Original Research

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

PERCEPTIONS AND THEIR CORRELATION WITH ENROLLMENT IN THE INDONESIAN NATIONAL HEALTH INSURANCE SCHEME

Persepsi dan Hubungannya dengan Partisipasi dalam Skema Jaminan Kesehatan Nasional Indonesia

***Asmaripa Ainy[1], Haerawati Idris[1], Hartati Inaku[2], Tannia Tembo[3]**
[1]Faculty of Public Health, Sriwijaya University, Indralaya, Indonesia
[2]College of Health Sciences Bakti Nusantara, Gorontalo, Indonesia
[3]Centre for Infectious Disease Research in Zambia (CIDRZ), Lusaka, Zambia
Correspondence*:
Address: Kampus FKM UNSRI,Jl. Raya Palembang-Prabumulih Km.32., Indralaya, Indonesia | e-mail: asmaripa_ainy@fkm.unsri.ac.id

Abstract

Background: Health insurance serves as a key mechanism in facilitating wider and more equitable availability of healthcare services, ensuring that every individual can access the services they need.
Aims: This research aims to examine the correlation between community perceptions and enrollment in the National Health Insurance (JKN) in the Musi Rawas Utara District, Indonesia.
Methods: This research applied a cross-sectional study by collecting data from 384 respondents. Logistic regression analysis was used to assess the correlation between perceptions and JKN enrollment.
Results: The results showed that 68.49% of respondents were not enrolled in the JKN. Factors associated with JKN enrollment include perceptions regarding JKN, income, and the history of illness. People with favorable perceptions have a 1.90 times higher chance to join the JKN membership. People with income ≥ provincial minimum wage (UMR) have an opportunity of 0.50 times higher than people with income < UMR to join the JKN membership. The history of illness is likely to enhance JKN enrollment by 7.86 times.
Conclusion: In the Musi Rawas Utara District, the rate of enrollment in the JKN program remains low. Strategic policy reforms, accompanied by targeted advocacy and health education promotion, have the potential to significantly increase JKN enrollment and contribute to the realization and sustainability of universal health coverage (UHC) goals.

Keywords: Perception, Enrollment, National Health Insurance

Abstrak

Latar Belakang: *Asuransi kesehatan berfungsi sebagai mekanisme kunci dalam memfasilitasi ketersediaan layanan kesehatan yang lebih luas dan merata, memastikan bahwa setiap orang dapat mengakses layanan yang mereka butuhkan.*
Tujuan: *Penelitian ini bertujuan untuk mengetahui hubungan antara persepsi dan keikutsertaan masyarakat dalam Jaminan Kesehatan Nasional (JKN) di Kabupaten Musi Rawas Utara, Indonesia.*
Metode: *Penelitian ini merupakan penelitian potong lintang dengan mengumpulkan data dari 384 responden. Analisis regresi logistik digunakan untuk menguji korelasi antara persepsi dan partisipasi dalam JKN.*
Hasil: *Hasil analisis menunjukkan bahwa 68,49% responden tidak terdaftar dalam JKN. Faktor-faktor yang terkait dengan partisipasi JKN termasuk persepsi tentang JKN, pendapatan dan riwayat kesehatan. Masyarakat dengan persepsi yang baik memiliki peluang 1,90 kali lebih tinggi untuk menjadi anggota JKN. Masyarakat dengan pendapatan ≥ Upah Minimum Regional (UMR) memiliki peluang 0,50 kali lebih tinggi untuk menjadi peserta JKN dibandingkan dengan masyarakat dengan pendapatan < UMR. Riwayat penyakit memiliki kemungkinan untuk meningkatkan keikutsertaan JKN sebesar 7,86 kali.*
Kesimpulan: *Di Kabupaten Musi Rawas Utara, tingkat partisipasi dalam program JKN masih rendah. Reformasi kebijakan yang strategis, disertai dengan advokasi dan promosi pendidikan kesehatan yang tepat sasaran, memiliki potensi untuk meningkatkan kepesertaan JKN secara signifikan dan berkontribusi pada realisasi dan keberlanjutan tujuan cakupan kesehatan semesta (*universal health coverage*/UHC).*

Kata kunci*: Persepsi, Pendaftaran, Asuransi Kesehatan Nasional*

Indonesian Journal of Health Administration (*Jurnal Administrasi Kesehatan Indonesia*)
p-ISSN 2303-3592, e-ISSN 2540-9301, Volume 12 No.2 2024, DOI: 10.20473/jaki.v12i2.2024.218-227
Received: 2024-06-08, Revised: 2024-10-20, Accepted: 2024-11-26, Published: 2024-12-09.
Published by Universitas Airlangga in collaboration with *Perhimpunan Sarjana dan Profesional Kesehatan Masyarakat Indonesia (Persakmi)*.

How to cite:
Ainy, A., Idris, H., Inaku, H. dan Tembo, T. (2024). "Perceptions and Their Correlation with Enrollment in the Indonesian National Health Insurance Scheme." *Indonesian Journal of Health Administration*, 12(2), pp.218-227. doi: 10.20473/jaki.v12i2.2024.218-227.

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

Introduction

Universal Health Coverage (UHC) is a vital and effective policy in health systems globally (Koohpayehzadeh *et al.,* 2021). Health financing reforms driven by the SDGs are policies that guide the achievement of UHC (Odoch, Senkubuge, and Hongoro, 2021). Addressing barriers to healthcare access is crucial for attaining the SDGs, which will subsequently enhance healthcare accessibility and improve life expectancy (Hao *et al*., 2020). To make strides towards UHC, it is imperative to efficiently mobilize resources through domestic means, international collaboration, and resource sharing (Kodali, 2023). Global awareness has prompted the movement for universal health coverage. Prioritizing it involves context-specific factors: political economy, local budgets, demographics, and epidemiology, tailoring approaches to each region's needs. This shift reflects a concerted effort to address these challenges and promote comprehensive health coverage as a fundamental driver for improving global health outcomes and socioeconomic well-being.

Tailored and context-specific modifications to health financing policies must be integrated to advance Universal Health Coverage (UHC) and subsequently attain the relevant Sustainable Development Goals (SDGs) (Joarder, Chaudhury, and Mannan, 2019). Health insurance ownership as a key determinant of access to healthcare services plays a role in advancing universal health coverage (Bouzaidi and Ragbi, 2024). Expanded health insurance coverage typically appears to enhance accessibility to healthcare facilities, improve financial security and positively impact health outcomes (Erlangga *et al.,* 2019). National Health Insurance (NHI) is often perceived as a mechanism to ensure individuals have access to healthcare services. However, it is important to emphasize that NHI should not solely be about access to any healthcare services but rather services based on medical needs.

A prior review has predominantly focused on examining the correlation between enrollment in health insurance and the mortality or survival outcomes associated with specific diseases, particularly non-communicable ones (Gamalliel *et al.,* 2020). Another previous study highlighted one option for financing healthcare in low- and middle-income countries by levying taxes on goods and services to achieve universal health coverage (Boubacar, 2021). Despite the widespread adoption of health insurance schemes, there is no certainty that it will consistently deliver pro-poor outcomes (Watson, Yazbeck, and Hartel, 2021). The health financing challenges identified are manifold, demanding a multifaceted strategy. This encompasses regional cooperation initiatives and the implementation of innovative digital technologies at the national level (Lim *et al.*, 2023).

As of the end of 2022, Indonesia's South Sumatera Province has 86.75% (7,432,930 people) enrolled in the Indonesian National Health Insurance or known as the JKN program, according to data from the Social Security Agency (DJSN). Nonetheless, 13.25% of the province's population remains uninsured, indicating a gap in achieving universal health coverage. In Musi Rawas Utara District, 5.43% of the population (10,561 people) is unregistered, and 14.39% are inactive. These statistics highlight significant challenges to the program implementation. Addressing these issues is crucial for achieving universal healthcare, emphasizing the gaps that require intervention to enhance the inclusivity of the JKN program (Lim *et al.*, 2023).

Suhud (2019) found that employees at the Indonesian Audit Board had limited knowledge of JKN but maintained a generally positive attitude toward it. Meanwhile, Ainy and Pujiyanto (2023) identified that urban students were 10.73 times more likely to possess good knowledge compared to rural students. In another study, respondents identified various priorities for improving JKN services, focusing on patient expectations related to responsiveness, tangibles, and reliability (Darmawan *et al.,* 2022). Furthermore, Putri and Aini (2021)

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

concluded that satisfaction with JKN services was similar in public and private hospitals.

This research focuses on Musi Rawas Utara, offering insights specific to the region. The findings provide key evidence to help policymakers improve JKN coverage and advance UHC efforts. This research examines the correlation between community perceptions and enrollment in the JKN program in Musi Rawas Utara, Indonesia.

Method

A cross-sectional study was conducted in Musi Rawas Utara (Muratara), South Sumatera, Indonesia. In 2022, Muratara had 194,405 residents, covered 6,008.66 km², and had Rupit as its administrative center. The sample size of 384 people was calculated with a 95% confidence level and 5% margin of error. It assumed a 50% JKN prevalence to ensure maximum precision due to the lack of exact data (Nair *et al.,* 2019). Consequently, the computation unfolded as follows:

$n = Z^2 (p)(1–p)/e^2$
$n = [1.96^2 (0.5) (1–0.5)]/0.05^2$
$n = [3.8416 \times 0.5 \times 0.5]/0.0025$
$n = 384.16$
$n = 384$

Participant recruitment and data collection for this research occurred between December 1, 2022, and February 4, 2023. A structured questionnaire was created based on a literature review on health insurance perceptions. It included JKN's benefits, administrative processes, and service quality at healthcare facilities.

This research investigated community enrollment in the JKN Program in Musi Rawas Utara District, focusing on the primary variable of JKN perceptions (categorized as good or not good). Socio-demographic factors function as confounding variables, including occupation, age, gender, education, marital status, income, illness history, and family size. Respondents' occupation was divided into employed or unemployed categories. Age was determined by the respondents' last birthday, distinguishing between those aged 18-64 years and those older than 64 years. Gender was categorized as female or male. Educational attainment groups included primary school, junior high school, or senior high school. Marital status was classified as unmarried or married. Monthly income was stratified based on the Indonesian provincial minimum wage (UMR) into equal to or less than UMR, and higher than UMR. History of illness was categorized as either none or present, and family size, including the respondent, was classified as a small or large family.

The data underwent analysis through descriptive methods, involving frequencies and percentages, alongside multiple logistic regression tests. These tests were employed to examine the correlation between perceptions and enrollment in the JKN program.

Results and Discussion

Participant Characteristics

Table 1 illustrates a comprehensive overview of participant characteristics in the context of enrollment status in the Indonesian National Health Insurance (JKN). A substantial portion, approximately 68.49% (263 people), is not enrolled in the JKN. Within this non-enrolled group, 69.14% exhibit a not-good perception, while 68.32% hold a positive perception. Conversely, among the enrolled individuals, 30.86% express a not-good perception, and 31.68% maintain a favorable perception.

This research looks at factors related to participants' characteristics that correlate with their enrollment in the JKN. Employment status differentiates the groups, with 65.22% of non-enrolled individuals being unemployed, contrasting with 69.21% of enrolled individuals being employed. In terms of age, non-enrolled individuals are mostly aged 18-64 (69.06%), while enrolled individuals are more evenly distributed across age groups. Gender distinctions reveal enrollment variations among females and males. Education level, marital status, family income, history of illness, and family size also impact enrollment patterns.

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

Table 1. Participant Characteristics (n=384)

Variable	Enrollment in JKN		Total n (%)
	No n (%)	Yes n (%)	
Enrollment in JKN	263(68.49)	121(31.51)	384(100)
Perception of JKN			
Not good	56(69.14)	25(30.86)	81(100)
Good	207(68.32)	96(31.68)	303(100)
Employment status			
Unemployed	45(65.22)	24(34.78)	69(100)
Employed	218(69.21)	97(30.79)	315(100)
Age			
18-64 years	154(69.06)	69(30.94)	223(100)
>64 years	109(67.70)	52(32.30)	161(100)
Gender			
Female	56(68.29)	26(31.71)	82(100)
Male	207(68.54)	95(31.46)	302(100)
Education level			
Primary school (ref)	63(67.74)	30(32.26)	93(100)
Junior high school	128(69.19)	57(30.81)	185(100)
Senior high school	72(67.92)	34(32.08)	106(100)
Marital status			
Unmarried	40(65.57)	21(34.43)	61(100)
Married	223(69.04)	100(30.96)	323(100)
Family income			
≤UMR South Sumatera	190(67.38)	92(32.62)	282(100)
>UMR South Sumatera	73(71.57)	29(28.43)	102(100)
History of illness			
None	248(70.25)	105(29.75)	353(100)
Present	15(48.39)	16(51.61)	31(100)
Family size			
Small (≤4 people)	158(68.40)	73(31.60)	231(100)
Large (>4 people)	105(68.63)	48(31.37)	153(100)

*Values are presented as numbers (%).
UMR/PMW: Provincial Minimum Wage (In 2022; Indonesia Rupiah 3.144.446,- monthly).

Table 2 provides a detailed overview of participants' perceptions regarding the JKN program. The table outlines the distribution of responses to specific statements related to the usefulness of the JKN program, the difficulty of enrollment procedures, and the ease of obtaining health services at primary healthcare facilities and hospitals. The table highlights participants' diverse perceptions about various aspects of the JKN program, providing valuable insights into areas that require improvement or intervention. The values are presented as both numbers and percentages, categorized into non-participants and participants. Responses range from "Strongly Disagree" to "Strongly Agree". Most of the respondents, both non-participants and participants, express positive perceptions, with varying degrees of agreement. A substantial number of respondents, particularly non-participants, find the enrollment procedures challenging. The majority of respondents, both non-participants and participants, perceive the procedures for obtaining health services at primary healthcare facilities as relatively easy. Respondents, both non-participants and participants, tend to find the procedures for obtaining health services in hospitals somewhat challenging.

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

Table 2. Distribution of participants' perceptions regarding JKN (n=384)

Statement Item	Answer	Non-Participant		Participant	
		n	%	n	%
The national health insurance program is useful in obtaining health services in times of illness	Strongly disagree	1	0.4	0	0.0
	Disagree	4	1.5	4	3.3
	Neutral	33	12.5	17	14.0
	Agree	134	51.0	55	45.5
	Strongly agree	91	34.6	45	37.2
The enrollment procedures for national health insurance are difficult	Strongly disagree	10	3.8	0	0.0
	Disagree	18	6.8	14	11.6
	Neutral	19	7.2	6	5.0
	Agree	109	41.4	49	40.5
	Strongly agree	107	40.7	52	43.0
Procedures for obtaining health services for national health insurance participants at primary healthcare are easy	Strongly disagree	18	6.8	8	6.6
	Disagree	13	4.9	5	4.1
	Neutral	11	4.2	9	7.4
	Agree	121	46.0	67	55.4
	Strongly agree	100	38.0	32	26.4
Procedures for obtaining health services for national health insurance participants in hospitals are difficult	Strongly disagree	19	7.2	9	7.4
	Disagree	10	3.8	5	4.1
	Neutral	20	7.6	3	2.5
	Agree	101	38.4	49	40.5
	Strongly agree	113	43.0	55	45.5

*Values are presented as numbers (%).

Tabel 3. Correlation between community perceptions and JKN enrollment in Musi Rawas Utara District, Indonesia (n=384)

Variable	Crude Model	p-value	Adjusted Model	p-value
Perception of JKN				
Not good	1.00(reference)		1.00(reference)	
Good	2.05(0.94-4.47)	0.072	1.90(0.88-4.10)	0.104
Family income per month				
≤UMR South Sumatera	1.00(reference)		1.00(reference)	
>UMR South Sumatera	0.39(0.17-0.90)	0.028	0.50(0.26-0.96)	0.038
History of illness				
None	1.00(reference)		1.00(reference)	
Present	8.51(2.71-26.71)	0.000	7.86(2.56-24.16)	0.000

*Values are presented as odd ratio (95% confidence interval).

Table 3 outlines the correlation between community perceptions and enrollment in the JKN program in Musi Rawas Utara. The table presents both crude and adjusted models, along with corresponding p-values, providing statistical insights into the relationship between various variables and JKN enrollment.

According to the findings in Table 3, the correlation between perceptions and JKN enrollment in the Musi Rawas Utara community indicates that individuals with a favorable perception of JKN are 2.05 times more likely to enroll in the program (crude model). However, this correlation becomes less significant following the adjustment of other factors (adjusted model). The adjusted odds ratio is 1.90, with a p-value of 0.104. The interval for JKN enrollment spans from 0.88 to 4.10, showcasing the range of enrollment probabilities among individuals with favorable and unfavorable perceptions of JKN. Individuals with a family income above the provincial minimum wage (UMR) in South Sumatera

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

are significantly less likely to enroll in JKN, with the crude and adjusted odds ratios of 0.39 and 0.50, respectively. Conversely, those with a history of illness are more likely to enroll in JKN, with an odds ratio of 8.51 in the crude model and 7.86 in the adjusted model.

Discussion

The research found that only 68.49% of Musi Rawas Utara's population is insured, indicating a significant membership gap. To achieve universal health coverage, the local government must develop strategies to increase enrollment. The lack of JKN coverage indicates participation barriers. Awareness campaigns and local government initiatives are essential for increasing enrollment and improving public health.

Putri and Aini (2021) discovered that many participants face challenges with enrollment and hospital services. This highlights the need for better information. Perceptions of the health insurance participants are shaped by factors such as information access, network hospital availability (Khanna, Patil, and Kotle, 2022), administrative convenience, personal beliefs (Kagaigai *et al.,* 2021), and healthcare quality (Adeneye *et al.,* 2021). Additionally, previous studies show that the National Health Insurance (NHI) system has improved healthcare access (Akinyemi, Owopetu, and Agbejule, 2021; Gaqavu and Mash, 2019).

Older adults join health insurance to manage the risks of illness and to ensure financial protection during healthcare needs (Garg, Bebarta, and Tripathi, 2022; Huguet *et al.*, 2023). However, the quality of health service also plays a significant role in motivating their decision to participate in the national health insurance program in Ghana (Morgan *et al.*, 2023). Discussing public perceptions of health insurance, several previous studies have identified that people in Myanmar showed positive views on National Health Insurance (NHI) (Myint, Pavlova, and Groot, 2019). This contrasts with the situation in Ethiopia, where household leaders criticized the Community-Based Health Insurance (CBHI) for its lack of utility, trust, and quality (Chanie and Ewunetie, 2020). Similarly, Iranian supplementary health insurance holders rate their perceived service quality significantly lower than their expectations (Hamzeh, Hozarmoghadam, and Ghanbarzadeh, 2023). In South-East Nigeria, skepticism about the National Health Insurance Scheme (NHIS) prevails among the majority (Okiche *et al.*, 2021). Nevertheless, healthcare professionals in Nigeria view the scheme favorably, potentially encouraging enrollment (Akinyemi, Owopetu, and Agbejule, 2021). Hence, the CBHI enrollment correlates with the perceived quality of care (Fite *et al*., 2021).

The research results indicate a correlation between income and enrollment in the JKN program. The wealth possessed by an individual plays a role in their capacity to participate in the health insurance program. In the case of rural communities in Myanmar, their limited economic resources, characterized by low income, result in a lack of health insurance coverage, as they face challenges in affording and accessing healthcare services (Myint, Pavlova, and Groot, 2019). Families experiencing lower income levels face an increased likelihood of school dropout, thus impacting human resources and creating a sustained effect on the awareness and inclination to enroll in health insurance (Fite *et al.,* 2021). Findings from a previous study indicated that not renewing health insurance enrollment in Uganda is strongly associated with household wealth status (Nshakira-Rukundo, Mussa, and Cho, 2021). Individuals with lower incomes are at risk of not enrolling in health insurance, and in such instances, income demonstrates a significant correlation with JKN membership (Putri, Laksono, and Rohmah, 2023). Households classified in the wealthier and wealthiest quintiles are more than twice as likely to have health insurance compared to households in the poorest quintile (Bhusal and Sapkota, 2021). Very impoverished households demonstrate a significantly higher propensity to enroll in health insurance than their counterparts, possibly attributed to

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

their exemption from health insurance premium payments (Adjei-Mantey and Horioka, 2023).

The research findings indicate a correlation between the history of illness and enrollment in the JKN program. Rural community with a history of illness still exhibit a limited inclination to enroll in health insurance, primarily due to constraints in affording premiums. Consequently, when facing illness, rural communities in Myanmar tend to resort to out-of-pocket health financing (Myint, Pavlova, and Groot, 2019). In a study from China, the authors used a discrete choice experiment to gather preferences of individuals with chronic diseases regarding insurance coverage for emerging medical technologies in the country (Geng *et al*., 2020).

Employment, age, gender, education level, marital status, and family size show no significant correlations with JKN enrollment in the Musi Rawas Utara District, Indonesia. However, other studies indicated that socio-demographic factors influence membership in health insurance programs. Employment significantly influences participation in community-based health insurance (Cheno, Tchabo, and Tchamy, 2021). Age, gender, marital status, employment, and education predict NHI membership among economically disadvantaged groups (Putri, Laksono, and Rohmah, 2023). Laksono *et al.* (2022) found that urban poor individuals in Indonesia are more likely to join NHI than those aged 65 and older. This difference can be attributed to the varying socio-economic conditions in Musi Rawas Utara. Higher education improved CBHI enrollment (Fite *et al.*, 2021). Educated individuals understand its benefits better. Additionally, larger family size influences CBHI enrollment (Cheno, Tchabo, and Tchamy, 2021). Bigger families are more motivated by higher healthcare costs.

This research has several limitations. The cross-sectional design limits its ability to determine causal relationships. Moreover, this research focuses only on the Musi Rawas Utara District, which may not represent other regions. The sample size calculation, based on an estimated 0.5 proportion of JKN participants, introduces uncertainty. Furthermore, the healthcare access variable is excluded. Future research should address these limitations for a better understanding of JKN perceptions and enrollment.

Conclusion

This research shows that 68.49% of the participants are not enrolled in the JKN program. Both enrolled and non-enrolled individuals acknowledge the advantages of the JKN for healthcare access. However, both groups encounter challenges with the enrollment process. While access to primary healthcare is relatively smoother for participants, difficulties persist when seeking hospital care. Individuals with a positive perception of JKN are more likely to enroll. However, this correlation becomes less pronounced when factors such as family income and history of illness are accounted for.

Abbreviations

UHC: Universal Health Coverage; LMICs: Low-Income and Middle-Income Countries; SDGs: Sustainable Development Goals; JKN: Jaminan Kesehatan Nasional; DJSN: Dewan Jaminan Sosial Nasional; UMR: Upah Minimum Regional; CBHI: Community-Based Health Insurance; NHIS: National Health Insurance Scheme; RSBY: Rashtriya Swasthya Bima Yojana Scheme.

Declarations

Ethics Approval and Consent Participant

Approval for this research was obtained through the ethical review process by the Health Research Ethics Committee of the Faculty of Public Health, Universitas Sriwijaya, under the reference number 359/UN9.FKM/TU.KKE/2022. Prior to their participation, respondents furnished written informed consent, affirming that all procedures would strictly conform to the applicable rules and regulations outlined in the document.

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

Conflict of Interest
The authors have no conflicts of interest.

Availability of Data and Materials
The availability of data in this research should be requested by asking to the corresponding author.

Authors' Contribution
AA conceptualized the study; AA created the methodology; AA, HID and HIN wrote the original draft; AA, HID, HIN, TT wrote, reviewed, and edited the manuscript.

Funding Source
None.

Acknowledgment
We express our gratitude to the research participants for their cooperation in providing data.

References

Adeneye, A.K. *et al.* (2021) 'Perception of community-based health insurance scheme in Ogun State, Nigeria', *Glob J Infect Dis Clin Res,* 7(1), 001-012. https://doi.org/10.17352/2455-5363.000039

Adjei-Mantey, K. and Horioka, C.Y. (2023) 'Determinants of health insurance enrollment and health expenditure in Ghana: An empirical analysis', *Rev Econ Household,* 21, 1269–1288. https://doi.org/10.1007/s11150-022-09621-x

Ainy, A. and Pujiyanto. (2023) 'Predictors of Indonesian national health insurance knowledge: a cross-sectional study among public health students in Palembang', *Media Kesehatan Masyarakat Indonesia*, 19(3), 120-129. https://doi.org/10.30597/mkmi.v19i3.26340

Akinyemi, O.O., Owopetu, O.F. and Agbejule, I.O. (2021) 'National health insurance scheme: perception and participation of federal civil servants in Ibadan', *Annals of Ibadan postgraduate medicine*, 19(1), 49–55. PMID: 35330897; PMCID: PMC8935672

Bhusal, U.P. and Sapkota, V.P. (2021) 'Predictors of health insurance enrolment and wealth-related inequality in Nepal: Evidence from Multiple Indicator Cluster Survey (MICS) 2019', *BMJ Open*, 11(11), 1–12https://doi.org/10.1136/bmjopen-2021-050922

Boubacar, A. (2021) 'Healthcare financing in low and middle-income countries and achieving universal health coverage', *Resolusi: Jurnal Sosial Politik*, 4(2), 86–94. https://doi.org/https://doi.org/10.32699/resolusi.v4i2.2195

Bouzaidi, T. D. and Ragbi, A. (2024) 'An analysis of the trend towards universal health coverage and access to healthcare in Morocco', *Health Econ Rev*, 14(1), 1–15. https://doi.org/10.1186/s13561-023-00477-0

Chanie, M.G. and Ewunetie, G.E. (2020) 'Determinants of enrollment in community based health insurance among households in Tach-Armachiho Woreda, North Gondar, Ethiopia, 2019', *PLoS ONE*, 15(8), 1–10. https://doi.org/10.1371/journal.pone.0236027

Cheno, R.W., Tchabo, W. and Tchamy, J. (2021) 'Willingness to join and pay for community-based health insurance and associated determinants among urban households of Cameroon: Case of Douala and Yaounde', *Heliyon*, 7(3), p. e06507. https://doi.org/10.1016/j.heliyon.2021.e06507

Darmawan, D. *et al.* (2022) 'BPJS patients satisfaction analysis towards service quality of public health center in Surabaya', *Media Kesehatan Masyarakat Indonesia*, 18(4), 124–131. https://doi.org/10.30597/mkmi.v18i4.19773

Erlangga, D. *et al.* (2019) 'Correction: The impact of public health insurance on health care utilisation, financial protection and health status in low: the middle-income countries: A

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

systematic review', *PLoS ONE*, 14(11), 1–20. https://doi.org/10.1371/journal.pone.0225237

Fite, M.B. *et al.* (2021) 'Factors associated with enrollment for community-based health insurance scheme in Western Ethiopia: Case-control study', *PLoS ONE*, 16(6), 1–10. https://doi.org/10.1371/journal.pone.0252303

Gamalliel, N. *et al.* (2020) 'Effectiveness of various health insurances in tackling health problems of the 21st century: A systematic review', *Journal of Asian Medical Students' Association*, 8(4), 41–47. https://doi.org/10.52629/jamsa.v8i4.166

Gaqavu, M.M. and Mash, R. (2019) 'The perceptions of general practitioners on national health insurance in Chris Hani District, Eastern Cape, South Africa', *South African Family Practice*, 61(3), 79. https://doi.org/10.4102/safp.v61i3.4980

Garg, S., Bebarta, K.K. and Tripathi, N. (2022) 'Role of publicly funded health insurance in financial protection of the elderly from hospitalisation expenditure in India-Findings from the longitudinal aging study'. *BMC Geriatr* 22, 572. https://doi.org/10.1186/s12877-022-03266-2

Geng, J. *et al.* (2020) 'Patients' preferences for health insurance coverage of new technologies for treating chronic diseases in China: A discrete choice experiment', *BMJ open*, 10(9), p. e038051. https://doi.org/10.1136/bmjopen-2020-038051

Hamzeh, A., Hozarmoghadam, N. and Ghanbarzadeh, M. (2023) 'Investigating the level of satisfaction of policyholders with supplementary health insurance in Iran', *BMC Health Serv Res*, 23(1), 1–9. https://doi.org/10.1186/s12913-023-10134-1

Hao, L. *et al.* (2020) 'Adequate access to healthcare and added life expectancy among older adults in China', *BMC Geriatrics*, 20(1), 1–15. https://doi.org/10.1186/s12877-020-01524-9

Huguet, N. *et al.* (2023) 'Impact of health insurance patterns on chronic health conditions among older patients', *J Am Board Fam Med,* 36(5), 839-850. https://doi.org/10.3122/jabfm.2023.230106R1

Joarder, T., Chaudhury, T.Z. and Mannan, I. (2019) 'Universal health coverage in Bangladesh: Activities, challenges, and suggestions', *Advances in Public Health*, 2019. https://doi.org/10.1155/2019/4954095

Kagaigai, A. *et al.* (2021) 'Do household perceptions influence enrolment decisions into community-based health insurance schemes in Tanzania?', *BMC Health Services Research*, 21(1), 1–11. https://doi.org/10.1186/s12913-021-06167-z

Khanna, K., Patil, D.Y. and Kotle, V. (2022) 'Study of factors influencing consumer perception towards health insurance policies during COVID-19 pandemic', *SSRN Electronic Journal*, 6(6), 7309–7315. https://doi.org/10.2139/ssrn.4219860

Kodali, P.B. (2023) 'Achieving universal health coverage in low-and middle-income countries: Challenges for policy post-pandemic and beyond', *risk management and healthcare policy*, 16(April), 607–621. https://doi.org/10.2147/RMHP.S366759

Koohpayehzadeh, J. *et al.* (2021) 'Best practices in achieving universal health coverage: A scoping review, *Med J Islamic Repub Iran*, 30 Dec, 1–11. https://doi.org/10.47176/mjiri.35.191

Laksono, A.D. *et al.* (2022) 'National health insurance membership among urban poor societies in Indonesia in 2019: Are they protected?', *Economies*, 10(8), 1–9. https://doi.org/10.3390/economies10080196

Indonesian Journal of Health Administration
(Jurnal Administrasi Kesehatan Indonesia)
p-ISSN 2303-3592, e-ISSN 2540-9301
10.20473/jaki.v12i2.2024.218-227

Lim, M.Y. *et al.* (2023) 'Health financing challenges in Southeast Asian countries for universal health coverage: A systematic review', *Archives of Public Health*, 81(1), 1–12. https://doi.org/10.1186/s13690-023-01159-3

Morgan, A.K. *et al.* (2023) 'A systematic review of macro and meso determinants of national health insurance enrolment among older adults in Ghana', *Cogent Public Health*, 10(1). https://doi.org/10.1080/27707571.2023.2217546

Myint, C.Y., Pavlova, M. and Groot, W. (2019) 'Health insurance in myanmar: knowledge, perceptions, and preferences of social security scheme members and general adult population', *International Journal of Health Planning and Management*, 34(1), 346–369. https://doi.org/10.1002/hpm.2643

Nair, M. *et al.* (2019) 'Knowledge, attitudes, and practices related to antibiotic use in Paschim Bardhaman District: A survey of healthcare providers in West Bengal, India', *PLoS ONE*, 14(5), 1–14. https://doi.org/10.1371/journal.pone.0217818

Nshakira-Rukundo, E., Mussa, E.C., and Cho, M.J. (2021) 'Dropping out of voluntary community based health insurance in rural Uganda: Evidence from a cross-sectional study in rural Southwestern Uganda', *PLoS One*, 16(7), 1–13. https://doi.org/10.1371/journal.pone.0253368

Odoch, W.D., Senkubuge, F. and Hongoro, C. (2021) 'How has sustainable development goals declaration influenced health financing reforms for universal health coverage at the country level? a scoping review of literature', *Globalization and Health*, 17(1), 1–13. https://doi.org/10.1186/s12992-021-00703-6

Okiche, E.L. *et al.* (2021) 'Health care payment practice, perception and awareness of national health insurance scheme by market women in Enugu Metropolis South-East Nigeria', *Pan African Medical Journal*, 40(127). https://doi.org/10.11604/pamj.2021.40.127.26775

Putri, N.K., Laksono, A.D. and Rohmah, N. (2023) 'Predictors of national health insurance membership among the poor with different education levels in Indonesia', *BMC Public Health*, 23(1), 1–8. https://doi.org/10.1186/s12889-023-15292-9

Putri, Y.S.C. and Aini, Q. (2021) 'The satisfaction analysis of national health insurance (JKN) patient using the Hospital Consumer Assessment Healthcare Providers and Systems (HCAHPS) survey between public hospital and private hospital in D.I. Yogyakarta', *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 6(3), 605–614. https://doi.org/10.30604/jika.v6i3.819

Suhud, H. (2019) 'An audit of knowledge and attitude regarding implementation of the national health insurance (JKN) in BPK RI', *International Journal of Multicultural and Multireligious Understanding*, 6(5), p. 50. https://doi.org/10.18415/ijmmu.v6i5.1059

Watson, J., Yazbeck, A.S. and Hartel, L. (2021) 'Making health insurance pro-poor: lessons from 20 developing countries', *Health Systems and Reform*, 7(2). https://doi.org/10.1080/23288604.2021.1917092