

POVERTY LEVELS MUST BE REDUCED TO IMPROVE ACCESSIBILITY TO HEALTH SERVICES

Tingkat Kemiskinan Harus Diturunkan untuk Meningkatkan Akses Layanan Kesehatan

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Abstract

Background: Access to health services is a fundamental right for every citizen, but its equitable distribution remains challenging due to the influence of several variables. Indonesia has achieved Universal Health Coverage (UHC), but access to health services for those who have health problems are still low.

Aims: This study aims to determine the variables influencing access to health services in Indonesia.

Methods: Longitudinal analysis of panel data was used, and the dataset was taken from the 34 provinces of Indonesia from 2018 to 2022. The data obtained were then analyzed descriptively and analytically by linear regression using STATA software.

Results: Individual and family variables influencing access to health services for population with health problem included variable need (health problem), ownership of health insurance, and ability to pay. Furthermore, the results showed that the number of areas with high poverty rates (socioeconomic) was a contextual factor with a higher level of influence.

Conclusion: Based on the results, policies to improve access to health services, a basic human right, could not be solely achieved by the health sector. Therefore, integrated comprehensive planning collaboration of Penta-Helical elements was needed to reduce poverty enclaves.

Keywords: ability to pay, access to health services, health insurance, poverty

Abstrak

Latar Belakang: Akses terhadap layanan kesehatan merupakan hak setiap warga negara, namun dalam kenyataannya, akses layanan kesehatan ini belum merata dirasakan oleh masyarakat karena banyak variabel yang mempengaruhinya.

Tujuan: Penelitian bertujuan untuk mengetahui variabel yang berpengaruh terhadap akses layanan kesehatan di Indonesia.

Metode: penelitian ini menggunakan longitudinal analysis data panel. Data panel diambil dari 34 provinsi di Indonesia tahun 2018 sampai tahun 2022. Pengolahan dan analisis data menggunakan software STATA. Data dianalisis secara deskriptif dan analitik dengan regresi linier.

Hasil: Variable sisi individu dan keluarga yang berpengaruh terhadap akses layanan kesehatan penduduk dengan keluhan kesehatan adalah variable need (adanya keluhan), kepemilikan jaminan kesehatan dan ability to pay. Penelitian ini menemukan bahwa faktor kontekstual sosial ekonomi yaitu wilayah dengan angka kemiskinan tinggi atau kantong kemiskinan, mempunyai pengaruh paling besar terhadap akses layanan kesehatan.

Kesimpulan: Untuk meningkatkan akses layanan kesehatan, tidak dapat dibebankan kepada sektor kesehatan saja, namun diperlukan perencanaan komprehensif terintegrasi, kolaborasi unsur Penta-Heliks untuk menurunkan angka kemiskinan dan mengurangi kantong-kantong kemiskinan.

Kata kunci: ability to pay, akses layanan kesehatan, jaminan kesehatan, kemiskinan



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Introduction

The provision of access to health services and information is considered a fundamental human right. This has led to the inclusion of Universal Health Coverage (UHC) as the main goal of health reform in several countries, including Indonesia (WHO, 2019).

Indonesia has made a commitment to achieving UHC by 2024, recognizing that reforming the healthcare financing system plays a role in achieving this objective (Asante *et al.*, 2023). The access to health services among individuals with health problem was 43.06% in 2022, indicating that 56.94% of the community had health problems but did seek medical intervention (BPS, 2023). The report showed that there was a substantial gap between those with health problems and others accessing healthcare services. This research is crucial in developing macro policy planning that is focused not only on sectoral planning, especially in the health sector, but also on increasing access to health services in Indonesia.

The multilevel model of healthcare access provides insights into the various factors influencing the accessibility of services at various levels, including individual, household, and regional. In terms of the individual and household side, the influencing factors are travel time, public perception of health, transportation cost and distance, quality of health services, education, income, and knowledge (Maulany, Dianingati and Annisaa, 2021). At the regional level, influencing factors include demography, economics, healthcare infrastructures, remote regions, and the population density of the poor (Wenang *et al.*, 2021).

Access to health services is primarily influenced by two essential dimensions: accessibility and ability. The accessibility dimension consists of proximity/distance, acceptability, availability, affordability, and suitability. Meanwhile, the capability aspect refers to the ability to understand, seek, reach, pay, and engage. According to previous studies, both dimensions work simultaneously to provide real access (Cu *et al.*, 2021)

The availability of public transportation has been reported to have a significant influence on access to health services, particularly in low-income communities (Cui *et al.*, 2022). Several studies have shown that the demand for medical interventions was often higher in the low-income group compared to the upper-income group (Xu *et al.*, 2023). Other studies in Kenya, Malawi, Tanzania, and Rwanda showed that travel time and population density influenced access to health services (Iyer *et al.*, 2020).

Panel data was used in this study. It has been proven to be more effective in policymaking, and aggregate data analysis is often needed by policymakers for macro development planning. Panel data is suitable for studying the dynamics of change by analysing observation results from cross-sections, detecting and measuring effects better, examining more complex behavioural models, and minimising bias that may occur when aggregating individuals into broad aggregates (Mursyidin, Annas and Rais, 2023).

This study aims to determine the variables influencing access to health services from the individual and family perspectives, namely need (health problem), ownership of National Health Insurance (NHI), ability to pay, enabling factors, as well as the regional/ contextual level perspective, including poverty enclaves, number of health facilities, population density, and number of villages in the region. Panel data from 2018 to 2022 using the modified health services access theoretical framework were utilised in this study.

Methods

This study used a longitudinal analysis of panel data from 34 provinces in Indonesia from 2018 to 2022, resulting in 170 datasets with an average of 331 households per year (BPS, 2023).

Real access to community health services was measured by the percentage of the community who had health problems when performing first-level outpatient care as the dependent variable. The

independent variables included need (health problems), enabling factors (NHI ownership), contextual factors (number of primary health care), poor community, and ability to pay/ non-food expenditure, population density, and number of villages.

Result and Discussion

The access to health services in Indonesia from 2018-2022 exhibited a fluctuating trend, as shown in Figure 1.

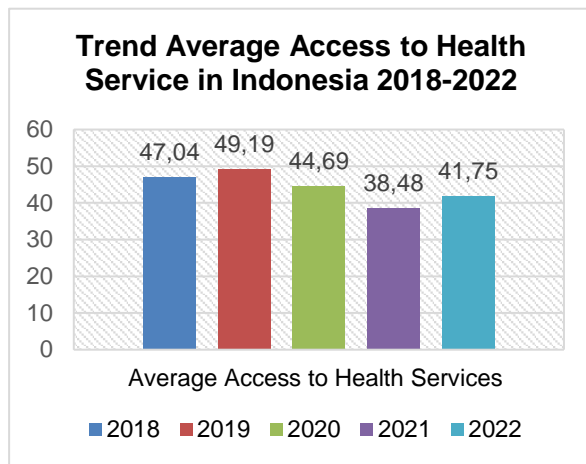


Figure 1. Trend of Average Access to Indonesia Health Services in 2018-2022 (BPS, 2023)

The highest percentage of access to health services occurred in 2019, with an average value of 49.19%, while the lowest

of 38.48% was recorded in 2021. In the period from 2018 to 2019, the trend increased, but a decline was observed from 2019 to 2021. This could be attributed to the incidence of the COVID-19 pandemic, which increased concerns regarding going to the hospital and delays in seeking treatment at health facilities (Mulia *et al.*, 2023). These conditions caused reduced access to essential facilities by communities who relied on public transportation (Sunio *et al.*, 2023). This reduction occurred across all diseases during the pandemic (Nugraheni *et al.*, 2023).

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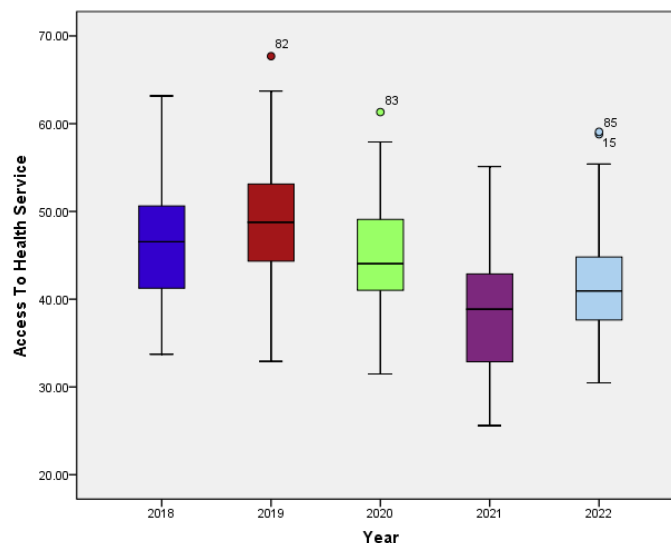


Figure 2. Average Minimum and Maximum Value of Access to Health Services in Indonesia in 2018-2022 (BPS, 2023)

Figure 2 shows the variation in data or disparity in access to health services coverage of communities who had complaints in 34 provinces during 2018-2022. These data were presented as the average minimum and maximum numbers of access to health services.

The province with the highest value of access to health services for the community possessing health problem reached 67.69% in 2019, while the lowest was 25.59% in 2021. Health-seeking behaviour was measured by real access to health services as the dependent variable, while the independent variables included need (health problem), enabling factors (NHI ownership), contextual factors (number of primary health cares), poor community, ability to pay/ non-food expenditure, population density, and number of villages. The results of

descriptive analysis of all variables (dependent and independent variables) are presented in Table 1. In this model, all independent variables had a Variant Inflation Factor (VIF) value of less than 10, indicating the exclusion of independent variables.

The statistic value was 157.49, with a probability value 0.000 (Table 2). This indicated that the Random Model was better than the Common/Pooled Model. In the Chow test, the test statistic value was 20.33, with a probability value of 0.000. Based on the result, the Fixed Model was better than the Common/Pooled Model. In the Hausman test, the statistic value was 25.85 with a probability value of 0.000, indicating that the Fixed Model was better than the Random Model. The Fixed Model was considered the best in describing the relationship between the variables.

Table 1. Characteristics of Dependent and Independent Variables.

No	Variable	Obs	Mean	Std. dev.	Min	Max	VIF
1	Access to health services for community with health problem (%)	170	44.23	7.90	25.59	67.69	1,13
2	Community with a health problem as a need (%)	170	27.89	6.25	11.68	44.39	1,30
3	Health insurance ownership (%)	170	61.04	12.93	32.73	95.71	6,61
4	Number of primary health care	170	298.98	242.60	55.00	1,100.00	1,28
5	Percentage of poor community (%)	170	10.50	5.44	3.45	27.59	1,27
6	Ability to pay/non-food expenditure (thousand IDR)	170	52.44	4.10	41.00	62.25	1,48
7	Population density (people/Km ²)	170	740.77	2.678.24	9.00	16.16	6,84
8	Total Villages	170	2,464.78	2.250.14	267.00	8,562	2,84

Source: Author's Computation

Table 2. Panel Data Model Test

No	Test	T-Value	Prob. Value	Conclusion
1	LM BP Test	157.49	0.000	Random Models are better than Common / Pooled Models
2	Chow Test	20.33	0.000	Fixed Models are better than Common / Pooled Models
3	Hausman Test	25.85	0.000	Fixed Models are better than Random Models

Source: Outhor's Computation

Table 3. Fixed Model with Lag data

Variable	Fixed.lag	Significant
1. Community has health problem	.479	***
2. Health insurance ownership	-.365	***
3. Number of primary health care	-.007	
4. Percentage of poor community	-2.955	**
5. Ability to Pay	.695	***
6. Population Density	.007	
7. Total villages	-.076	
Lag data	.047	
-cons	231.016	
r ²	.609	
r ² _adj	.439	
F	18.322	
P	3.036e-16	

Description: ***<0,01; **<0,05
Source: Author's Computation

However, it was necessary to modify the Fixed Model using a lag data model due to violations of normality and autocorrelation assumptions, as revealed by the classical assumption test. The final model used is presented in Table 3. The coefficient of determination (r^2) indicated the strength of the relationship between the independent variable and the dependent variable. The coefficient of determination adjustment (r^2_{adj}) showed the strength of relationship between the independent variable and the dependent variable which is controlled by other variables (Kleinbeum, Kupper and Muller, 1987).

The coefficient of determination (r^2_{adj}) of 0.439 indicated that all independent variables could explain the variation in access to health services by 43.88%. Meanwhile, the rest was influenced by other variables outside the model. The F statistic test showed that all independent variables influenced access to health services. This was indicated by the probability value of the F statistic being <0.05, showing that the modelling was carried out appropriately.

From the partial test, which was identified by the probability value of the t-test, only four variables had a significant influence, with a probability value of 0.000 α 0.05. The four variables included health problem (Need factor), community with NHI ownership, poverty enclave (% poor community), and ability to pay

(economic ability). The variable with the greatest influence was poverty, which was represented by the percentage of poor communities.

The results showed that the individual and family side variables influencing the access to health services for residents with health problem were need, ownership of health insurance, and ability to pay. This study found that need, as measured by the health problem, influenced accessibility and showed a positive relationship. An increase in the percentage of the community with health problem was likely to affect access. This indicated that the community was aware of the need for health services when they had health problem. In this study, NHI had an influence on access to health services, but it had a negative relationship. This indicated that regions with high NHI coverage had low access, and this was contrary to expectations.

The analysis of Socio Economic of National Survey data in 2018 showed that poor pregnant women were reluctant to use health facilities even if the mother's delivery is covered by NHI. This was because health insurance did not cover the costs to health facilities for delivery, particularly for mothers living in remote areas such as islands or areas with limited access, as well as and the additional time and opportunity costs during hospitalisation. Families with numerous members may also reconsider

seeking healthcare due to the increased expenses, leading to higher living costs and dependency (Putra and Pujiyanto, 2020).

A research in Ghana found that UHC was not a 'one size fits all' process, requiring long-term policies that could adapt to country-specific sociocultural and political economies (Domapielle, 2021). The medical expenses guaranteed and mandatory contributions cheaper were the positive side of NHI. A long waiting list for hospitalization, limited medicine, and the need to follow referral rules are the negative side of NHI (Yanti and Susilawati, 2023).

In this study, ATP influenced access to health services and had a positive relationship. This indicated that the higher the average ATP per capita of the community, the higher the average percentage of access. Another study found that health expenditure in urban areas was higher than in rural areas (Zikidou and Hadjidema, 2020). A study in Nigeria showed that income and work status influenced service use. The government was advised to improve the socioeconomic status of the community in the areas of education, employment opportunities, income equity, and minimizing the cost of healthcare services (Archibong *et al.*, 2020).

Financial factors were one of the barriers to accessing health services, where cost constraints led to delay of visits. (Jatrana and Crampton, 2021). Faruqui *et al.*, (2020) found that health knowledge, patient awareness, and sociocultural beliefs were individual characteristics affecting access to healthcare services. The main barriers to accessing health services were proximity and remoteness, walking safety, public transportation services, personal safety, and healthcare quality. The recommendation was to design integrated transportation and policies by considering the quality and quantity of transportation and healthcare facilities (Guimarães, Lucas and Timms, 2019).

Previous studies in China found that health resource allocation was higher for urban areas compared to rural regions. The inequity of the Medical and Health Services System program in China persisted the

disparity in the allocation of resources. The development of a well-coordinated equity and efficiency model was necessary to realize equitable and quality services (Zhao and Chen, 2023).

The SMeru Research Institute stated that the use of health facilities was considered low. This phenomenon stemmed from communities refraining from seeking medical assistance because they believed could be self-treat due to the absence of non-treatment costs. The study also found that, while the poor use of health services showed some positive results, the impact was relatively small. Although the NHI program was known to provide benefits to the poor, the study found that the use of health facilities was not significantly higher compared to the subsidies provided by the government (Saputri and Murniati, 2022).

The issue of accessing health services for the poor requires the attention of all stakeholders. During the pandemic, the government collaboration on addressing limitations in services and diagnostic equipment. This partnership led to the formation of a Task Force for Research and Technological Innovation for COVID-19 (TFRIC19), which adopted a penta-helical model consisting of teams and engineers from various institutions, universities, industries, and communities as well as the media (Priambudi, 2022).

The collaborations concept is useful for addressing regional problems, where each stakeholder represents diverse regional interests. Through a collaborative effort, it is hoped that inventions will be supported by the synergistic use of resources (Septadiani, Pribadi and Rosnarti, 2022). The roles of the actors in overcoming extreme poverty are as follows: government as controller and regulator, academics as conceptualizers, private actors as enablers, communities as accelerators, media as information provider, and traditional institutions as strategists (Ibal, Madaul and Rifqah, 2023).

Multi-stakeholder collaboration, including both triple and penta-helical, could contribute to address poverty by improving access to education, infrastructure, capital, and women empowerment towards inclusive and

sustainable solutions (Lumbantoruan, 2023).

Limitation

The variables that can be analysed are limited, as other factors may influence the results. However, the possibility of potential bias is minimal.

Conclusion

In conclusion, this study found that the socioeconomic factor of poverty enclaves, represented by the high percentage of poor communities, had the greatest influence on access to health services. This suggests that improving access to health services, a basic human right, cannot be achieved by the health sector solely. Therefore, a Penta Helical collaboration consists of five elements: government, academics, business, media and community working simultaneously to reduce poverty enclaves was needed.

Abbreviations

Who: World Health Organization; UHC: Universal Health Coverage; NHI: National Health Insurance; obs: observation; Std. Dev: Standard Deviation; Min: Minimum; Max: Maximum; VIF: Variant Inflation Factor.

Declarations

Ethics Approval and Consent Participant

This study used secondary data sourced from the Central Statistics Agency of Indonesia (BPS-Statistics Indonesia).

Conflict of Interest

The authors declare no conflict of interest in this publication.

Availability of Data and Materials

Research data and materials are available on <https://www.bps.go.id/>

Authors' Contribution

DY conceptual development, data collection, and preparation of the initial manuscript; ER conceptual development, methodology, and writing of the final manuscript; PRS data processing and

analysis; NY and IN writing of the initial manuscript.

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References

- Archibong, E.P. *et al.* (2020) 'Income level and healthcare utilization in Calabar Metropolis of Cross River State, Nigeria', *Heliyon*, 6(9), pp. 1–5. Available at: <https://doi.org/10.1016/j.heliyon.2020.e04983>.
- Asante, A. *et al.* (2023) 'The benefits and burden of health financing in Indonesia: analyses of nationally representative cross-sectional data', *The Lancet Global Health*, 11(5), pp. e770–e780. Available at: [https://doi.org/10.1016/S2214-109X\(23\)00064-5](https://doi.org/10.1016/S2214-109X(23)00064-5).
- BPS (2023) *Statistik Indonesia 2023*.
- Cu, A. *et al.* (2021) 'Assessing Healthcare Access Using the Levesque's Conceptual Framework– A Scoping Review', *International Journal for Equity in Health*, 20(1), pp. 1–14. Available at: <https://doi.org/10.1186/s12939-021-01416-3>.
- Cui, B. *et al.* (2022) 'Modal equity of accessibility to healthcare in Recife, Brazil', *The Journal of Transport and Land Use*, 15(1), pp. 1–15. Available at: <https://doi.org/10.5198/jtlu.2022.2103>.
- Domapielle, M.K. (2021) 'Adopting localised health financing models for universal health coverage in Low and middle-income countries: lessons from the National Health Insurance Scheme in Ghana', *Heliyon*, 7(6), p. e07220. Available at: <https://doi.org/10.1016/j.heliyon.2021>

- .e07220.
- Faruqui, N. *et al.* (2020) 'Access to care for childhood cancers in India : perspectives of health care providers and the implications for universal health coverage', *BMC Public Health*, pp. 1–11. Available at: <https://doi.org/10.1186/s12889-020-09758-3>.
- Guimarães, T., Lucas, K. and Timms, P. (2019) 'Understanding how low-income communities gain access to healthcare services: A qualitative study in São Paulo, Brazil', *Journal of Transport and Health*, 15(March), p. 100658. Available at: <https://doi.org/10.1016/j.jth.2019.100658>.
- Ibal, L., Madaul, R.A. and Rifqah, N.N. (2023) 'Model Kolaboratif Penanggulangan Kemiskinan Ekstrem melalui Konsep Hexahelix di Provinsi Papua Barat Daya', *Jurnal Sosial Humaniora*, 16(2), p. 164. Available at: <https://doi.org/10.12962/j24433527.v16i2.19505>.
- Iyer, H.S. *et al.* (2020) 'Geospatial evaluation of trade-offs between equity in physical access to healthcare and health systems efficiency', pp. 1–10. Available at: <https://doi.org/10.1136/bmjgh-2020-003493>.
- Jatrana, S. and Crampton, P. (2021) 'Do financial barriers to access to primary health care increase the risk of poor health? Longitudinal evidence from New Zealand', *Social Science and Medicine*, 288(June), p. 113255. Available at: <https://doi.org/10.1016/j.socscimed.2020.113255>.
- Kleinbeum, D.G., Kupper, L.L. and Muller, K.E. (1987) *Applied Regression Analysis and Other Multivariable Methods 2nd Edition*. 2nd edn. Duxbury Press.
- Lumbantoruan, P. (2023) 'Mengatasi Kemiskinan melalui Kolaborasi Multistakeholder: "Menuju Solusi Inklusif dan Berkelanjutan"'. Jakarta: Direktorat Hukum dan Hubungan Masyarakat, Kementerian Keuangan Republik Indonesia, pp. 1–2. Available at: <https://www.djkn.kemenkeu.go.id/kanwil-kalbar/baca-artikel/16175/Mengatasi-Kemiskinan-melalui-Kolaborasi-Multistakeholder-Menuju-Solusi-Inklusif-dan-Berkelanjutan.html>.
- Maulany, R.F., Dianingati, R.S. and Annisaa, E. (2021) 'Faktor-Faktor yang Mempengaruhi Akses Kesehatan', *Indonesian Journal of Pharmacy and Natural Product*, 4(2), pp. 142–149. Available at: <https://doi.org/10.35473/ijnp.v4i2.1161>.
- Mulia, N. *et al.* (2023) 'Inequitable access to general and behavioral healthcare in the US during the COVID-19 pandemic: A role for telehealth?', *Preventive Medicine*, p. 107426. Available at: <https://doi.org/10.1016/j.ypmed.2023.107426>.
- Mursyidin, N., Annas, S. and Rais, Z. (2023) 'Pemodelan Regresi Data Panel terhadap Determinan Indeks Kualitas Lingkungan Hidup (IKLH) Provinsi di Pulau Sulawesi Tahun 2011-2020', *VARIANSI: Journal of Statistics and Its Application on Teaching and Research*, 5(2), pp. 94–103. Available at: <https://doi.org/10.35580/variansium118>.
- Nugraheni, W.P. *et al.* (2023) 'Effects of the COVID- pandemic on cardiovascular disease financing in Indonesia (JKN claims data analysis 2019-2020)', *Frontiers in Public Health*, pp. 1–8. Available at: <https://doi.org/10.3389/fpubh.2023.1148394>.
- Priambudi, R. (2022) 'Kolaborasi Model Pentahelix Dalam Penanganan Pandemi COVID-19', *Aliansi: Jurnal Politik, Keamanan dan Hubungan Internasional*, 19(Special Edition), pp. 332–337.
- Putra, G.W. and Pujiyanto, P. (2020) 'Evaluasi Dampak Program Keluarga Harapan Terhadap Pemanfaatan Fasilitas Pelayanan Kesehatan untuk Layanan Persalinan di Indonesia

- (Analisis Data SUSENAS tahun 2018)', *Jurnal Ekonomi Kesehatan Indonesia*, 5(1). Available at: <https://doi.org/10.7454/eki.v5i1.3898>.
- Saputri, N.S. and Murniati, S. (2022) *Kajian Dampak Bantuan Iuran Program Jaminan Kesehatan pada Masyarakat Miskin dan Tidak Mampu*. Available at: <http://repository.unair.ac.id/id/eprint/17554>.
- Septadiani, W.P., Pribadi, O.S.I. and Rosnarti, D. (2022) 'Peran Model Pentahelix Dalam Pengembangan Pariwisata Di Kawasan Ekonomi Khusus Mandalika', *Universitas Trisakti*, pp. 22–31.
- Sunio, V. *et al.* (2023) 'Impact of public transport disruption on access to healthcare facility and well-being during the COVID-19 pandemic: A qualitative case study in Metro Manila, Philippines', *Case Studies on Transport Policy*, 11. Available at: <https://doi.org/10.1016/j.cstp.2023.100948>.
- Wenang, S. *et al.* (2021) 'Availability and Accessibility of Primary Care for the Remote, Rural, and Poor Population of Indonesia', *Frontiers in Public Health*, 9(September), pp. 1–11. Available at: <https://doi.org/10.3389/fpubh.2021.721886>.
- WHO (2019) *Primary health care towards universal health coverage. Document A72/12 Seventy-Second World Health Assembly. Report by the Director-General., WHO Library Cataloguing-in-Publication Data*. Available at: <https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf>.
- Xu, J. *et al.* (2023) 'Horizontal inequity trends of health care utilization in rural China after the medicine and healthcare system reform : based on longitudinal data from 2010 to 2018', *International Journal for Equity in Health*, pp. 1–13. Available at: <https://doi.org/10.1186/s12939-023-01908-4>.
- Yanti, F.D. and Susilawati (2023) 'Analisis Perspektif Masyarakat pada Program Jaminan Kesehatan Nasional di Wilayah Teluk Mengkudu', *Florona: Jurnal Ilmiah Kesehatan*, 2(1), pp. 20–23.
- Zhao, N. and Chen, K. (2023) 'Equity and efficiency of medical and health service system in China', *BMC Health Services Research*, 2, pp. 1–10. Available at: <https://doi.org/10.1186/s12913-023-09025-2>.
- Zikidou, S. and Hadjidema, S. (2020) *Household Health Expenditure in Greece and the Impact of Financial Crisis, Munich Personal RePEc Archive*. Greece. Available at: https://mpra.ub.uni-muenchen.de/99388/1/MPRA_paper_99388.pdf.