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Research Paper

Linkage Between Hospital Accessibility and Health Insurance Ownership in East Kalimantan Province

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Abstract: Healthcare accessibility remains a persistent challenge in Indonesia, particularly in resource-limited regions where geographical barriers, transportation constraints, and financial limitations create significant disparities in health service utilization. Hospital accessibility encompasses multiple dimensions that collectively influence healthcare utilization patterns. The physical presence of healthcare facilities, commonly referred to as hospital existence, serves as the fundamental prerequisite for healthcare access. This study seeks to analyze how dimensions of hospital accessibility correlate with health insurance ownership in East Kalimantan. This research used secondary data from the 2023 Indonesian Health Survey. This research was quantitative approach with cross sectional design. The population in this research refers to the population of 2023 Indonesian Health Survey, with total population 1,082,958. Due to the inclusion and exclusion criteria, the sample was 10,717 respondents. Chi square analysis was used to determine the relationship between the independent variable and dependent variable. The result shows that the independent variables that are significantly related to the health insurance ownership with p-value < 0.005, namely marital status, age group, education level and occupation. Meanwhile, sex (p-value= 0.185), residence (p-value= 0.093) and hospital accessibility (p-value= 0.134) showed no significant associations with health insurance ownership with p-value > 0.005. The lack of association between hospital accessibility and insurance ownership indicates that physical proximity to healthcare facilities is not a primary determinant of insurance enrolment decisions.

Keywords: Hospital Accessibility; Health Insurance; Ownership

Introduction

Health is a fundamental human right and a critical component of sustainable development. The United Nations' Sustainable Development Goals (SDGs), particularly SDG 3: "Ensure healthy lives and promote well-being for all at all ages," emphasizes the importance of achieving universal health coverage (UHC) as a key target. Specifically, SDG target 3.8 aims to "achieve universal health coverage, including financial risk protection,

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access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all." This target underscores two fundamental dimensions of healthcare access: the availability and accessibility of health services and financial protection through health insurance coverage. The distribution of hospitals affects the distribution of services, especially polyclinics. This can indirectly affect the level of public health.

Healthcare accessibility remains a persistent challenge in Indonesia, particularly in resource-limited regions where geographical barriers, transportation constraints, and financial limitations create significant disparities in health service utilization. As a developing country, Indonesia always strives to improve the welfare of its people. The Indonesian government's top priority in its development plan is in the field of health. The government continues to develop the health sector in order to improve the highest possible level of public health so that the Indonesian people become a healthy, high-quality and productive society. The Indonesian government's implementation of the Social Security Administrative Body for Health (BPJS Kesehatan) program represents a substantial effort to achieve universal health coverage, yet substantial gaps in healthcare accessibility and insurance coverage persist across different provinces and demographic groups.

High disparities between regions are often caused by centralized economic activities and development in one particular region. Economic constraints are the cause of difficulty in accessing health services, resulting in low utilisation of health services and consequently low levels of public health. Recent research found that there is a disparity between urban and rural areas in the hospital utilization as outpatient and outpatient-inpatient at the same time in Indonesia. An adults living in urban were likely to use hospital outpatient facilities 1,246 times higher than adults living in rural areas (Laksono et al., 2019). This also in line with research in 2018 showed that someone living in an urban region has 1,208 times higher odds than someone who lives in a rural area using outpatient and inpatient hospital services simultaneously (Wulandari et al., 2022).

Recent research has increasingly focused on travel time as a more accurate predictor of healthcare utilization than traditional distance measure. Studies indicate that individuals with travel time of ≤1 hour to hospitals are 2,510 times more likely to utilize hospital services compared to those with longer travel times (Laksono, Megatsari, et al., 2023). This finding has profound implications for healthcare planning in geographically challenging regions, suggesting that infrastructure development focused on reducing travel time may yield greater returns on health outcomes than simply increasing the number of facilities.

The temporal dimension of healthcare access extends beyond mere travel time to encompass the practical challenges of reaching healthcare facilities within clinically appropriate timeframes. A recent study documented significant variations in hospital utilization based on temporal accessibility, with eastern Indonesian regions experiencing particular challenges that compound existing geographic barriers (Laksono, Wulandari, et al., 2023).

The role of transportation infrastructure in healthcare accessibility has gained increased attention in recent literature, particularly in archipelagic regions where conventional transportation networks prove inadequate. A study demonstrated that transportation infrastructure and vehicle availability constitute critical determinants of healthcare accessibility, with the availability of appropriate transportation means directly influencing individuals' ability to reach healthcare facilities (Ipa et al., 2023). Current research has moved beyond binary assessments of transportation availability to examine the quality, reliability, and affordability of transportation options. This nuanced approach recognizes that nominal availability of transportation services may not translate to practical accessibility if services are unreliable, prohibitively expensive, or culturally inappropriate for certain demographic groups.

Financial accessibility remains a central concern in healthcare access research, with recent studies revealing complex interactions between direct medical costs, transportation expenses, and opportunity costs of healthcare seeking. Recent research highlighted that high transport costs pose substantial challenges for households with limited financial resources, particularly when accessing urban-based healthcare facilities from remote areas. This research underscores the multifaceted nature of financial barriers that extend beyond direct medical expenses to encompass the broader economic burden of healthcare seeking (Asante et al., 2023).

The relationship between health insurance ownership and healthcare accessibility has become a critical area of research, particularly in countries implementing universal health coverage initiatives. Indonesia's National Health Insurance (JKN) program represents one of the world's largest health insurance schemes, aiming to improve equity in health service access by reducing out-of-pocket expenses and encouraging hospital utilization (Putri & Noer, 2019).

Recent research has demonstrated that social health insurance ownership can increase equity in access to health services, particularly for vulnerable populations, with studies showing pro-poor effects of insurance coverage (Hartono, 2017). However, the relationship between insurance ownership and actual healthcare utilization remains complex, influenced by factors including provider network adequacy, benefit package design, and complementary policies addressing non-financial barriers to access. Recent study revealed that disparities in both hospital accessibility and insurance coverage persist, influenced by socioeconomic status, education, and geographic factors. This finding suggests that insurance coverage alone may be insufficient to address accessibility challenges in the absence of complementary interventions addressing geographic and infrastructural barriers (Mahmudiono & Laksono, 2021). Furthermore, a research about equity of inpatient utilization in health services showed that pro-rich inequity caused by inequalities in age, income, education, regional residence and JKN ownership (Ariani & Pujiyanto, 2019).

East Kalimantan Province presents a particularly compelling case study for healthcare accessibility research, representing many of the challenges faced by resource-rich yet

geographically challenging regions in developing countries. The province's substantial natural resource wealth coexists with significant geographic barriers to healthcare access, creating unique dynamics that influence both healthcare infrastructure development and insurance utilization patterns. The province's diverse demographic composition, ranging from urban centers to remote indigenous communities, provides opportunities to examine how different population groups navigate healthcare access barriers. Understanding these dynamics is crucial for informing targeted interventions that can improve health equity while optimizing resource allocation in challenging geographic contexts.

The integration of data from the Indonesian Health Survey 2023, which represents the most comprehensive health data collection effort in Indonesia's history, provides an unprecedented opportunity to examine these relationships with high-quality, regionally representative data. This survey's comprehensive coverage of health status, environmental health, health behaviours, and health service access creates possibilities for nuanced analysis of the factors influencing healthcare accessibility and insurance utilization (Kementerian Kesehatan, 2024)

Understanding the relationship between hospital accessibility —encompassing hospital presence, transportation means, travel time, and associated costs—and health insurance ownership in East Kalimantan province is crucial for informing evidence-based policy interventions. This linkage may reveal how physical and financial access barriers interact, shaping individuals' ability to obtain health services and potentially creating feedback loops that reinforce or mitigate existing health inequities.

Thus, this study seeks to analyze how dimensions of hospital accessibility correlate with health insurance ownership in East Kalimantan, contributing to the broader goal of enhancing equitable health service utilization in Indonesia.

Method

This research used secondary data from the 2023 Indonesian Health Survey from the Health Development Policy Agency, Ministry of Health of the Republic of Indonesia. This research was quantitative approach with cross sectional design. We chose this design to analysed the linkage hospital accessibility and health insurance ownership in East Kalimantan Province.

The population in this research refers to the population of 2023 Indonesian Health Survey, with total population 1,082,958. Sample was the availability data from 2023 Indonesian Health Survey. The inclusion criteria were citizen in East Kalimantan province registered in 2023 Indonesian Health Survey. The exclusion criteria were missing data found. They were also some exclusions in healthcare ownership in category other than JKN and Non-JKN, in type of transportation in category other than land transportation and water transportation. Afterall, the sample was 10,717 respondents.

The dependent variable of this study is health insurance ownership (code: B4K11) taken from household instruments. Health insurance ownership refers to an individual's

possession of valid health insurance coverage which was divided into 2 categories, non-JKN and JKN. The independent variables were hospital accessibility taken from household instruments such as hospital existence (code: B5R1DK2), type of transportation (code: B5R1DK3), travel time (code: B5R1DK4), costs of transportation (code: B5R1DK5). Hospital accessibility refers to the ease with which the community can reach and utilize hospital service which divided into 2 categories, not accessible and accessible. The measurement criteria were hospital existence, costs of transportation, travel time, and type of transportation. Hospital existence refers to the presence and availability of hospital facility as part of healthcare service infrastructure which was divided into 2 categories, within the city and in the nearest district/city. Costs of transportation encompass all financial expenditures related to traveling to and from hospital which was divided into 2 categories, affordable and unaffordable. Travel time refers to duration of time required to reach hospital which was divided into 2 categories, far and nearby. Type of transportation is mode of transportation used by the community to access hospital which was divided into 2 categories water transportation and land transportation.

The data is presented in frequency and percentage based on hospital accessibility. Chi square analysis was used to determine the relationship between the independent variable and dependent variable. P-value <0.05 was considered statistically significant. All analyses were conducted using SPSS 26.0 (IBM Corporation, NY, USA). This research has obtained ethical approval from the Research Ethic Committee Dian Nuswantoro University No 003369/Universitas Dian Nuswantoro/2025.

Results

The analysis begins by describing the demographic and socioeconomic characteristics of the respondents, which provide a general overview of the study population. As shown in Table 1, these characteristics include variables such as sex, residence, marital status, age group, education level, and factors related to hospital accessibility and health insurance ownership.

Table 1. Characteristics of Respondents

Characteristics	Total (n)	Percentage (%)
Sex		
Men	4,860	45.3
Women	5,857	54.7
Residence		
Rural	3,659	34.1
Urban	7,058	65.9
Marital Status		
Not Married	2,956	27.6
Married	7,061	65.9
Widowed/Divorced	700	6.5
Age Group		
Children	575	5.4
Teenager	2,342	21.9
Adult	4,347	40.6
Elderly	3,453	32.2

Characteristics	Total (n)	Percentage (%)
Education Level		
Primary Education	3,939	36.8
Secondary Education	5,464	51.0
Higher Education	1,314	12.3
Existence of Hospital		
Within The City	9,164	85.5
In The Nearest District/City	1,553	14.5
Costs of Transportation		
Affordable	9,054	84.5
Unaffordable	1,663	15.5
Travel Time		
Far	5,888	54.9
Nearby	4,829	45.1
Type of Transportation		
Water Transportation	520	4.9
Land Transportation	10,197	95.1
Health Insurance Ownership		
Non-JKN	411	3.8
JKN	10,306	96.2
Hospital Accessibility		
Not Accessible	6,503	60.7
Accessible	4,214	39.3

Table 1 shows that women were 5,857 respondents (54.7%) and men were 4,860 respondents (45.3%). In variable residence, individuals who lived in urban were 7,058 respondents (65.9%) and individuals who lived in rural were 3,659 respondents (34,1%). In variable marital status, the most was married with 7,061 respondents (65.9%) and the least was widowed/divorced with 700 respondents (6.5%). In variable age group, the most was adult with 4,347 respondents (40.6%) and the least was children with 575 respondents (5.4%). In variable education level, the most was secondary education with 5,464 respondents (51.0%) and the least was higher education with 1,314 respondents (12.3%). In variable occupation, the most was unemployed with 5,413 respondents (50.5%) and the least was formal with 2,206 respondents (20.6%). The existence of hospital within the city were 9,164 respondents (85.5%) and the existence of hospital is in the nearest district/city were 1,553 respondents (14.5%). In variable cost of transportation, affordable were 9,054 respondents (84.5%) and unaffordable were 1,663 respondents (15.5%). In variable travel time, far category were 5,888 respondents (54.9%) and nearby category were 4,829 respondents (45.1%). In variable type of transportation, water transportation were 520 respondents (4.9%) and land transportation were 10,197 respondents (95.1%). In variable health insurance ownership, non-JKN were 411 respondents (3.8%) and JKN were 10,306 respondents (96.2%). In variable hospital accessibility, not accessible were 6,503 respondents (60.7%) and accessible were 4,214 respondents (39.3%).

Due to data is not normally distributed, then cut off points will use median (3.000) and the hospital accessibility variable divided into 2 categories, not accessible (< 3.000) and accessible (≥3.000).

To explore the relationship between sociodemographic characteristics and health insurance ownership, a bivariate analysis was conducted. As shown in Table 2, the

crosstabulation presents the distribution of independent variables in relation to JKN and non-JKN ownership status.

Table 2. Crosstabulation of Independent Variables and Health Insurance Ownership

Variables	Health Insurance Ownership				P Value	OR	CI 95%	
	Non JKN		JKN					
	n	%	n	%			Lower	Upper
Sex								
Men	200	4.1	4,660	95.9	0.185	1.148	0.943	1.399
Women	211	3.6	5,646	96.4				
Residence								
Rural	287	4.1	6,771	95.9	0.093	1.208	0.975	1.497
Urban	124	3.4	3,535	96.6				
Marital Status								
Not Married	97	3.3	2,859	96.7	0.004	1		
Married	299	4.2	6,762	95.8		0.767	0.608	0.969
Widowed/Divorced	15	2.1	685	97.9		1.549	0.894	2.686
Age Group								
Children	21	3.7	554	96.3		1		
Teenager	77	3.3	2,265	96.7	0.000	1.115	0.682	1.823
Adult	234	5.4	4,113	94.6		0.666	0.423	1.050
Elderly	79	2.3	3,374	97.7		1.619	0.992	2.641
Education Level								
Primary Education	105	2.7	3,834	97.3		1		
Sec. Education	228	4.2	5,236	95.8	0.000	0.629	0.497	0.795
Higher Education	78	5.9	1,236	94.1		0.434	0.322	0.586
Occupation								
Unemployed	184	3.4	5,229	96.6	0.000	1		
Non-Formal	54	1.7	3,044	98.3		1.984	1.460	2.695
Formal	173	7.8	2,033	92.2		0.414	0.334	0.512
HospitalAccessibility								
Not Accessible	79	3.3	2,318	96.7	0.134	0.817	0.670	0.997
Accessible	332	4.0	7,988	96.0				

Table 2 shows that the independent variables that are significantly related to the health insurance ownership with p-value < 0.005, namely marital status, age group, education level and occupation. Meanwhile, sex (p-value= 0.185), residence (p-value= 0.093) and hospital accessibility (p-value= 0.134) showed no significant associations with health insurance ownership with p-value > 0.005. The population shows very high JKN coverage rates (92.2%-98.3% across all groups), reflecting East Kalimantan province's success in expanding Universal Health Coverage (UHC). This analysis demonstrates that East Kalimantan province has achieved high health insurance coverage overall, but specific socioeconomic and demographic subgroups still require targeted interventions to achieve true universal coverage.

Discussion

Accessibility to health services in Indonesia remains an issue. This issue is a consequence of Indonesia's geographical condition as an archipelago and its topographical conditions, which can be extremely diverse between regions. Inequality exists not only in the availability of healthcare facilities, equipment and technology, but also in the

availability of health workers in each region. The shared priority of achieving universal access reflects the belief that access to healthcare requires the more active participation of community members (Laksono et al., 2016).

The results of the study indicate that health insurance ownership is significantly influenced by marital status, age group, education level and occupation. These findings are consistent with other studies in Indonesia showing that socioeconomic status strongly predicts health insurance ownership (Laksono et al., 2022). Formal employment facilitates easier access to JKN as employers often manage or subsidize premiums, while informal sector workers face barriers (Wulandari et al., 2023). Education increases health literacy and awareness, influencing insurance participation (Astuti et al., 2024). This finding is in line with the theory put forward by Notoatmodjo, who stated that formal education increases individual's understanding of the importance of health services. With a higher level of education, a person is better able to understand the benefits of health facilities (Notoatmodjo, 2018).

Married individuals have a 23.3% lower risk (OR=0.767) of having National Health Insurance (JKN) ownership compared to unmarried individuals. Divorced individuals have a 54.9% higher risk (OR=1.549) of having National Health Insurance (JKN) ownership compared to unmarried individuals. In age group, the elderly and adults showed opposite trends: the Elderly tended to be at higher risk (OR=1.619) while adults were at lower risk (OR=0.666) of having National Health Insurance (JKN) ownership compared to children, but both were borderline significant. On education level, secondary education have a 37.1% lower risk (OR=0.629) of having National Health Insurance (JKN) ownership compared to primary education. Higher education have a 56.6% lower risk (OR=0.434) of having National Health Insurance (JKN) ownership compared to primary education. On occupation, non-formal job have a 98.4% higher risk (OR=1.984) of having National Health Insurance (JKN) ownership compared to unemployed. Formal job have a 58.6% lower risk (OR=0.414) of having National Health Insurance (JKN) ownership compared to unemployed.

These findings are aligning with findings that socioeconomic and demographic variables predict health insurance coverage (Pratiwi et al., 2021). Increased education and formal employment correlate with higher health insurance ownership, which echoes studies emphasizing education and stable employment as enablers for enrolment and sustained participation in health insurance programs (Yusuf et al., 2025). This suggests education and employment facilitate awareness, affordability, and trust in national insurance schemes. This also consistent with broad evidence linking socioeconomic status to insurance participation and healthcare access (Widiarti, 2022). Recent study shows that JKN programme has increased the probability of individuals seeking outpatient and inpatient care. This impact is stronger amongst the contributory group, which likely comes from the wealthier and more educated population (Erlangga et al., 2019). Another research in 2023 also showed that having health insurance can increase outpatient utilization by 14.6% higher than individuals who do not have health insurance (Wanti, 2024). This suggests

targeted strategies are needed to improve education, outreach, and affordability for informal sector and lower-education populations.

First limitation of our study is that the data represents a single point in time (2023), which may not reflect long-term trends or seasonal variations in healthcare access and insurance enrolment patterns.

Second limitation of our study is unmeasured confounders. Important variables that may influence both hospital accessibility and insurance ownership were not included in the analysis, such as: household income and economic status, previous healthcare experience, health status and chronic conditions, social networks and community influence, knowledge and awareness of insurance benefits.

Conclusion

Based on the analysis of factors associated with health insurance ownership (JKN vs Non-JKN), several sociodemographic variables showed statistically significant relationships. Marital status demonstrated a significant association (p=0.004), with married individuals having 23.3% lower odds of non-JKN ownership compared to unmarried individuals (OR=0.767, 95% CI: 0.608-0.969). Age group also showed a significant overall relationship (p<0.001), though individual comparisons with children as reference were not statistically significant. Education level revealed a significant association (p<0.001), where secondary education (OR=0.629) and higher education (OR=0.434) groups had significantly lower odds of non-JKN ownership compared to primary education, suggesting better JKN coverage among more educated populations. Occupation status was highly significant (p<0.001), with formal workers showing 58.6% lower odds of non-JKN ownership (OR=0.414), indicating stronger JKN participation in the formal sector. However, sex (p=0.185), residence (p=0.093), and hospital accessibility (p=0.134) did not show statistically significant associations with health insurance type, suggesting that JKN coverage is relatively equitable across these demographic characteristics.

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References

Ariani, D. S., & Pujiyanto, P. (2019). Ekuitas Layanan Rawat Inap Rumah Sakit di Indonesia. *Jurnal Ekonomi Kesehatan Indonesia*, *4*(1), 21–31. https://doi.org/10.7454/eki.v4i1.2371

Asante, A., Cheng, Q., Susilo, D., Satrya, A., Haemmerli, M., Fattah, R. A., Kosen, S., Novitasari, D., Puteri, G. C., Adawiyah, E., Hayen, A., Mills, A., Tangcharoensathien, V., Jan, S., Thabrany, H., & Wiseman, V. (2023). The benefits and Burden of Health Financing in Indonesia : Analyses of Nationally Representative Cross-Sectional Data. *The Lancet Global Health*, *11*(5), e770–e780. https://doi.org/10.1016/S2214-109X(23)00064-5

Astuti, D., Kongsin, S., & Hearnden, S. R. (2024). Utilization of Primary Health Care Under National Health Insurance in Samarinda Municipality , East Kalimantan Province , Indonesia. *Journal of Multidisciplinary Healthcare*, *17*, 1025–1039. https://doi.org/https://doi.org/10.2147/JMDH.S447332

Erlangga, D., Ali, S., & Bloor, K. (2019). The Impact of Public Health Insurance on Healthcare Utilisation in Indonesia : Evidence From Panel Data. *International Journal of Public Health*, *64*(4), 603–613. https://doi.org/10.1007/s00038-019-01215-2

Hartono, R. K. (2017). Tingkat Ekuitas Kepemilikan Jaminan Asuransi Kesehatan di Indonesia. *Kesmas: National Public Health Journal*, *12*(2), 93–100. https://doi.org/10.21109/kesmas.v0i0.1408

Ipa, M., Laksono, A. D., & Wulandari, R. D. (2023). The Role of Travel Time on Hospital Utilization in the Islands Area : A Cross - Sectional Study in the Maluku Region , Indonesia , in 2018. *Indian Journal of Community Medicine*, *48*, 269–273. https://doi.org/10.4103/ijcm.ijcm

Kementerian Kesehatan. (2024). *Survey Kesehatan Indonesia Tahun 2023*.

Laksono, A. D., Megatsari, H., Senewe, F. P., Latifah, L., & Ashar, H. (2023). Policy To Expand Hospital Utilization in Disadvantaged Areas in Indonesia : Who Should Be The Target ? *BMC Public Health*, *23*(12), 1–9. https://doi.org/10.1186/s12889-022-14656-x

Laksono, A. D., Mubasyiroh, R., Laksmiarti, T., Nurhotimah, E., Suharmiati, & Sukoco, N. E. (2016). Aksesibilitas Pelayanan Kesehatan di Indonesia. In *PT Kanisius* (Issue January). PT. Kanisius.

Laksono, A. D., Nugraheni, W. P., Rohmah, N., & Wulandari, R. D. (2022). Health Insurance Ownership Among Female Workers in Indonesia : Does Socioeconomic Status Matter ? *BMC Public Health*, *22*, 1–10. https://doi.org/10.1186/s12889-022-14189-3

Laksono, A. D., Wulandari, R. D., Rohmah, N., Rukmini, R., & Tumaji, T. (2023). Regional disparities in hospital utilisation in Indonesia : a cross- - sectional analysis data from the 2018 Indonesian Basic Health Survey. *BMJ Open*, *13*, 1–9. https://doi.org/10.1136/bmjopen-2022-064532

Laksono, A. D., Wulandari, R. D., & Soedirham, O. (2019). Urban and rural disparities in hospital utilization among Indonesian adults. *Iranian Journal of Public Health*, *48*(2), 247–255. https://doi.org/10.18502/ijph.v48i2.819

Mahmudiono, T., & Laksono, A. D. (2021). Disparity in the Hospitals Utilization among Regions in Indonesia. *Macedonian Journal of Medical Sciences*, *9*, 1461–1466. https://doi.org/https://doi.org/10.3889/oamjms.2021.7304

Notoatmodjo, S. (2018). *Metodologi Penelitian Kesehatan*. PT. Rineka Cipta.

Pratiwi, A. B., Setiyaningsih, H., Kok, M. O., Hoekstra, T., Mukti, A. G., & Pisani, E. (2021). Is Indonesia achieving universal health coverage ? Secondary analysis of national data on insurance coverage , health spending and service availability. *BMJ Open*, *11*, 1–11. https://doi.org/10.1136/bmjopen-2021-050565

Putri, F. D., & Noer, K. U. (2019). Accessibility of National Health Guarantee-Health Indonesia Cards (JKN-KIS) for Family Scenaries in Headquarters in TPA Cipayung - Depok. *Proceeding International Conference on Social Sciences*, *101*, 5–6.

Wanti, D. I. (2024). Pengaruh Kepemilikan Asuransi Kesehatan Pada Kelompok Miskin Terhadap Utilisasi Pelayanan Kesehatan Di Indonesia: Sebuah Studi Retrospektif. *Jurnal Ekonomi Kesehatan Indonesia*, *8*(2), 123. https://doi.org/10.7454/eki.v8i2.7273

Widiarti, I. P. (2022). Factors Associated with Independent National Health Insurance Ownership among Reproductive Aged Women in Indonesia Factors Associated with Independent National Health Insurance Ownership among Reproductive Aged Women in Indonesia. *Makara Journal of Health Research*, *26*(1), 1–7. https://doi.org/10.7454/msk.v26i1.1309

Wulandari, R. D., Laksono, A. D., Mubasyiroh, R., Rachmalina, R., Ipa, M., & Rohmah, N. (2023). Hospital utilization among urban poor in Indonesia in 2018 : is government - run insurance effective ? *BMC Public Health*, *23*(92), 1–8. https://doi.org/10.1186/s12889-023-15017-y

Wulandari, R. D., Laksono, A. D., Nantabah, Z. K., & Rohmah, N. (2022). Hospital Utilization In Indonesia In 2018 : Do Urban – Rural Disparities Exist ? *BMC Health Services Research*, 22(1), 1–11. https://doi.org/10.1186/s12913-022-07896-5

Yusuf, B. R., Yakup, A. P., Novriansyah, M. A., Ibrahim, I. A., & Gorontalo, U. (2025). Factors Influencing Health Insurance Participation Among Bentor Drivers in Gorontalo Regency. *International Journal of Education, Social Studies, And Management (IJESSM)*, 5(2), 587–598. https://doi.org/https://doi.org/10.52121/ijessm.v5i2.726