Scholar Perception of Inequality in the Healthcare System

Keisha Qarin[1], Annisa Nurullathifah[1] , Mega Citra Lestari[1] , Luhung Seno Burhanudin[1] ,Karin Syahkirana Kasandra Wati[1], Suciana Wijirahayu[2]

[1] The Faculty of Public Health, Universitas Muhammadiyah Prof. DR. HAMKA, Jakarta, Indonesia
[2] The Faculty of Teacher Training and Education, Universitas Muhammadiyah Prof. DR. HAMKA, Jakarta, Indonesia

Corresponding Author:
Name: Suciana Wijrahayu
Email: (sucianawijirahayu@uhamka.ac.id)

Author
Keisha Qarin (arinecha5@gmail.com)
Annisa Nurullatifah (annisanurullatifahh@gmail.com)
Mega Citra Letari (megacitralstri99@gmail.com)
Luhung Seno Burhanudin (senoburhannudin@gmail.com)
Karin Syahkirana Kasandra Wati (karinsyahkirana@gmail.com)
Suciana Wijrahayu (sucianawijirahayu@uhamka.ac.id)

Abstract

Scholar perception of inequality in the healthcare system is viewed by the general public as indicating that healthcare services in Indonesia are still uneven and unfair. Scholars assess that the available healthcare workforce is unevenly distributed and often lacks competence in certain areas. They feel they receive only basic services at community health centers, unlike in the city where they can directly access specialists. And we highlight the perspective of respondent 1A, whom we surveyed through a quantitative survey, stating that obstacles often occur due to several other factors, including uneven infrastructure distribution, scarcity of healthcare workers in remote areas, lack of health insurance or government support that hinders some people due to high costs, optimization of resources, utilization of digital technology for health information, as well as lack of health education and information.The numerous obstacles and problems people encounter when trying to access healthcare services often make them feel excluded and ignored within the healthcare system

Keywords: Healthcare Inequality, High Healthcare Costs, Infrastructure Disparity, Modern Healthcare Service System, Resource Optimization

Introduction

Inequities in healthcare services remain a pressing global challenge. Therefore, the primary objective of this study is to investigate Indonesian scholars' perceptions of inequities in the healthcare system, focusing on recognizing key inequities, their underlying causes, and proposed solutions. Many low- and middle-income countries, particularly Indonesia, face challenges such as uneven distribution of healthcare facilities, workforce shortages in remote areas,

and higher costs for the poor, leading to prolonged treatment times and poorer health outcomes. There is a stark disparity between urban areas with a dense supply of healthcare workers and rural areas, which often only receive basic services. This disparity further exacerbates public distrust of the quality of healthcare services in rural areas, leading many to delay treatment or turn to traditional medicine, ultimately increasing the risk of mortality. Scholars' perceptions also highlight the public perception that, due to the unequal distribution of healthcare workers and the low competence of rural residents, rural residents often receive only "basic" services at community health centers (Puskesmas), in contrast to quick access to specialist doctors in large cities.

Recent research on healthcare inequality in Indonesia establishes key facts about disparities. The factors causing this inequality are analyzed in Health Policy and Planning Oxford Academic, which found substantial variations in hospital costs across regions [1]. The National Health Insurance (JKN) program tends to benefit wealthy areas with advanced facilities, so urban residents in Java and Bali gain more benefits compared to rural communities and remote islands. BMC Health Services, the problem is, in Indonesia, even though the lower economic community is the group that most needs health services, access to health services is still concentrated in the upper financial community [2]. And also, when comparing small regions of Indonesia with high-income countries (Western Europe, Japan, Australia, Canada), it shows disparities in issues such as uneven access, socio-environmental factors (socio-economic inequality, low health education, weak social support), and different public policies (for example, food regulations and disease prevention programs).

This survey empirically transforms subjective perceptions into testable and replicable data, strengthening scholarly discourse for sustainable change. The following are key solutions proposed to reduce disparities in access, quality, and affordability of healthcare services: Increased Needs-Based Budget Allocation For example, increasing the budget for eastern provinces like Papua to 30% of the national total, to address urban-rural imbalances (such as the 70% allocation of resources to Java). Strengthening Infrastructure in Remote Areas: Build health facilities and recruit specialist doctors with incentives (e.g., higher salaries). Emphasize this to overcome cultural biases and bureaucratic barriers [3]. Digital Transformation in the Health Sector: Implement a national dashboard to track indicators of inequality (access, disease prevention, mortality), with feedback from scholars and the community. This approach is particularly relevant to implementing disease prevention programs. Digital technology can help people engage more through online applications, thereby reducing embarrassment and making programs more effective in the community. Digital tools facilitate daily monitoring of factors such as social and economic conditions, linking nutritional issues with mental health programs. This forms a comprehensive and long-lasting health system

Material and Methods

This study uses an survey methods approach to explore students' perceptions of stigma and inequality in the Indonesian health system. This approach was developed from adaptations for a hypothetical follow-up study in 2024, focusing on the themes of access inequality, social stigma (poor/rural patients), and government regulations. A sequential design (quantitative followed by qualitative) was chosen for comprehensive data integration.
Design and Sample Population: First-year students in the Public Health program at Muhammadiyah University Prof. Dr. HAMKA (aged 18-20 years, first semester).
Purposive sample: 24 respondents (larger than the original study), divided into subgroup 1A and 1B, online sampling for geographical representation. Instruments **:** Likert Survey: 10 statements about inequality (e.g., influence of income, rural-urban, insurance, education, telemedicine, lack of education healthcare, insurance). Distributed via google forms: data collection procedure. Data collected September - October 2025: First stage: online survey distributed via class WhatsApp, with a target response rate of 80%.

Material

Google Form Questionnaire research instrument used in this study was an online questionnaire designed and distributed through Google Forms. This platform was selected because it is free, accessible, and allows automatic data collection and export into spreadsheet formats suitable for statistical analysis.Perception Scale – included 10 questions measured.

Methhods

Using google form survey to collect quantitative data from scholar. The sample included 55 respondents (Scholar) in Universitas Prof DR.Hamka, selected using purposive sampling. Quantitative data were obtained from structured surveys using a Likert scale (1-5) to measure perceptions of telemedicine access.This analysis maps spatial, economic, and digital disparities affecting the groups poor and ethnic minorities.
Quantitative : Includes descriptive statistics, independent test for rural-urban group comparisons based on respondent 1A and 1 B data, as well as logistic regression to measure the impact of barrier variables connectivity on service access.

Results and Discussion

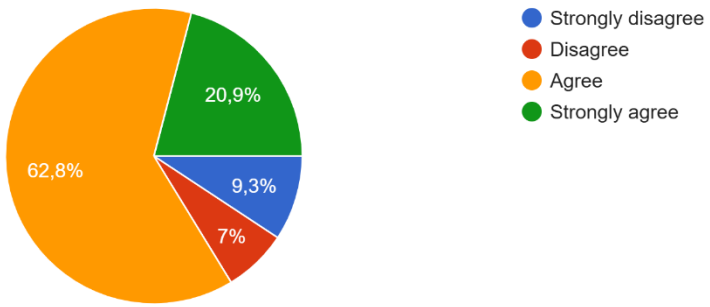

Figure 1. The inequality of access to health services (hospitals, medicine) higher among low-income people compared to high ones

The results of respondents to the question 1, “To what extent do you agree that inequality of access to health services (hospitals, medicines) is higher in low-income communities than in high-income communities?” show that at the level of strongly disagree: 9,3%, agree: 62,8%, disagree: 7%, and strongly agree: 20,9%.

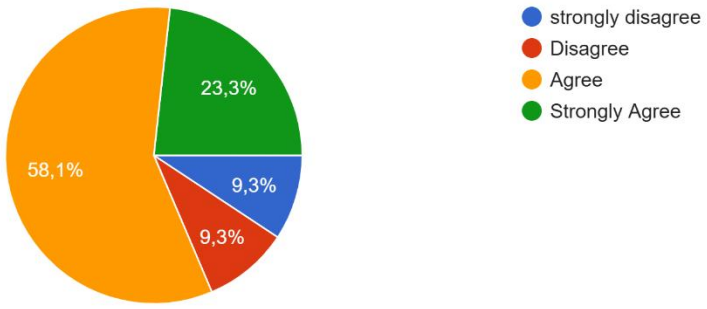

Figure 2. The distance that is far enough from the countryside to the city an obstacle to equal access to health services

The results of respondents to the question 2, "To what extent do you agree that the distance from rural areas to cities is a barrier to equal access to health services?" show that at the level of strongly disagree: 9,3%, agree: 58,1%, disagree: 9,3%, and strongly agree: 23,3%

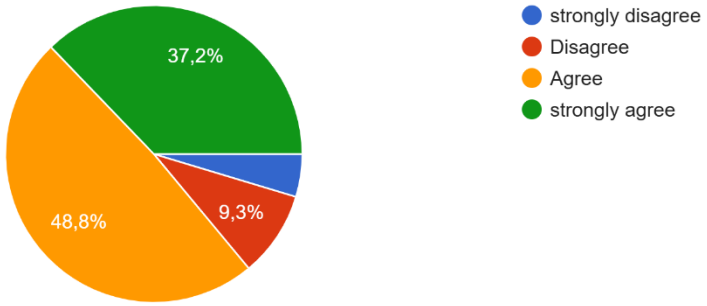

Figure 3. The rural background have difficulty accessing health services compared to big cities

The results of respondents to the question 3, "To what extent do you agree that people from rural areas have difficulty accessing health services compared to those in big cities?" show that at the level of strongly disagree : 37.2%, agree : 48.8%, disagree : 9.3%, and strongly agree : 37.2%

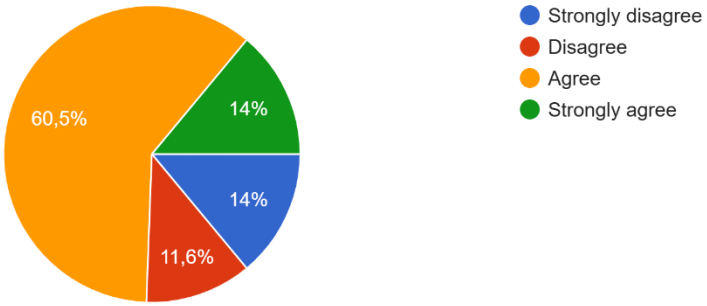

Figure 4. The inequality of telemedicine (online health services) higher than rural people compared to city people

The results of respondents to the question 4, "How likely are you to agree that readiness to receive access to health services in rural areas is lower than in urban areas?" shows that at the level of strongly disagree: 14%, agree: 60.5%, disagree: 11.6%, strongly agree: 14%

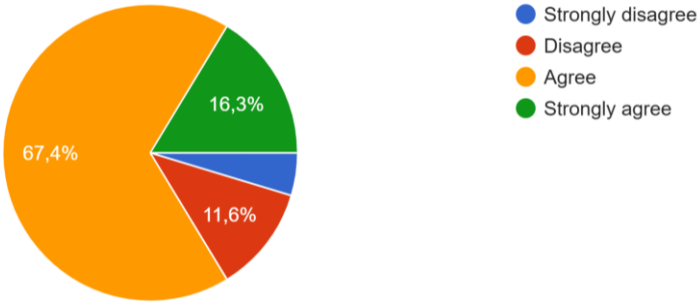

Figure 5. The readiness to receive access to health services in rural areas lower than in urban areas

The results of respondents to the question 5, "How likely are you to agree that an individual's economic background affects healthcare?" shows that at the level of Strongly disagree: 0%, ,Agree: 67.4%, disagree: 11.6%, Strongly agree: 16.3%

Addressing health inequalities, particularly those highlighted inequalities can occur when health facilities located in poor communities provide worse quality compared to health facilities located in richer communities (e.g. inadequate infrastructure, unqualified providers, etc.) ,presents significant challenges, such as the persistent disparities in healthcare quality where facilities in poorer communities often suffer from inadequate infrastructure, unqualified providers, and limited resources, leading to suboptimal patient outcomes compared to wealthier areas [4]. Reflecting on the results of such inequities reveals stark consequences, including higher rates of preventable diseases, reduced life expectancy, and exacerbated socioeconomic divides, as evidenced by studies showing that low-income populations face barriers to accessing high-quality care, ultimately perpetuating cycles of poverty and ill health.

Practically, applying this theory in the school curriculum can help educators to foster criticalawarenes among students about health inequalities, equipping them with the knowledge to recognize and challenge disparities in

healthcare access and quality, such as those stemming from socioeconomicfactors. This study still has limitations, such as the small sample size, which may restrict the generalizability of findings on health inequalities across diverse populations, potentially overlooking regional variations in facility quality disparities. Additionally, reliance on self-reported data from providers could introduce biases, like underreporting of inadequacies in poorer communities due to social desirability, and the cross-sectional design limits insights into long-term causal relationships between socioeconomic factors and healthcare outcomes Survey results show a very strong perception of disparities in healthcare services in Indonesia. The majority of respondents (84%) agree that people in rural areas have far more limited access to healthcare facilities compared to those living in urban areas. These findings indicate that the distribution of facilities and medical personnel is still uneven, which affects the quality of healthcare services at the community level [6] [7].

As many as 75% of respondents stated that differences in income levels and socio-economic status greatly affect a person's ability to access quality healthcare services. Respondents judged that people with higher incomes tend to receive faster and more comprehensive services, while low-income communities often face administrative obstacles in using the national health insurance (JKN). In addition, 82% of respondents have a positive view of the implementation of telemedicine as a digital solution to overcome distance and limited healthcare services in remote areas. However, around 28% of respondents still expressed doubts about its effectiveness due to internet connectivity limitations and the lack of technological knowledge among the community.In terms of perception of government policies, 70% of respondents believe that the regulation and distribution of healthcare workers still need to be strengthened, especially regarding the equitable distribution of specialist doctors and the improvement of infrastructure in eastern Indonesia. This aligns with previous studies which highlight the structural disparities between urban and rural areas [1] [5].

The results of the statistical test found a significant difference ($p < 0.05$) between respondents living in urban and rural areas. This means that perceptions of healthcare service inequality are indeed significantly different between the two groups. The analysis also showed that internet access is one of the most influential factors in determining how easily an individual can access digital healthcare services.The results of this study support previous research which stated that disparities in healthcare services in Indonesia are caused by several factors, such as the uneven distribution of medical personnel, differences in socio-economic conditions, and government policies that have not been fully implemented [8] [9] [10]. Overall, this study shows that although the healthcare system in Indonesia continues to develop, there are still many challenges that need to be addressed. The government needs to strengthen healthcare facilities in remote areas, improve public health literacy, and expand the use of digital technology so that healthcare services can be fairly accessible to all segments of society

Conclusion

In this case, healthcare consistently highlights systemic disparities in access, quality, and outcomes, often rooted in social determinants such as socioeconomic status, health education, and geography. Key findings include:

1. Socioeconomic status
   Research from the World Health Organization (WHO) and economists such as Raj Chetty shows that low-income individuals face barriers such as unaffordable insurance, limited provider networks, and delayed treatment, leading to poorer health outcomes.
2. Geographic disparities

Global reviews, including from the WHO, reveal that geographic isolation exacerbates inequality, with widening urban-rural gaps in low- and middle-income countries.

3. Lack of health education
   Low levels of health education are considered to widen the inequality gap because people who lack health knowledge tend to delay seeking treatment, neglect prevention, and find it difficult to make optimal use of available services.

Limitations

1. The geographical scope of the study is relatively narrow, so that understanding of regional variations in health service inequality in Indonesia is still limited.
2. This study does not fully consider other intersecting factors such as gender and race or differences in policy implementation that may also influence perceptions of inequality.
3. This study primarily captures scholars' perceptions of health service inequality, rather than objective measures of inequality itself, so the findings may have limitations in terms of generalizability to a broader population.

Recommendations for Further Research:

1. It is recommended to conduct comparative studies between regions or between urban and rural areas to identify local challenges and best practices in addressing inequality.
2. Future researchers can expand the research participants by involving health workers, policymakers, and patients, so that the perspectives obtained are more diverse and the findings can be validated from various points of view.
3. It is recommended that future research explore the relationship between government policies and public perceptions of health service equity, particularly how policy communication strategies affect the level of public trust in the national health system

Acknowledgments

The author would like to express sincere gratitude to Muhammadiyah University Prof. DR. HAMKA for its support, guidance, and valuable knowledge contributions in the preparation of this article. The input and professional expertise from the international conference on healthcare safety and health education (Insight 2025) have significantly improved the quality and depth of the information presented. Special appreciation is extended to Dr. Ir. Suciana Wijirahayu, M.Pd. for the technical assistance and in-depth insights provided throughout the research and writing process. This article would not have been possible without the collaboration and spirit of knowledge sharing from all parties involved.

References

1. Sambodo, N. P., Van Doorslaer, E., Pradhan, M., & Sparrow, R. (2021). Does geographic spending variation exacerbate healthcare benefit inequality? A benefit incidence analysis for Indonesia. *Health Policy and Planning*, *36*(7), 1129–1139.
2. Oktaria, V., & Mahendradhata, Y. (2022). The health status of Indonesia's provinces: the double burden of diseases and inequality gap. *The Lancet Global Health*, *10*(11), e1547–e1548.
3. Assan, J. K., Assan, S. K., Assan, N., & Smith, L. (2009). Health inequality in resource poor environments and the pursuit of the MDGs: Traditional versus modern healthcare in rural Indonesia. *Journal of Health Management*, *11*(1), 93–108.

4. Mulyanto, J., Kringos, D. S., & Kunst, A. E. (2019). Socioeconomic inequalities in healthcare utilisation in Indonesia: a comprehensive survey-based overview. *BMJ Open*, *9*(7), e026164.
5. Aizawa, T. (2022). Inequality in health opportunities in Indonesia: long-term influence of early-life circumstances on health. *BMC Public Health*, *22*(1), 1334.
6. Hosseinpoor, A. R., Nambiar, D., & Schlotheuber, A. (2018). Monitoring health inequality in Indonesia. In *Global Health Action* (Vol. 11, Issue sup1, pp. 3–6). Taylor & Francis.
7. Johar, M., Soewondo, P., Pujisubekti, R., Satrio, H. K., & Adji, A. (2018). Inequality in access to health care, health insurance and the role of supply factors. *Social Science & Medicine*, *213*, 134–145.
8. Listyaningrum, N., Sukadi, S., & Lubis, J. (2025). Legal Perspectives on Healthcare Inequality in Indonesia. *KARSA Journal of Social and Islamic Culture*, *33*(1), 272–296.
9. Utomo, B., Sucahya, P. K., & Utami, F. R. (2011). Priorities and realities: addressing the rich-poor gaps in health status and service access in Indonesia. *International Journal for Equity in Health*, *10*(1), 47.
10. Wiseman, V., Thabrany, H., Asante, A., Haemmerli, M., Kosen, S., Gilson, L., Mills, A., Hayen, A., Tangcharoensathien, V., & Patcharanarumol, W. (2018). An evaluation of health systems equity in Indonesia: study protocol. *International Journal for Equity in Health*, *17*(1), 138.