

Original Article

Barriers to Universal Health Coverage in Pakistan: A Health System Perspective

Muhammad Hamza Muzammil^{1*}, Muhammad Uzair², Faiza Iqrar³, Muhammad Talha⁴, Sara Alam⁵, Aatqa Khan⁶, Sehrish Muhammad⁷, Arsalan Khan⁸, Kainat Ashraf⁹, Noor Fatima¹⁰

¹⁻⁹ Health Services Academy, Islamabad, Pakistan

¹⁰ Riphah International University, Islamabad, Pakistan

*Corresponding author: Muhammad Hamza Muzammil, Email: hamzamuzammil619@gmail.com, ORCID: 0009-0004-7875-6702

ABSTRACT

Background: Universal Health Coverage (UHC) aims to ensure equitable access to essential health services without financial hardship; however, progress in Pakistan remains constrained by systemic challenges. **Qualitative inquiry** is needed to understand how these barriers are experienced and interpreted within the health system. **Objective:** To explore stakeholder perceptions of structural barriers to UHC in Pakistan from a health systems perspective. **Methods:** A qualitative descriptive study was conducted between January and March 2025 using semi-structured interviews with 25 stakeholders, including policymakers, public health experts, physicians, and hospital administrators. Participants were selected through purposive sampling. Data were analyzed using Braun and Clarke's reflexive thematic analysis. **Results:** Five major themes were identified: insufficient health financing, workforce shortages and maldistribution, weak governance and policy implementation, inequitable healthcare access, and high out-of-pocket expenditure. Participants described these barriers as interconnected, with financing and governance influencing workforce distribution and service accessibility, while financial burden directly affected healthcare utilization. **Conclusion:** Achieving UHC in Pakistan requires integrated health system reforms focusing on financing, governance, workforce distribution, and financial protection. Strengthening implementation mechanisms and addressing contextual barriers will be critical for improving equitable healthcare access. **Keywords:** Universal Health Coverage, Pakistan, Health Systems, Qualitative Research, Healthcare Access, Health Policy

"Cite this Article" | Received: 27 July 2025; Accepted: 13 December 2025; Published: 31 December 2025.

Author Contributions: Concept: MHM; Design: MHM; Data Collection: MHM, MU, FI, MT; Analysis: MHM, MU, FI, MT, SA, AK; Drafting: MHM, SM, AK, SM, AK, NF **Ethical Approval:** Health Services Academy, Islamabad, Pakistan. **Informed Consent:** Written informed consent was obtained from all participants; **Conflict of Interest:** The authors declare no conflict of interest; **Funding:** No external funding; **Data Availability:** Available from the corresponding author on reasonable request; **Acknowledgments:** N/A.

INTRODUCTION

Universal Health Coverage (UHC) is a core global health priority and a central target of Sustainable Development Goal 3, reflecting the principle that all people should be able to obtain needed promotive, preventive, curative, rehabilitative, and palliative health services without suffering financial hardship. In Pakistan, this goal remains difficult to realize because healthcare delivery is shaped by persistent constraints in financing, governance, workforce distribution, and service accessibility within a mixed public-private health system. Public services are intended to provide essential care, yet private providers continue to deliver a substantial share of healthcare, often at significant cost to households. These structural conditions complicate the realization of equitable and financially protected access to care across provinces and between urban and rural populations. Pakistan's UHC reform efforts have increasingly emphasized primary healthcare and benefit-package design, but major implementation and financing challenges remain.

The urgency of health-system reform in Pakistan must also be understood in relation to the country's broader demographic and reproductive health context. Pakistan continues to experience relatively high fertility, with the total fertility rate reported at 3.6 births per woman in 2023, while family planning progress remains slower than needed for population and health goals. Official and partner sources continue to describe Pakistan's contraceptive prevalence rate as approximately 34%, with substantial unmet need for family planning and continued concern about inequitable access to reproductive health

services. National and partner commitments under FP2030 have framed family planning expansion as a strategic priority, and UNFPA Pakistan notes that meeting unmet need could substantially increase contraceptive prevalence by 2030. These realities are directly relevant to UHC because health coverage cannot be considered universal when essential primary and reproductive health services remain inaccessible, unaffordable, or unevenly implemented.

Pakistan's health system also reflects longstanding geographic and social inequities. Health services, specialists, and higher-level facilities are disproportionately concentrated in urban areas, whereas rural populations often face travel barriers, workforce shortages, and weak continuity of care. The post-devolution context following the 18th Constitutional Amendment has further highlighted variation in provincial capacity, coordination, and implementation performance. Although decentralization can improve local responsiveness, it can also widen disparities when administrative capability, fiscal space, and policy execution differ across settings. In this context, progress toward UHC depends not only on formal policy commitments but on how those commitments are translated into functional health-system arrangements at service-delivery level.

A qualitative approach is particularly important for examining barriers to UHC because policy documents and service indicators alone cannot adequately explain how financing constraints, governance weaknesses, provider shortages, and access inequities are experienced and interpreted by the actors who work within the health system. Stakeholder perspectives are needed to understand where policy implementation breaks down, how institutional fragmentation affects service delivery, why workforce maldistribution persists, and how out-of-pocket expenditure shapes healthcare-seeking decisions. Such inquiry is especially valuable in Pakistan, where formal reforms, insurance initiatives, and primary-healthcare strengthening efforts coexist with continuing complaints about affordability, uneven access, and variable administrative performance.

Existing literature has described UHC challenges in Pakistan, including limited public financing, uneven service readiness, and governance inefficiencies, but there remains a need for interpretive evidence that captures how key stakeholders understand these barriers across policy, managerial, and frontline perspectives. The present study was therefore designed to explore the structural barriers to UHC in Pakistan from a health-system perspective using qualitative inquiry. Specifically, it sought to examine stakeholder perceptions of the major constraints affecting progress toward UHC, to identify how these barriers operate across financing, workforce, governance, and access domains, and to generate contextually grounded insights that may inform more equitable and implementable health-system reform.

MATERIAL AND METHODS

This study used a **qualitative descriptive design** to explore structural barriers to Universal Health Coverage in Pakistan from a health-systems perspective. A qualitative design was appropriate because the study aimed to capture how individuals involved in policy, planning, administration, and service delivery understood the constraints affecting progress toward UHC, rather than to test predefined hypotheses or quantify associations. The study was conducted between **January and March 2025** and focused on eliciting interpretive accounts of financing, governance, workforce, and access-related barriers within the Pakistani health system.

A **purposive sampling strategy** was used to recruit participants with direct knowledge of health-system functioning and policy implementation. The sample included **25 stakeholders**, comprising **policymakers (n=5)**, **public health experts (n=6)**, **physicians (n=8)**, and **hospital administrators (n=6)**, to ensure representation from multiple levels of the health sector. Participants were selected because of their professional roles and presumed capacity to provide informed perspectives on system-level barriers to UHC. This sampling approach was intended to maximize the relevance and diversity of viewpoints

rather than statistical representativeness. The final sample size was considered adequate for thematic exploration once sufficient recurrence of core issues was observed across interviews.

Data were collected through **semi-structured individual interviews**. An interview guide was developed around the study objectives and included open-ended questions on the main challenges facing Pakistan's healthcare system, the influence of healthcare financing on service access, governance and implementation issues, workforce distribution, and possible strategies to improve progress toward UHC. Interviews were conducted either **in person or through online platforms**, depending on participant availability and feasibility, and each interview lasted approximately **45 to 60 minutes**. The semi-structured format allowed the interviewer to maintain consistency across participants while also probing emerging issues in greater depth when relevant to participants' roles and experiences.

All participants provided **informed consent** before participation, and confidentiality was maintained throughout the study. Anonymity was protected during analysis and reporting by presenting findings at category level rather than identifying individual participants by name or institution. Ethical approval was obtained from the relevant **Institutional Review Board**, as stated in the original study documentation. Given the professional positions of many participants and the policy-sensitive nature of the topic, attention was paid to ensuring that responses could be shared without compromising institutional or personal confidentiality.

The study was informed by a health-systems perspective, and reflexive attention was maintained during data collection and interpretation to reduce the risk of overly narrow or role-dependent readings of the data. Because participants occupied different positions within the health sector, the analysis considered how professional standpoint might shape the framing of barriers and proposed solutions. This was important for distinguishing between administrative, policy, and service-delivery concerns and for avoiding the treatment of stakeholder accounts as interchangeable.

Interview data were analyzed using **Braun and Clarke's reflexive thematic analysis**. The analytical process involved repeated familiarization with the interview material, initial coding of meaningful segments, clustering of related codes into candidate themes, review and refinement of themes, clear thematic definition, and final synthesis for reporting. The analysis was primarily **inductive**, while remaining informed by the study's health-systems orientation. This allowed recurrent patterns to emerge from participant accounts while still organizing interpretation around system-relevant domains such as financing, workforce, governance, access, and financial protection. Theme development was guided by conceptual coherence, recurrence across interviews, and relevance to the study objective.

To enhance the **trustworthiness** of the findings, the analysis emphasized credibility through the inclusion of participants from multiple stakeholder groups, dependability through a structured and transparent thematic process, confirmability through close grounding of interpretation in the interview data, and transferability through sufficiently detailed description of the study context and participant categories. The use of diverse stakeholder groups also enabled a degree of **triangulation** across perspectives, allowing convergence and divergence in views to be considered during interpretation. Findings were reported as thematic patterns representing shared and contrasting perceptions of barriers to UHC rather than as frequency-based claims.

RESULTS

A total of 25 stakeholders participated in the study, including policymakers (n=5), public health experts (n=6), physicians (n=8), and hospital administrators (n=6). Across interviews, participants described Universal Health Coverage in Pakistan as constrained by interconnected structural weaknesses rather than isolated service-delivery problems. Five major themes were identified: insufficient health financing, healthcare workforce shortages and maldistribution, weak governance and policy implementation, inequitable healthcare access, and high out-of-pocket expenditure. These themes were consistently

reflected across stakeholder groups, although emphasis varied according to participants' institutional and professional roles. Policymakers and administrators discussed financing and governance failures in greater structural terms, whereas physicians and public health experts more frequently emphasized service access, workforce limitations, and the practical consequences for patients and communities.

Table 1. Theme matrix showing patterns across participant groups

Theme	Policymakers	Public Health Experts	Physicians	Hospital Administrators	Overall Interpretation
Insufficient health financing	Frequent	Frequent	Moderate	Frequent	Viewed as a foundational barrier affecting infrastructure, staffing, medicines, and continuity of services
Workforce shortages and maldistribution	Moderate	Frequent	Frequent	Frequent	Strong concern regarding rural staffing gaps and unequal specialist distribution
Weak governance and policy implementation	Frequent	Frequent	Moderate	Frequent	Seen as a major contributor to poor coordination and weak reform execution
Inequitable healthcare access	Moderate	Frequent	Frequent	Moderate	Most often discussed in relation to urban-rural disparities and underserved communities
High out-of-pocket expenditure	Moderate	Frequent	Frequent	Moderate	Described as directly affecting care-seeking behavior and treatment continuity

Participants described **insufficient health financing** as the most fundamental barrier because it influenced nearly every other component of the health system. Stakeholders repeatedly linked low public-sector investment with shortages of medicines, inadequate infrastructure, weak facility readiness, and limited capacity to expand essential services. Policymakers and hospital administrators particularly framed underfinancing as a systems issue that prevented sustainable planning and reduced the state's ability to deliver equitable coverage. Physicians also connected financial limitations with service delays and overburdened facilities, especially in government settings. Overall, the theme suggested that UHC was not seen merely as a policy aspiration, but as an objective undermined by chronic underinvestment.

"[Public healthcare] is expected to serve the majority of the population, but the funding does not match the actual need on the ground." (Policymaker)

"When the budget is limited, everything suffers — staffing, medicines, equipment, and even patient trust in the system." (Hospital Administrator)

The second theme, **healthcare workforce shortages and maldistribution**, reflected widespread concern that the availability of trained personnel remained highly uneven across regions and levels of care. Physicians, public health experts, and administrators particularly emphasized that doctors, nurses, and allied health professionals were concentrated in urban centers, while rural and peripheral areas remained understaffed. Participants suggested that the issue was not only the absolute number of health workers, but also weak deployment systems, limited incentives for rural service, and poor retention in underserved settings. This created major inequities in service availability and weakened the practical reach of healthcare programs intended to support universal access.

"The main issue is not only shortage, but where the workforce is located; rural areas are consistently left behind." (Public Health Expert)

"You may have trained professionals in the system, but they are not where the need is greatest." (Physician)

A third and strongly recurring theme was **weak governance and policy implementation**. Participants described a persistent gap between policy formulation and actual delivery, noting that reforms were often well intentioned but poorly executed. Policymakers and administrators discussed fragmentation

in responsibilities, weak accountability, administrative inefficiencies, and inconsistent coordination between federal and provincial levels. Some participants linked these issues to the post-devolution environment, suggesting that differences in provincial capacity and implementation mechanisms had produced uneven performance across regions. Public health experts also noted that policy continuity was often weak, with initiatives affected by changing priorities and insufficient follow-through. This theme highlighted that UHC was constrained not only by scarce resources, but also by institutional weaknesses that limited the conversion of policy into functioning service systems.

“Policies are made, but implementation is where the system starts to break down.” (Hospital Administrator)

“There is often no strong bridge between planning at higher levels and what is actually delivered at facility level.” (Public Health Expert)

The fourth theme, **inequitable healthcare access**, was described in relation to both geography and service distribution. Participants consistently reported that healthcare infrastructure, specialists, and better-quality services were concentrated in urban centers, while rural populations experienced transportation barriers, fewer facilities, and limited access to skilled providers. Physicians and public health experts spoke most directly about the consequences of these disparities for patients, especially those living in remote or underserved settings. Participants indicated that inequity in access was not simply about physical distance, but also about continuity, affordability, and confidence in available services. This theme reinforced the view that UHC in Pakistan remains unevenly experienced across different communities.

“In many rural areas, access means much more than whether a facility exists; it also means whether trained staff, medicines, and transport are available.” (Physician)

“People in cities have multiple options, but in remote settings even basic services may not be realistically reachable.” (Public Health Expert)

The final theme, **high out-of-pocket expenditure**, captured participants' view that financial burden remains one of the most immediate and visible barriers to healthcare utilization in Pakistan. Physicians and public health experts most frequently emphasized that many households pay directly for consultations, medicines, diagnostics, and follow-up care, often delaying or avoiding treatment because of cost. Participants described this as incompatible with the core principle of UHC, since nominal service availability did not translate into meaningful access when patients could not afford to seek care or continue treatment. Several participants also suggested that financial protection mechanisms remained limited in scope or uneven in implementation, leaving a substantial proportion of the population exposed to healthcare-related hardship.

“Even when services are technically available, many patients still cannot afford the total cost of treatment.” (Physician)

“Out-of-pocket spending is one of the clearest signs that universal coverage is still far from reality.” (Public Health Expert)

Taken together, these findings show that stakeholders viewed barriers to UHC as deeply interconnected. Underfinancing weakened infrastructure and staffing, workforce shortages reduced service reach, governance failures limited implementation, inequitable distribution restricted access, and high out-of-pocket expenditure undermined affordability. Rather than describing these as separate problems, participants portrayed them as mutually reinforcing system weaknesses that collectively obstruct equitable progress toward Universal Health Coverage in Pakistan.

Table 2. Subthemes and illustrative quotation placeholders

Theme	Subtheme	Participant Type
Insufficient health financing	Low public-sector investment	Policymaker
Insufficient health financing	Resource shortages across services	Hospital Administrator
Workforce shortages and maldistribution	Rural staffing gaps	Public Health Expert
Workforce shortages and maldistribution	Unequal specialist deployment	Physician
Weak governance and policy implementation	Policy-practice gap	Hospital Administrator
Weak governance and policy implementation	Fragmented coordination	Public Health Expert
Inequitable healthcare access	Urban-rural disparities	Physician
Inequitable healthcare access	Limited realistic service reach	Public Health Expert
High out-of-pocket expenditure	Financial hardship	Physician
High out-of-pocket expenditure	Weak financial protection	Public Health Expert

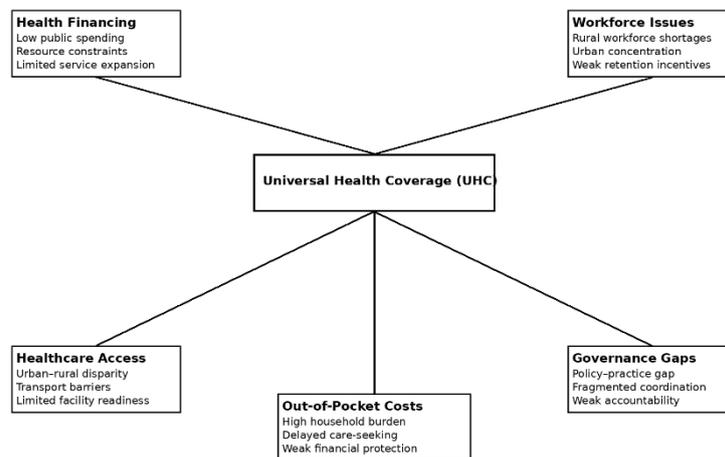


Figure 1. Thematic framework of barriers to Universal Health Coverage in Pakistan. This figure illustrates the interrelated system-level barriers identified through qualitative thematic analysis. Five major domains—health financing constraints, workforce shortages and maldistribution, governance and policy implementation gaps, inequitable healthcare access, and high out-of-pocket expenditure—collectively influence progress toward Universal Health Coverage (UHC). Subthemes within each domain highlight specific structural challenges, including low public spending, rural workforce shortages, policy-practice gaps, urban-rural disparities, and high household financial burden. The directional relationships demonstrate how governance and financing shape workforce distribution and healthcare accessibility, while financial burden directly affects healthcare utilization. Together, these interconnected components reflect the systemic nature of challenges hindering equitable health coverage in Pakistan.

DISCUSSION

The present study provides a qualitative exploration of systemic barriers to Universal Health Coverage in Pakistan, highlighting the interconnected nature of financing constraints, workforce maldistribution, governance inefficiencies, inequitable access, and high out-of-pocket expenditure. Rather than functioning as isolated challenges, these barriers were described by participants as mutually reinforcing components of a constrained health system, where deficiencies in one domain directly amplify limitations in others. This systems-level interdependence is consistent with broader health systems literature from low- and middle-income countries, where structural weaknesses in financing and governance often cascade into workforce shortages and inequitable service delivery.

Insufficient health financing emerged as a foundational constraint influencing nearly all other domains of the health system. Participants consistently described how limited public-sector investment restricted

infrastructure development, reduced availability of essential medicines, and constrained service expansion. This finding aligns with existing evidence that Pakistan's public health expenditure remains comparatively low, contributing to heavy reliance on private-sector care and increasing financial burden on households. From a systems perspective, underfinancing not only limits service availability but also undermines long-term planning, workforce retention, and institutional accountability, thereby weakening the overall trajectory toward UHC.

Workforce shortages and maldistribution were identified as critical operational barriers, particularly affecting rural and underserved populations. Participants emphasized that while the absolute number of trained professionals may be increasing, their geographic concentration in urban centers limits equitable service delivery. This reflects a broader pattern observed in similar settings, where inadequate rural incentives, limited career progression opportunities, and weak deployment policies contribute to persistent workforce imbalances. The findings suggest that workforce challenges are not solely related to supply, but also to governance and policy failures in distribution, retention, and system-level planning.

Governance and policy implementation gaps further complicate progress toward UHC by creating a disconnect between strategic planning and service delivery. Participants highlighted fragmentation across administrative levels, inconsistent policy execution, and weak accountability mechanisms as major impediments. The post-devolution health governance structure in Pakistan appears to have introduced both opportunities and challenges, with variability in provincial capacity contributing to uneven implementation outcomes. These findings underscore the importance of strengthening coordination mechanisms, enhancing administrative efficiency, and ensuring continuity in policy execution to translate UHC commitments into effective practice.

Inequitable healthcare access remains a persistent concern, particularly in relation to urban–rural disparities. Participants described how geographic, infrastructural, and logistical barriers limit access to care in peripheral regions. These disparities extend beyond physical availability to include issues of service readiness, continuity of care, and perceived quality. In line with existing qualitative research in Pakistan, factors such as mobility constraints, safety concerns, and sociocultural influences may further restrict healthcare access, especially for vulnerable populations. Addressing these inequities requires not only infrastructure expansion but also targeted strategies that account for contextual barriers affecting healthcare utilization.

High out-of-pocket expenditure was identified as a direct and immediate barrier to healthcare utilization, reflecting the limited financial protection available within the system. Participants described how healthcare costs influence care-seeking behavior, often leading to delayed treatment or avoidance of services altogether. This finding is consistent with national and international evidence indicating that a large proportion of healthcare spending in Pakistan is borne by households. From a UHC perspective, financial protection is a core component, and the persistence of high out-of-pocket payments suggests that current financing mechanisms remain insufficient to ensure equitable access.

The study also highlights important implementation implications. Strengthening primary healthcare systems, improving workforce distribution through targeted incentives, enhancing governance coordination, and expanding financial protection mechanisms are critical areas for reform. In addition, strategies such as community-based service delivery, improved monitoring systems, and integration of health information systems may support more effective implementation of UHC-related policies.

In terms of trustworthiness, the study draws on perspectives from multiple stakeholder groups, allowing for triangulation across policy, administrative, and clinical viewpoints. This enhances the credibility of the findings by capturing diverse experiences within the health system. However, several limitations should be acknowledged. First, the study relies on self-reported perspectives, which may be influenced by professional roles and subjective interpretation. Second, participants were purposively selected, which may limit generalizability but is appropriate for qualitative inquiry. Third, the absence of direct patient

perspectives may restrict understanding of demand-side barriers. Finally, as an endline qualitative assessment, the study does not establish causal relationships but instead provides interpretive insights into system-level challenges.

CONCLUSION

This qualitative study highlights that progress toward Universal Health Coverage in Pakistan is constrained by interrelated systemic barriers spanning financing, workforce distribution, governance, access, and financial protection. Stakeholders consistently emphasized that these challenges are not independent but operate collectively to limit equitable healthcare delivery. The findings suggest that achieving UHC will require coordinated and sustained reforms that strengthen health financing, improve workforce deployment, enhance governance mechanisms, and expand financial protection strategies. In addition to structural reforms, attention to implementation processes and contextual realities will be essential for translating policy commitments into effective and equitable healthcare services. These insights provide a foundation for policy and system-level interventions aimed at advancing UHC in Pakistan.

REFERENCES

1. Ahmed J, Shaikh BT, Ali N. Universal health coverage in Pakistan: challenges and opportunities. *Health Res Policy Syst.* 2018;16(1):24.
2. Atun R, Jaffar S, Nishtar S, Knaul FM, Barreto ML, Nyirenda M, et al. Improving responsiveness of health systems to non-communicable diseases. *Lancet.* 2013;381(9867):690–7.
3. Bossert TJ, Mitchell AD. Health sector decentralization and local decision-making. *Soc Sci Med.* 2011;72(5):785–91.
4. Khan MM, Mahmud S. Health care financing and equity in Pakistan. *Int J Health Plann Manage.* 2015;30(4):353–68.
5. Nishtar S. *Choked pipes: reforming Pakistan's mixed health system.* Oxford: Oxford University Press; 2010.
6. Savedoff WD, de Ferranti D, Smith AL, Fan V. Political and economic aspects of the transition to universal health coverage. *Lancet.* 2012;380(9845):924–32.
7. Shaikh BT, Rabbani F. Health management information system in Pakistan. *East Mediterr Health J.* 2004;10(1):164–73.
8. World Bank. *Pakistan health sector review.* Washington (DC): World Bank; 2022.
9. World Health Organization. *Universal health coverage global monitoring report.* Geneva: WHO; 2021.
10. Khatri GK, Ansari J, Akhlaq A. Exploring barriers, facilitators and stakeholders' perspective to the implementation of sustainable health equity: a case of Sindh, Pakistan. *Int J Trends Innov Bus Soc Sci.* 2025;3(4):313-26.
11. Sharma J, Pavlova M, Groot W. Challenges and opportunities for universal health coverage in South Asia: a scoping review. *Asia Pac J Public Health.* 2025;37(1):7-16.

12. Durrani F, Maidah, Shaikh F, Alkhaldi M. A comparative policy analysis of health inequities in access to healthcare across low- and high-income contexts: the cases of Pakistan and Canada. *Int J Environ Res Public Health*. 2025;22(11):1735.
13. Malik M, Strang N, Hafeez A, Shabbir M, Iftikhar F, Jonuscheit S. Barriers to accessing eye care in Pakistan: a mixed methods study. *Prim Health Care Res Dev*. 2025;26:e58.
14. Khan MR, Nazir MA, Afzal S. A need for a comprehensive health financing strategy in Pakistan: an analysis of key health financing issues. *J Health Organ Manag*. 2025;39(4):531-49.
15. Belay DG, Tessema GA, Meherali S, Lassi ZS. Spatial distribution and determinants of health care access barriers among female Pakistan youths: spatial and multilevel regression analysis. *BMC Health Serv Res*. 2025;25(1):1181.