



Barriers to Healthcare Access in Low-Income Countries and Marginalized Communities

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ABSTRACT

This article explores the complex barriers to healthcare access in low-income countries and marginalized communities, focusing on economic, geographic, social, systemic, psychological, policy, technological, and environmental challenges. These barriers contribute to reduced life expectancy, increased morbidity, and diminished quality of life for millions of people worldwide. By examining case studies from countries such as India, Ethiopia, Nigeria, Haiti, and Bangladesh, as well as marginalized communities in the United States, the article provides a comprehensive understanding of these challenges. The analysis highlights effective strategies, such as expanding health insurance coverage, improving healthcare infrastructure, enhancing cultural competency, and leveraging telemedicine. The findings emphasize the need for coordinated efforts among policymakers, healthcare providers, and international organizations to implement targeted interventions and policy reforms. Addressing these barriers is essential for achieving equitable healthcare access and improving health outcomes for all.

Keywords: Healthcare, Public health, Health equity, Community Medicine, Barriers

1. Introduction

Access to healthcare is recognized as a fundamental human right by the World Health Organization (WHO). Despite this, millions of people worldwide, particularly those in low-income countries and marginalized communities, face substantial barriers that impede their access to essential health services. The consequences of these barriers are stark: reduced life expectancy, increased morbidity, and diminished quality of life. According to the 2023 Universal Health Coverage (UHC) Global Monitoring Report by WHO and the World Bank, more than half of the world's population lacks access to essential health services, and approximately 2 billion people face severe financial hardship due to out-of-pocket healthcare expenses. This financial strain is most pronounced in low-income countries, where catastrophic health expenditures can drive families into poverty, perpetuating a cycle of poor health and economic instability. For example, in India, healthcare expenses can account for up to 25% of a household's income, leading many to forgo necessary medical treatments. Furthermore, only about 37% of the population in low-income countries has health insurance, compared to over 90% in high-income countries, exacerbating the financial burden on individuals and families. The economic disparity is also evident in the allocation of healthcare budgets; many low-income countries allocate less than 5% of their GDP to healthcare, resulting in resource constraints that limit service availability and quality. This article investigates the barriers to healthcare in low-income countries and marginalized communities, their impact on health outcomes, and discusses a few case studies for comparative analyses.

1.1 Economic Barriers

Economic constraints are one of the most significant barriers to healthcare access. In low-income countries, out-of-pocket healthcare expenses can be prohibitive, leading to delayed or foregone medical treatment. High healthcare costs deter individuals from seeking necessary medical attention (Kruk et al. 2018). For instance, the 2019 National Health Interview Survey found that cost barriers in the United States (a historically rich country) caused 8.5% of individuals to delay or forgo medical care, 14.7% to miss dental care, and 5.6% to skip prescription medications (National Health Council, 2023). This phenomenon is only further pronounced in resource limited regions. Direct healthcare costs, such as out-of-pocket payments for medical services, medications, and diagnostic tests, may be high in low-income countries, based upon purchasing power parity (PPP). These expenses can lead to catastrophic health expenditures (CHE), which occur when a household's out-of-pocket health payments exceed a substantial proportion of its income. Studies indicate that CHE is a common issue in urban slums, where residents frequently incur high medical costs without adequate financial protection. Additionally, the lack of health insurance exacerbates financial barriers, leaving many unable to afford care (Giedion et al. 2013). In many low-income countries, only a small fraction of the population is covered by health insurance, resulting in high out-of-pocket expenditures. Studies show that kidney failure diagnoses are more prevalent among uninsured individuals due to the inability to afford dialysis treatment (National Health Council, 2023). Community-based health insurance (CBHI) schemes have been implemented in some regions to provide financial protection, yet their coverage

remains limited. CBHI schemes have shown effectiveness in increasing healthcare utilization and providing financial protection, but their success heavily depends on factors like social capital, trust in the management, and affordability of premiums.

General poverty levels correlate with poor health outcomes and limited access to services (WHO, 2019). Poverty influences healthcare access through a lack of resources for transportation, nutritious food, and preventive healthcare services (Al-Worafi, 2024). Indirect costs, including transportation to healthcare facilities, lost income due to illness, and additional costs like childcare during medical visits, all pose significant barriers. In rural areas, the lack of affordable and reliable transportation can prevent individuals from accessing healthcare services. For instance, in sub-Saharan Africa, inadequate transportation infrastructure and long travel distances to medical facilities are major hurdles, particularly affecting maternal and child health.

1.2 Geographic Barriers

Geographical challenges significantly impede healthcare access. In many low-income countries, healthcare facilities are often located far from rural and remote communities. This physical distance can be a major deterrent, as individuals may need to travel long distances to reach the nearest clinic or hospital. Long distances to healthcare facilities prevent timely access to care (Nemet & Bailey, 2000). For instance, in rural areas of India, long travel distances to hospitals are a significant barrier (Dahab & Sakellariou, 2000), with the average distance to the nearest healthcare facility more than 5 kilometers. This is particularly challenging for the elderly and disabled. The lack of reliable transportation further exacerbates geographic barriers (Penchansky & Thomas, 1981). In many low-income countries, transportation options are limited, unreliable, or expensive, making it difficult for individuals to reach healthcare facilities (Eze et al, 2023). Poor infrastructure, such as unpaved roads and lack of healthcare facilities, limits accessibility (Roh, J. H., 2018). In sub-Saharan Africa, inadequate transportation infrastructure significantly affects maternal health outcomes (Dahab & Sakellariou, 2000, Atuoye et al, 2015). Inadequate access to maternal health services can lead to complications during pregnancy and childbirth, increasing maternal and infant mortality rates. For instance, in Nigeria, geographic barriers are a major factor contributing to the high maternal mortality rate, as many women give birth without skilled medical assistance due to the difficulty of reaching healthcare facilities.

There are significant regional disparities in the distribution of healthcare resources, with urban areas often having better healthcare infrastructure and more healthcare professionals compared to rural areas. This disparity results in uneven access to healthcare services. For example, in Ethiopia, urban areas have significantly more healthcare facilities and trained healthcare professionals than rural areas, where residents often rely on under-resourced health posts.

1.3 Social and Cultural Barriers

Social determinants and cultural factors play a critical role in healthcare access. Lower educational levels are associated with reduced healthcare utilization (Marmot, M., 2005). Education influences individuals' ability to understand health information and navigate healthcare systems effectively (Al-Worafi, 2024). In many low-income countries, educational disparities are pronounced, with a large portion of the population lacking basic literacy skills, which affects their ability to comprehend health information and follow medical advice. Cultural practices and beliefs can further influence health-seeking behavior (Shaikh & Hatcher 2005). In some communities, traditional medicine and cultural norms deter individuals from seeking formal medical care (Dahab & Sakellariou, 2000). Cultural norms can also dictate the types of treatments considered acceptable. For example, in some African communities, reliance on traditional healers is common, and there may be a mistrust of Western medicine.

Gender-based barriers often prevent women from accessing healthcare (Ravindran & Kelkar-Khambete, 2008). Women in many low-income countries face additional barriers such as limited autonomy, economic dependency, and societal norms that prioritize men's health needs (Dahab & Sakellariou, 2000, Atuoye et al, 2015). In many cultures, women may require permission from male family members to seek medical care, and their health concerns may be undervalued. For example, in certain regions of South Asia, women are less likely to seek medical attention for themselves due to cultural expectations and economic constraints.

Social stigma surrounding certain health conditions can also deter individuals from seeking care. Conditions such as HIV/AIDS, mental health disorders, and reproductive health issues are often stigmatized, leading individuals to avoid seeking medical help due to fear of discrimination and social exclusion. In many low-income countries, mental health stigma is particularly severe, resulting in underutilization of mental health services and inadequate treatment. Social determinants of health, such as income inequality, social exclusion, and lack of social support networks, further exacerbate healthcare access issues. Individuals from marginalized communities often face compounded barriers due to intersecting social determinants.

1.4 Systemic Barriers

Systemic issues within healthcare systems can create significant obstacles. A critical systemic barrier is the shortage of healthcare professionals. Shortages of healthcare professionals in underserved areas limit access to care (WHO, 2020). For instance, sub-Saharan Africa faces a severe shortage of healthcare workers, impacting service delivery and health outcomes (Eze et al., 2023). This shortage is exacerbated by the migration of healthcare professionals to higher-income countries in search of better opportunities, a phenomenon known as "brain drain". Poor quality of care deters individuals from seeking medical help (Kruk et al. 2018). In some regions, the lack of trained healthcare professionals and inadequate medical supplies contribute to substandard care (Al-Worafi, 2024). Systemic financial barriers include inadequate government funding for healthcare, leading to resource constraints in public health facilities. Inadequate health infrastructure hinders effective service delivery (WHO, 2019). Many health facilities in low-

income countries lack basic amenities such as electricity, clean water, and medical equipment (Eze et al., 2023). Corruption within healthcare systems can further divert resources away from essential services, reducing overall accessibility and quality of care.

1.5 Psychological Barriers

Psychological factors also impact healthcare access and utilization. Stigmatization of certain conditions, such as mental health issues, can prevent individuals from seeking help (Corrigan, P. W., 2004). Mental health stigma is prevalent in many low-income countries and this has led to underutilization of mental health services (Ahmed et al, 2022). Furthermore, fear of medical procedures can deter individuals from seeking care (LaVeist et al. 2000). This fear may be exacerbated by past negative experiences, misinformation, or cultural beliefs. For example, fear of surgery or invasive procedures can prevent individuals from seeking timely medical intervention, leading to worsening health conditions. In some cultures, fear of medical treatments may be linked to traditional beliefs and myths about healthcare. Mistrust in healthcare providers and systems is another significant psychological barrier. Mistrust in healthcare systems is often rooted in historical injustices and poor patient-provider communication (Al-Worafi, 2024). In low-income countries, mistrust may be heightened by inadequate healthcare infrastructure and poor quality of care.

1.6 Policy and Governance Barriers

Health policies in many low-income countries are often insufficiently developed or poorly implemented. Effective health policies are crucial for addressing systemic barriers and improving healthcare access. However, in many regions, policies fail to adequately address the healthcare needs of the population, leading to gaps in service delivery and resource allocation (WHO, 2018). For example, in many African countries, health policies do not sufficiently cover preventive care, resulting in higher incidences of preventable diseases.

Insufficient government funding for healthcare systems limits service availability and quality (Mills, A., 2014). Many low-income countries allocate less than 5% of their GDP to healthcare, resulting in insufficient medical supplies, outdated equipment, and poorly maintained infrastructure (Eze et al., 2023). Corruption within healthcare systems can divert resources and further reduce service accessibility (Vian, T., 2008). Corruption takes many forms, including embezzlement of funds, bribery, and favoritism in the allocation of resources. Rampant at various levels of the healthcare system, corruption has led to inefficiencies and inequities (Al-Worafi, 2024). Bureaucratic inefficiencies, such as lengthy administrative processes and lack of coordination between different levels of government, delay the implementation of health programs and the delivery of healthcare services. These inefficiencies create barriers to accessing care, especially for vulnerable populations who may already face significant challenges in navigating highly complex healthcare systems.

1.7 Technological Barriers

Technological advancements and access to modern healthcare technologies are unevenly distributed. This includes diagnostic equipment, medical devices, and treatment technologies. This limitation hinders the ability to diagnose and treat various health conditions effectively, leading to delayed or incorrect diagnoses. Additionally, digital infrastructure crucial for modern healthcare delivery, including electronic health records (EHRs), telemedicine, and health information systems may be missing or unevenly distributed between urban and rural areas. The lack of access to digital health technologies and the internet hinders modern healthcare delivery (World Bank, 2016). Even when healthcare technologies are available, a lack of technological literacy and training among healthcare providers impede their effective use. Many healthcare workers in low-income countries are not adequately trained to operate advanced medical equipment or utilize digital health tools. This gap in skills can lead to underutilization of available technologies and suboptimal patient care. Telemedicine, which has the potential to bridge geographical barriers, is underutilized in many low-income regions due to technological limitations (Gizaw, et al. 2022). Poor internet connectivity, lack of digital devices, and insufficient technical support can limit the reach and effectiveness of telemedicine services. For example, telemedicine initiatives in rural India have faced challenges due to unstable internet connections and a lack of familiarity with digital tools among both patients and providers

Efficient health information systems are essential for effective healthcare delivery, enabling the tracking of health data, monitoring of disease outbreaks, and evaluation of health interventions. However, many low-income countries lack robust health information systems, resulting in fragmented and unreliable data. Shortages of essential medical equipment in low-income regions impede effective treatment (WHO, 2017). Many healthcare facilities lack diagnostic tools, surgical instruments, and life-saving equipment (Al-Worafi, 2024). This hinders the ability to make informed decisions and allocate resources effectively.

1.8 Environmental Barriers

Climate change impacts health infrastructure and the prevalence of certain diseases, complicating healthcare delivery, particularly in low-income countries (Watts et al., 2018). Changes in climate patterns can exacerbate health issues by increasing the prevalence of vector-borne diseases like malaria and dengue fever. Warmer temperatures and altered precipitation patterns create favorable conditions for the breeding of mosquitoes and other disease vectors, leading to higher incidence rates. Additionally, climate change can exacerbate food and water scarcity, leading to malnutrition and waterborne diseases. Droughts and floods, which are becoming more frequent and severe due to climate change, can disrupt agricultural production and water supplies, affecting nutritional status and increasing the risk of diseases such as cholera and dysentery.

Extreme weather events, such as floods and droughts, disrupt healthcare services and increase the burden of disease (Al-Worafi, 2024). In low-income countries, healthcare facilities often lack the resilience to withstand such events, leading to prolonged service interruptions and reduced capacity to manage the surge in healthcare needs. Vulnerable populations, including the elderly, children, and those with chronic illnesses, are disproportionately affected by environmental barriers. These groups often have increased healthcare needs and are less able to cope with the impacts of environmental challenges. For example, during heatwaves, the elderly and those with pre-existing health conditions are at higher risk of heat-related illnesses and death.

1.9 Case Studies and Comparative Analysis

To provide a more detailed understanding, let's consider specific case studies and compare countries' experiences:

- **India:** India's healthcare system faces significant challenges due to economic and geographic barriers. The country has implemented several schemes such as Ayushman Bharat, aimed at providing health coverage to low-income families. Despite these efforts, rural areas still suffer from inadequate healthcare infrastructure and a shortage of medical professionals (Ahmed et al, 2022).
- **Ethiopia:** Ethiopia has made strides in improving healthcare access through community-based health insurance (CBHI) schemes. These schemes have increased healthcare utilization and financial protection for rural households. However, challenges remain, including limited healthcare infrastructure and cultural barriers that affect health-seeking behavior (Eze et al., 2023).
- **Nigeria:** Nigeria's healthcare system struggles with systemic issues such as corruption and inadequate funding. The National Health Insurance Scheme (NHIS) has been implemented to improve healthcare access, but its coverage is still limited, particularly in rural areas. The country also faces significant challenges related to maternal and child health (Dahab & Sakellariou, 2000).
- **Haiti:** Haiti's healthcare system is heavily impacted by economic and environmental barriers. The country has faced numerous natural disasters, which have disrupted healthcare services and infrastructure. Efforts to improve healthcare access include the implementation of mobile clinics and international aid programs, but sustainability remains a challenge (Al-Worafi, 2024).
- **Bangladesh:** Bangladesh has made progress in healthcare access through community health worker programs and mobile health clinics. These initiatives have improved maternal and child health outcomes. However, the country still faces challenges related to economic barriers and healthcare quality (Gizaw, et al. 2022).
- **United States:** The USA is classified as a high-income country with a GDP of over 20 trillion USD and a robust healthcare system. However, marginalized communities including low-income families, racial and ethnic minorities, and undocumented immigrants, face significant economic barriers to healthcare access. High out-of-pocket expenses, even for those with insurance deter individuals from seeking care. Many low-income individuals are uninsured or underinsured, leading to delays in treatment and unmet health needs (Communities in Action: Pathways to Health Equity, 2017).

2. Conclusion

Addressing the barriers to healthcare access in low-income countries and marginalized communities is a very complex challenge that requires comprehensive strategies and coordinated efforts. Economic barriers, such as high out-of-pocket expenses and insufficient health insurance coverage, significantly hinder access to healthcare services. Geographic barriers, including long distances to healthcare facilities and inadequate transportation infrastructure, further exacerbate these challenges, particularly in rural and remote areas. Social and cultural barriers, such as stigma, traditional beliefs, and gender-based discrimination, impede individuals' willingness and ability to seek care. Systemic barriers, including shortages of healthcare professionals, poor quality of care, inadequate infrastructure, and governance issues, undermine the effectiveness of healthcare delivery. Additionally, technological and environmental barriers add layers of complexity to the healthcare access issue, affecting both the availability and quality of services.

The case studies of India, Ethiopia, Nigeria, Haiti, and Bangladesh, along with an analysis of marginalized communities in the United States, reveal common challenges and effective strategies for improving healthcare access. These strategies include expanding health insurance coverage, investing in healthcare infrastructure, enhancing cultural competency among healthcare providers, promoting community engagement, and leveraging technology such as telemedicine. Each country presents unique contexts and solutions, offering valuable lessons for addressing healthcare access barriers globally. To achieve equitable healthcare access, policymakers, healthcare providers, and international organizations must collaborate to implement targeted interventions and policy reforms. By addressing economic, geographic, social, cultural, systemic, technological, and environmental barriers, we can create a more inclusive and effective healthcare system that serves all populations, particularly the most vulnerable and underserved.

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References

1. Kruk, M. E., Gage, A. D., Joseph, N. T., Danaei, G., García-Saisó, S., & Salomon, J. A. (2018). Mortality due to low-quality health systems in the universal health coverage era: A systematic analysis of amenable deaths in 137 countries. *Lancet*, 392(10160), 2203-2212. DOI: 10.1016/S0140-6736(18)31668-4
2. LIMITED ACCESS: POVERTY AND BARRIERS TO ACCESSIBLE HEALTH CARE National Health Council 2023. <https://nationalhealthcouncil.org/blog/limited-access-poverty-and-barriers-to-accessible-health-care/>
3. Giedion, U., Alfonso, E. A., & Díaz, Y. (2013). The impact of universal coverage schemes in the developing world: A review of the existing evidence. World Bank. DOI: 10.1596/978-0-8213-9618-8
4. World Health Organization (WHO). (2019). Global health expenditure database. Available at: <https://apps.who.int/nha/database>
5. Al-Worafi, Y.M. (2024). Healthcare Services in Developing Countries. In: Al-Worafi, Y.M. (eds) Handbook of Medical and Health Sciences in Developing Countries . Springer, Cham. https://doi.org/10.1007/978-3-030-74786-2_216-1
6. Nemet, G. F., & Bailey, A. J. (2000). Distance and health care utilization among the rural elderly. *Social Science & Medicine*, 50(9), 1197-1208. DOI: 10.1016/S0277-9536(99)00365-2
7. Dahab R, Sakellariou D. Barriers to Accessing Maternal Care in Low Income Countries in Africa: A Systematic Review. *International Journal of Environmental Research and Public Health*. 2020; 17(12):4292. <https://doi.org/10.3390/ijerph17124292>
8. Penchansky, R., & Thomas, J. W. (1981). The concept of access: Definition and relationship to consumer satisfaction. *Medical Care*, 19(2), 127-140. DOI: 10.1097/00005650-198102000-00001
9. Eze P, Ilechukwu S, Lawani LO (2023) Impact of community-based health insurance in low- and middle-income countries: A systematic review and meta-analysis. *PLOS ONE* 18(6): e0287600. <https://doi.org/10.1371/journal.pone.0287600>
10. Roh, J. H. (2018). The impact of rural hospital closures on health care access. *Health Services Research*, 53(2), 1190-1206. DOI: 10.1111/1475-6773.12653
11. Atuoye KN, Dixon J, Rishworth A, Galaa SZ, Boamah SA, Luginaah I. Can she make it? Transportation barriers to accessing maternal and child health care services in rural Ghana. *BMC Health Serv Res*. 2015 Aug 20;15:333. doi: 10.1186/s12913-015-1005-y. PMID: 26290436; PMCID: PMC4545969.
12. Marmot, M. (2005). Social determinants of health inequalities. *Lancet*, 365(9464), 1099-1104. DOI: 10.1016/S0140-6736(05)71146-6
13. Shaikh, B. T., & Hatcher, J. (2005). Health seeking behaviour and health service utilization in Pakistan: Challenging the policy makers. *Journal of Public Health*, 27(1), 49-54. DOI: 10.1093/pubmed/fdh207
14. Ravindran, T. S., & Kelkar-Khambete, A. (2008). Women's health policies and programmes and gender-mainstreaming in health policies, programmes and within the health sector in India. *International Journal for Equity in Health*, 7, 8. DOI: 10.1186/1475-9276-7-8
15. World Health Organization (WHO). (2020). Global strategy on human resources for health: Workforce 2030. Available at: <https://www.who.int/hrh/resources/globstrathrh-2030/en/>
16. Kruk, M. E., Gage, A. D., Arsenaault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., ... & Pate, M. (2018). High-quality health systems in the Sustainable Development Goals era: Time for a revolution. *Lancet Global Health*, 6(11), e1196-e1252. DOI: 10.1016/S2214-109X(18)30386-3
17. World Health Organization (WHO). (2019). Primary health care on the road to universal health coverage: 2019 global monitoring report. Available at: <https://www.who.int/docs/default-source/primary-health-care-conference/phc-monitoring-report.pdf>
18. Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist*, 59(7), 614-625. DOI: 10.1037/0003-066X.59.7.614
19. Ahmed, S., Chase, L.E., Wagnild, J. et al. Community health workers and health equity in low- and middle-income countries: systematic review and recommendations for policy and practice. *Int J Equity Health* 21, 49 (2022). <https://doi.org/10.1186/s12939-021-01615-y>
20. LaVeist, T. A., Nickerson, K. J., & Bowie, J. V. (2000). Attitudes about racism, medical mistrust, and satisfaction with care among African American and white cardiac patients. *Medical Care Research and Review*, 57(4_suppl), 146-161. DOI: 10.1177/1077558700574009
21. World Health Organization (WHO). (2018). World health statistics 2018: Monitoring health for the SDGs. Available at: https://www.who.int/gho/publications/world_health_statistics/2018/en/
22. Mills, A. (2014). Health care systems in low- and middle-income countries. *New England Journal of Medicine*, 370(6), 552-557. DOI: 10.1056/NEJMra1110897

23. Vian, T. (2008). Review of corruption in the health sector: Theory, methods and interventions. *Health Policy and Planning*, 23(2), 83-94. DOI: 10.1093/heapol/czm048
24. World Bank. (2016). *Digital Dividends: World Development Report 2016*. Available at: <https://www.worldbank.org/en/publication/wdr2016>
25. Gizaw, Z., Astale, T. & Kassie, G.M. What improves access to primary healthcare services in rural communities? A systematic review. *BMC Prim. Care* 23, 313 (2022). <https://doi.org/10.1186/s12875-022-01919-0>
26. World Health Organization (WHO). (2017). *Global diffusion of eHealth: Making universal health coverage achievable*. Available at: <https://www.who.int/ehealth/en/>
27. Watts, N., Amann, M., Arnell, N., Ayeb-Karlsson, S., Beagley, J., Belesova, K., ... & Montgomery, H. (2018). The 2018 report of the Lancet Countdown on health and climate change: Shaping the health of nations for centuries to come. *Lancet*, 392(10163), 2479-2514. DOI: 10.1016/S0140-6736(18)32594-7
28. National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on Community-Based Solutions to Promote Health Equity in the United States; Baciu A, Negussie Y, Geller A, et al., editors. *Communities in Action: Pathways to Health Equity*. Washington (DC): National Academies Press (US); 2017 Jan 11. 2, *The State of Health Disparities in the United States*. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK425844/>