorized dichotomously ("yes" or "no"). This study did not specifically classify the type of insurance owned, namely BPJS PBI, BPJS Non-PBI, Jamkesda, or private insurance.

CONCLUSION

Based on the results of the 2020 Population Census, Indonesia has experienced a demographic transition to an elderly population structure with more than 7 percent of the population aged over 60 years. Increased life expectancy must be balanced with the expansion of health insurance. The results of the cross-tabulation test prove a significant relationship between the implementation of family protection functions for the elderly and health insurance ownership. The results for families that have implemented protection functions and have health insurance mean they have fully implemented the protection function for their families, especially health protection (95.5 percent). These families have also implemented Law Number 52 of 2009, which provides protection to maintain family integrity, resilience, and welfare; and Law No. 40 of 2004, which states that every family member has the right to receive health insurance benefits (Republic of Indonesia, 2009b; Republic of Indonesia, 2004). The determining factors for health insurance ownership for the elderly are gender, education of the head of the family, area of residence, wealth level, marital status, number of children, and occupation of the head of the family. The probability of health insurance ownership in the elderly is young elderly (60-69

years), male, residing in urban areas, married, having 0-2 children, and still actively working. There is a gap between elderly women and men, where women's life expectancy is longer than men's, but health insurance ownership is low. The findings of this study have several policy implications. First, Elderly Family Development activities need to be accompanied by long-term financial literacy. Productive individuals should be encouraged to prioritize health insurance ownership for the elderly. Second, the expansion of BPJS PBI membership that is targeted, especially to vulnerable elderly women who do not have an independent income. Third, the program synergy to increase the coverage of active health insurance participation, especially for vulnerable elderly.

Artificial Intelligence (AI) Use Disclosure

The authors used Grammarly to assist in grammar editing and language refinement. All ideas, analyses, interpretations, and conclusions are the sole responsibility of the authors. No AI tools were used to generate data, conduct data analysis, or replace the authors' critical thinking.

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