



Analysis of Health Equity and Access of Healthcare In Indonesia: Literature Review

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Abstrak

Keadilan kesehatan merupakan hal mendasar dalam gagasan menjalani kehidupan yang baik dan membangun masyarakat yang dinamis karena implikasinya yang praktis, ekonomi, dan sipil. Jumlah puskesmas di Indonesia pada tahun 2023 sebanyak 10.180 puskesmas yang terdiri dari 4.210 puskesmas rawat inap dan 5.970 puskesmas non rawat inap. Banyaknya fasilitas kesehatan yang tersedia menimbulkan pertanyaan apakah mampu memberikan pelayanan medis terbaik dan dapat diakses oleh seluruh lapisan masyarakat. Penelitian ini menggunakan metode PRISMA (Preferred Reporting Items For Systematic Review And Meta Analysis). Tinjauan literatur yang komprehensif dilakukan dengan menggunakan database berikut: Science Direct, Pub Med, Google Scholar. Periode penelitian adalah 2020-2024. Diperoleh 140 artikel dengan kata kunci “akses”, “ekuitas”, “layanan kesehatan”, “Indonesia”. Artikel disaring berdasarkan kesesuaian judul, abstrak, isi, dan dipilih yang memenuhi kriteria sehingga terdapat 20 artikel yang dinilai kesesuaiannya. Jadi, ada 4 artikel yang dapat dianalisis dan dibahas mengenai akses dan pemerataan layanan kesehatan di Indonesia. Ketersediaan dan akses terhadap layanan kesehatan di Indonesia memerlukan perbaikan dari berbagai aspek. Disarankan untuk meningkatkan infrastruktur transportasi, meningkatkan akses layanan kesehatan melalui telemedicine, meningkatkan kesadaran masyarakat akan pentingnya mendapatkan layanan kesehatan yang terpercaya dan mudah diakses.

Kata Kunci: Ketersediaan Kesehatan, Akses Pelayanan Kesehatan, Analisis

Abstract

Health equity is fundamental to the idea of living a good life and building a vibrant society because of its practical, economic, and civic implications. The number of Primary Health Care in Indonesia in 2023 will be 10,180 Primary Health Care, consisting of 4,210 inpatient health centers and 5,970 non-inpatient health centers. The large number of health facilities available raises the question of whether they are able to provide the best medical services and can be accessed by all levels of society. This study used the PRISMA (Preferred Reporting Items For Systematic Review And Meta Analysis) method. A comprehensive literature review was conducted using the following databases: Science Direct, Pub Med, Google Scholar. The period was 2020-2024. It obtained 140 articles with the keyword “access” “equity” “healthcare” “Indonesia”. The articles were filtered based on the suitability of the title, abstract, content, and selected those that met the criteria, so that there were 20 articles that were assessed for suitability. So, there are 4 articles that can be analyzed and discuss about access and equity healthcare in Indonesia. Equality and access to health services in Indonesia requires improvement from various aspects. It is recommended to improve transport infrastructure, increasing access to health services by telemedicine, increase public awareness of the importance of getting trusted and easily accessible health services

Keywords: *Health Equity, Access of Healthcare, Analysis*

INTRODUCTION

Health care systems around the world implement policies and interventions to improve access to health care for marginalized populations. Health care organizations must consider equitable access to care, regardless of factors such as gender, socioeconomic status, ethnicity or disability. Timely access to quality care is a fundamental ethical principle. By promoting equitable distribution of resources, health care organizations can reduce disparities and provide a fair opportunity for all individuals to receive needed health care (Lelyana, 2024).

Public health policies should ensure equality of access to health services and equity in the distribution of health resources. This involves identifying and addressing health disparities that may arise from social, economic or demographic factors (Indarwati et al., 2024)

Health equity is fundamental to the idea of living a good life and building a vibrant society because of its practical, economic, and civic implications. Shifts in economic mobility, income inequality, and persisting legacies of social problems such as structural racism are hampering the attainment of health equity, causing economic loss, and most overwhelmingly, the loss of human lives and potential. Health equity is the state in which everyone has the opportunity to attain full health potential and no one is disadvantaged from achieving this potential because of social position or any other socially defined circumstances. Health equity and opportunity are inextricably linked (Weinstein et al., 2017)

The committee took a multifactor view of health status and health inequities, in recognition that only some aspects of a person's health status depend on individual behaviors and choice. Community-wide problem, such as poverty, unemployment, low educational attainment, inadequate housing, lack of public transportation, exposure to violence, and neighborhood deterioration (social or physical) shape health and contribute to health inequalities (Weinstein et al., 2017). To truly eliminate health disparities and thereby achieve health equity, many solutions require a social justice lens (Smalley et al., 2021). Meanwhile, health equality is the achievement of the highest level of health for all people. To achieve this health equality, everyone needs to respect social equality (Siregar & Rahman, 2022)

Indonesia is an archipelagic country consisting of 17,374 islands, with an area of 1,892,410.1 km². The large number of islands in Indonesia with various tribes, cultures and languages poses its own challenges in the government's efforts to provide health services for the Indonesian people. The level of public health in a country can be influenced by the existence of health service facilities. Health service facilities are entities that deal directly with the community. Primary Health Care and hospitals are still the main types of health services that provide basic and referral health services. The number of Primary Health Care in Indonesia in 2023 will be 10,180 Primary Health Care, consisting of 4,210 inpatient health centers and 5,970 non-inpatient health centers. The number of

hospitals in Indonesia in 2023 will be 3,155, consisting of 2,636 general hospitals and 519 special hospitals. The number of posyandu in Indonesia in 2023 will be 304,263 posyandu spread throughout the region (BPS Indonesia, 2024)

Availability of health facilities is limited in the area coast, especially on remote islands resulting in difficulties in providing services adequate health for local residents (Sinulingga et al., 2024). The large number of health facilities available raises the question of whether they are able to provide the best medical services and can be accessed by all levels of society. Based on the description above, it needs to be analyzed health equity and access of healthcare in Indonesia.

METHOD

The data for this study was collected from scientific articles published between 2020 and 2024, sourced from following databases: Science Direct, Pub Med and Google Scholar, using the keywords "access", "equity", "healthcare", and "Indonesia". Initially, 20 articles were retrieved, but after assessed for suitability, 4 articles were selected for use.

The data collection process involved three main stages: identification, selection, and data extraction. Relevant journals were accessed from electronic databases, and articles were screened for eligibility based on the established criteria. Essential information, including research objectives, methods, results, and conclusions, was extracted from each article. This study examines how social and economic inequalities affect communities' access to safe and affordable healthcare services.

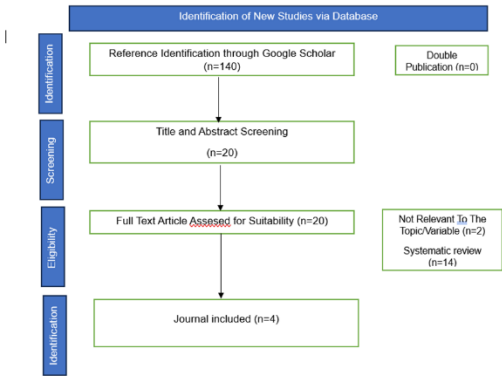


Figure 1.1 Journal Review Flowchart Researched

RESULT AND DISCUSSION

This study analyzed four journals related to health equity and access of healthcare in Indonesia.

Table 1. Article Review Table

No	Title Article	Authors	Journal	Year	Results
1	Availability and Accessibility of Primary Care for the Remote, Rural, and Poor Population of Indonesia	Supriyatningsih Wenang <i>et al</i>	Frontiers of Public Health	2021	The access points of primary healthcare (PHC) were mainly used by the poor population and in remote regions, whereas other population groups (non-PBI and non-Remote)

No	Title Article	Authors	Journal	Year	Results
2	Spatial evaluation of healthcare accessibility across archipelagic communities of Maluku Province, Indonesia	Yanti Leosari <i>et al</i>	PLOS Global Public Health	2023	preferred direct access to advance healthcare (AHC) The average distances to puskesmas (primary health clinics) were 8.89 km (by land) and 18.43 km (by land and water) respectively, and the average distances to hospitals were 56.19 km (by land) and 73.09 km (by land and water), with large disparities within and among districts. Analysis of health workforce data shows that 65% of 207 puskesmas lack physicians, while 49% lack midwives. Ambon, Tual, and Southeast Maluku have the highest health equity, while East Ceram, Buru, and South Buru have the lowest.
3	Poor quality for the poor? A study of inequalities in service readiness and provider knowledge in Indonesian primary health care facilities	Manon Haemmerli	International Journal of Equity in Health	2021	In both sectors, inequalities in both quality scores existed between major islands. In public facilities, inequalities in readiness scores persisted between rural and urban areas, and to a lesser extent between rich and poor communities.
4	Equate access to primary health care in rural Kalimantan: What basic health services should be available locally?	Ferry Fadzlul Rahma <i>et al</i>	JHNS (Journal of Holistic Nursing Science)	2023	the criteria that must be met include the importance of equality in health services; consideration of social determinants of health; flexibility, effective resource budgeting, adjusting the type of health services according to patient needs, and providing services as close to home as possible

HEALTH EQUITY

Equity in health-care delivery can be defined as equal access to preventive, promotive, and curative health services to the whole population, irrespective of residence, gender, caste, economic strata,

and other factors (Banerjee, 2020). Primary healthcare is recognized as the most important form of healthcare for maintaining population health because it is relatively inexpensive, can be more easily delivered than specialty and inpatient care,

and, if properly distributed, it is most effective in preventing disease progression on a wide scale (Wenang et al., 2021)

Improving access to primary healthcare (PHC) for vulnerable populations is important for achieving health equity, yet this remains challenging. Evidence of effective interventions is rather limited and fragmented. Equity of access to primary healthcare is a major social determinant of health and is considered as a strategy for addressing health inequity. The primary healthcare sector as a whole has a responsibility to promote health equity as part of its social mandate. This means developing interventions which support access via fair arrangements based on equal access to healthcare for all in equal need. Determinants of access to healthcare are amenable to change, both at a system level (e.g. transforming the way that health systems and organizations function; supporting the development of new professional roles and expanded scope of practice) and at an individual or population level (e.g. empowering patients to participate in decision making processes regarding their care; advocating for community-led services). However, we are still striving to find effective ways of reaching equity of access to primary healthcare to support those most in need, and to identify which aspects of services and abilities of people to strengthen in order to achieve transformative change (Richard et al., 2016).

The findings in East Kalimantan province showed that equity access in healthcare must be met include the importance of equality in health services; consideration of social determinants of

health; flexibility, effective resource budgeting, adjusting the type of health services according to patient needs, and providing services as close to home as possible (Rahman et al., 2023).

In line with study that conducted in Maluku province showed that smaller districts like Ambon, Tual, and Southeast Maluku have shorter distances than those with larger area and scattered islands, such as East Ceram, Southwest Maluku, and Central Maluku. The territory of Buru and South Buru is primarily made up of land, but the island's size, lack of road infrastructure, and limited health facilities force residents to travel by water to reach other parts of the island. It indicates the overall health equity as a function of accessibility to health facilities and availability of health workers. Ambon is on top of the list while East Ceram is at the bottom (Leosari et al., 2023)

In Indonesia, primary care access points are mainly used by the poor population and people living in rural/remote regions, whereas other population groups prefer direct access to advanced care structures (Wenang et al., 2021). In both sectors, inequalities in both quality scores existed between major islands. In public facilities, inequalities in readiness scores persisted between rural and urban areas, and to a lesser extent between rich and poor communities (Haemmerli et al., 2021)

ACCESS OF HEALTHCARE

A strong primary healthcare (PHC) system is paramount to optimising population health, yet PHC services are not always readily accessible (Richard et al., 2016). Access to quality healthcare is one of

the main challenges faced by many countries, including Indonesia. Geographical factors, limited infrastructure, and disparities between urban and rural areas are barriers to ensuring that all individuals have equal access to healthcare (Khayru & Issalillah, 2022)

Previous evaluations for Indonesia suggested that the inequity of healthcare usage currently occurs, where poor populations and those living in remote areas would benefit less due to their limited geographical access to primary health care in particular. For instance, allocating physicians to remote islands or in mountainous or forest locations subsequently resulting in a shortage of essential health workers have been recognized as a major challenge (Mahendradhata et al., 2017)

A survey conducted in Indonesia showed that within public health facilities, both puskesmas and puskesmas pembantu were equally distributed across poor and rich communities. However, puskesmas and puskesmas pembantu were both more likely to be located in urban areas. Both private GP practices and clinics were also more likely to be located in urban areas, whereas midwife and nurse practices were equally distributed between urban and rural areas. Regarding the urban and rural divide, puskesmas, puskesmas pembantu and midwife/ nurse practices located in urban areas were better equipped; this was especially the case for puskesmas pembantu (Haemmerli et al., 2021)

The findings in East Kalimantan province showed that the access to primary healthcare was quite far, even though, according to regulations, the distance to primary healthcare had met the

requirements (maximum 10 km). Still, the lack of patient pick-up facilities exacerbated the geographical conditions. Informants thought advanced referral services were not well facilitated because the distance to advanced health services is quite far and must be reached by ship or airplane, where the patient must bear the costs of transportation and accompanying health workers. The National Health Insurance guarantees maintenance costs at the advanced service level but not transportation costs, fees for accompanying health workers, or accommodation costs for companions. Waiting time is not a point of discussion. Still, an essential point in the discussion is the availability of health workers when needed, as well as medicines following the integrity of the treatment (Rahman et al., 2023)

A study conducted in Ambon stated that the average distances to puskesmas (primary health clinics) were 8.89 km (by land) and 18.43 km (by land and water) respectively, and the average distances to hospitals were 56.19 km (by land) and 73.09 km (by land and water), with large disparities within and among districts. Access to hospitals is more challenging for patients. Although 81% of the population has access to road infrastructure to visit a hospital, the average distance traveled is 56.19 km. The remaining 19% must travel 73 km through land and naval routes. Inequality is also apparent in the fact that most districts only have one hospital to serve the entire population. In Ambon, the nearest hospital is located within 6 km of a given resident, whereas two-thirds of the population in East Ceram who have land access to a hospital need to travel 254 km,

and only about a quarter of people in Southwest Maluku have access to a hospital by land (Leosari et al., 2023)

It is stated that the average travel time and cost to the nearest primary health care facility were very long and high in most districts in Sumatra, Kalimantan, and Papua, as well as in other districts. For remote districts, such as in Maluku and Nusa Tenggara. Higher travel costs in areas where access to health facilities is more difficult is also associated with lower outpatient utilisation (Niedar et al., 2022)

The findings in Indonesia similar to study conducted in Sub Saharan Africa showed that more than 400 million people in SSA live beyond 3 hours away from the nearest urban centre, of which almost 250 million are settled in the rural domain. In such conditions, many countries in SSA struggle to provide prompt access to healthcare, within 30 min (Florio et al., 2023)

CONCLUSION

The number of hospitals and health centers increases from year to year. Equity and access to health services in Indonesia requires improvement from various aspects. It is recommended to improve transport infrastructure, increasing access to health services by telemedicine, increase public awareness of the importance of getting trusted and easily accessible health services

REFERENCES

- Banerjee, A. (2020). Equity and Quality of Health-Care Access: Where Do We Stand and the Way Forward? *Indian Journal of Community Medicine*, 45(1), 4–7.
- https://doi.org/https://doi.org/10.4103/ijcm.IJCM_183_19
- BPS Indonesia, S. I. (2024). Catalog : 1101001. *Statistik Indonesia 2023*, 52, 790.
- https://www.bps.go.id/publication/2020/04/29/e9011b3155d45d70823c141f/statistik-indonesia-2020.html
- Florio, P., Freire, S., & Melchiorri, M. (2023). Estimating Geographic Access to Healthcare Facilities in Sub-Saharan Africa by Degree of Urbanisation. *Applied Geography*, 160(April), 103118. https://doi.org/10.1016/j.apgeog.2023.103118
- Haemmerli, M., Powell-Jackson, T., Goodman, C., Thabrany, H., & Wiseman, V. (2021). Poor quality for the poor? A study of inequalities in service readiness and provider knowledge in Indonesian primary health care facilities. *International Journal for Equity in Health*, 20(1), 1–12. https://doi.org/10.1186/s12939-021-01577-1
- Indarwati, Agustina, N.W Wahyuningsih, A Marasabessy, N. . M., Handayani, S., Fuada, N. A., Ratna, Siregar, P. ., & Ismarina. (2024). *Kesehatan Masyarakat*. CV. Rey Media Grafika.
- Khayru, R. K., & Issalillah, F. (2022). The Equal Distribution of Access to Health Services Through Telemedicine: Applications and Challenges. *International Journal of Service Science*, 2(3), 24–27.
- Lelyana, N. (2024). Dampak Telemedis Terhadap Akses Pelayanan Kesehatan Di Masyarakat Pedesaan. *Medical Journal of Nusantara (MJN)*, 3(2), 78–89.
- https://doi.org/10.55080/mjn.v3i2.832
- Leosari, Y., Uelmen, J. A., & Carney, R. M. (2023). Spatial evaluation of healthcare accessibility across archipelagic communities of Maluku

- Province, Indonesia. *PLOS Global Public Health*, 3(3), 1–20. <https://doi.org/10.1371/journal.pgph.0001600>
- Mahendradhata, Y., Trisnantoro, L., Listiyadewi, S., Soewondo, P., MArthias, T., Harimurti, P., & Prawira, J. (2017). The Republic of Indonesia Health System Review. In *Health System in Transition* (Vol. 7, Issue 1). Asia Pasific Observatory on Health Systems and Policies.
- Niedar, A., Hafidz, F., & Hort, K. (2022). Optimization of Healthcare Workers Availability: Increasing Primary Health Care Efficiency in Indonesia. *Jurnal Ekonomi Kesehatan Indonesia*, 7(1), 1. <https://doi.org/10.7454/eki.v7i1.5397>
- Rahman, F. F., Haris, F., & Irawati, K. (2023). Equate Access To Primary Health Care in Rural Kalimantan: What Essential Health Services Should Be Available Locally? *Journal of Holistic Nursing Science*, 10(2). <https://doi.org/10.31603/nursing.v0i0.8460>
- Richard, L., Furler, J., Densley, K., Haggerty, J., Russell, G., Levesque, J. F., & Gunn, J. (2016). Equity of access to primary healthcare for vulnerable populations: The IMPACT international online survey of innovations. *International Journal for Equity in Health*, 15(1). <https://doi.org/10.1186/s12939-016-0351-7>
- Sinulingga, E., Salsabila, M. M., Rahayu, E. P., Putra, F. R. P., & Kusumawardhani, O. B. (2024). *Manajemen Rumah Sakit Dan Puskesmas*. Penerbit Pradina Pustaka.
- Siregar, P. P., & Rahman, S. (2022). *Diabetes Mellitus Tipe 2 dan Akses Pelayanan Kesehatan: Pengalaman Selama Pandemi Covid-19* (Y. A. Nasution (ed.)). UMSU Press.
- Smalley, K. B., Warren, J. C., & Isabel, M. F. (2021). *Health Equity: A Solutions-Focused Approach*. Springer Publishing Company.
- Weinstein, J. N., Geller, A., & Negussie, Y. (2017). *Communities in Action: Pathways to Health Equity* (A. Baciú (ed.)). The National Academic Press. New York
- Wenang, S., Schaefer, J., Afdal, A., Gufron, A., Geyer, S., Dewanto, I., & Haier, J. (2021). Availability and Accessibility of Primary Care for the Remote, Rural, and Poor Population of Indonesia. *Frontiers in Public Health*, 9(September), 1–11. <https://doi.org/10.3389/fpubh.2021.721886>