



Exploring Barriers, Facilitators and Stakeholders' Perspective to the Implementation of Sustainable Health Equity: A Case of Sindh, Pakistan

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ABSTRACT

The purpose of this study was to explore the barriers, facilitators and perspectives of stakeholders to the implementation of sustainable health equity in the healthcare sector of Sindh, Pakistan. Using a qualitative approach, it study used purposive sampling. Semi-structured, in-depth interviews were conducted with 09 participants, including district health officers, monitoring and evaluation, physicians, and paramedical staff. The data were analyzed through a thematic analysis using NVivo. Participants had a limited understanding of sustainable health equity. Most of them believed that equity would have been achieved by meeting one of the targets of (SDG 3.8), i.e. Universal Health Coverage. The findings show that sustainable health equity in Sindh cannot be achieved through service expansion alone, but rather the progress requires equity-focused governance, inclusion of stakeholders' views in policy formation. For these steps, financing, monitoring of services and outcomes, and political commitment are required. The study highlights that sustainable health equity can only be implemented if the stakeholders from the healthcare sector of Sindh are actively involved in policy formation. Current health equity policies should be reviewed, keeping in view the points of stakeholders. This study can support sustainable health equity policy implementation in Pakistan and offer lessons for similar healthcare system settings seeking to implement sustainable health equity.

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INTRODUCTION

Sustainable health equity means ensuring fair health outcomes for everyone now and in future generations (Castro et al., 2021; Goldstein et al., 2024; Munro et al., 2020). It entails upholding the right to health, and developing public services and policies through processes that are inclusive, participatory, and accountable (Boyd et al., 2023; Castro et al., 2021; World Health Organization, 2025). Globally, a substantial share of the population remains unable to access basic health services because of high costs. In fact, many millions spend a significant portion of their household income on health care, while every

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year many people are driven into extreme poverty due to the cost of essential health services (Bouckley et al., 2025; Jakovljevic & Getzen, 2016; Khattak et al., 2023). To guarantee that anyone can obtain health care whenever needed, there must be a structured system, a skilled health-care workforce, and strong policies capable of advocating effectively for universal access (Hasan et al., 2022; Hosseinpour et al., 2023). The purpose of this study was to explore the barriers, facilitators and perspectives of stakeholders to the implementation of sustainable health equity in the healthcare sector of Sindh, Pakistan. The study contributed by providing subnational evidence from Sindh, addressing a gap where most South Asian studies remain national or sector specific. It integrates stakeholder perspectives across policy, service delivery, and development sectors, offering an implementation focused view rather than outcome description.

- What barriers hinder the implementation of sustainable health equity initiatives in Sindh, Pakistan?
- What facilitators support sustainable health equity within the Sindh health system?
- How do key stakeholders in Sindh perceive and operationalize sustainable health equity?

LITERATURE REVIEW

Health is a fundamental human right, the entitlement to achieve the highest attainable standard of physical and mental well-being. Progressively achieving the right to health involves systematically recognizing and removing unfair differences rooted in inequities in health and overall living conditions (Abu El Kheir-Mataria, 2023; Bouckley et al., 2025; Shaikh & Ali, 2023; World Health Organization, 2025). According to World Health Organization, because health is a human right, all people deserve equal enjoyment of it (World Health Organization, 2025; Zaka et al., 2023). This underpins the concept of health equity. Health equity is defined as the “absence of unfair and avoidable or remediable differences in health among population groups” regardless of their social, economic, demographic, geographic status or other dimensions such as sex, gender, ethnicity, disability, or sexual orientation. When health equity is realized, every individual has the opportunity to reach their full health and well-being potential (Abu El Kheir-Mataria, 2023, p. 3035; Braveman, 2022; World Health Organization, 2025).

To realize this, the World Health Organization promotes Universal Health Coverage (UHC), ensuring that all individuals can access essential health services, including prevention, treatment, rehabilitation, and palliative care without financial hardship (Haider et al., 2025; Ranabhat et al., 2020). Since the aim of Universal Health Coverage is to guarantee that everyone can access needed health services without facing financial strain and its core principle is Health equity. Although equity is a core ambition of universal health coverage, simply putting UHC policies and strategies in place does not guarantee that equity will be realised (Rodney & Hill, 2014). Since 2015, UHC has been enshrined in the Sustainable Development Goals (SDG 3.8), and in 2019, countries reaffirmed their commitment by pledging to implement UHC at a United Nations high-level meeting (Hogan et al., 2018; Shaikh & Ali, 2023).

Another strategic objective of World Health Organization (WHO) for 2022 was to extend essential health services to an additional one billion people. Under this plan, every five years between 2015 and 2030, one billion more individuals globally should gain access to a defined set of standard health services (Hasan et al., 2022; Shah et al., 2024). The Sustainable Development Goals (SDG) indicator SDG 3.8.1 which measures coverage of essential health services via ‘tracer interventions’ (A “tracer intervention” is a standard, measurable health service or indicator chosen to “trace” or represent the broader health-system performance) covering reproductive, maternal, new born and child health; infectious diseases; and non-communicable diseases is used to align this UHC goal with the SDGs (Hasan et al., 2022).

The WHO’s work on Universal Health Coverage (UHC) specifically focuses on guaranteeing universal access to necessary health services of acceptable quality (prevention, treatment, rehabilitation, palliative care), protecting people from financial risk, and ensuring availability of safe, effective, affordable medicines and vaccines for all (Shelton et al., 2022). The standard of healthcare continues to be generally poor especially in low- and middle-income countries where most of the scarce resources go towards tertiary care hospitals, even though, primary health care (PHC) is the first and only point of contact for nearly 80 % of population with the health system (Gibbs et al., 2020; Odhus et al., 2024; Ranabhat et al., 2020). There is a pressing need for solid evidence about the barriers to and facilitators of quality-improvement initiatives in ways that are equitable in terms of their design and implementation (Bhat &

McCammon, 2021; Haemmerli et al., 2021).

For instance, the recent systematic review by (Odhus et al., 2024) on barriers and facilitators of quality improvement in primary health care synthesised findings from 47 studies across 52 LMICs, covering both communicable and non-communicable diseases along with equity considerations, identified that equity was often treated in a narrow way, focusing mainly on ensuring access for hard-to-reach or disadvantaged groups rather than embedding equity more deeply. The analysis also revealed multiple structural, organisational, and contextual constraints to quality improvement ranging from workforce shortages and inadequate infrastructure to weak health-systems support and limited data capacity (Odhus et al., 2024). A research study by Haemmerli et al. (2021) emphasized that when services formally exist and people have access to care, disadvantaged groups frequently receive lower-quality treatment compared to better-off communities. Authors recommended in their researches (Endalamaw et al., 2023; Haemmerli et al., 2021) that in future, researchers should include meaningful stakeholder engagement, that reflect local context to make a real progress.

Pakistan is classified as a lower-middle-income country and lies in the Eastern Mediterranean region. According to the most recent census in 2023, the country's population stands at about 241.5 million. Roughly 38.8 % of citizens now live in urban areas, while the remaining 61.2 % reside in rural communities (Hasan et al., 2022). Administratively, Pakistan is divided into four provinces Punjab, Sindh, Khyber Pakhtunkhwa (formerly NWFP), and Balochistan along with several federal territories. Each province is subdivided into districts, which are further broken down into sub-districts like Tehsils or Talukas (Hasan et al., 2022). Since independence, power in Pakistan has frequently been concentrated among a few dominant social groups notably the military, the civil service, and political-economic elites. Over the past several decades, governance has alternated between military rule and fragile democratic governments. As a result, many policies have been shaped by and for a narrow elite, often landowners or well-connected urban figures (Ghaffar et al., 2000). This has contributed to persistent neglect of social sectors like health, even during periods of modest economic growth. Therefore, improvements in healthcare outcomes have been indefinable, and many health and social indicators remain weak due to unavailability of data if compared with regional peers (Khan & Puthussery, 2019).

Pakistan's public health sector consists of three levels of healthcare. Primary health care is the first point of contact for most people. Secondary health care handles referrals from primary facilities and connects patients to tertiary services. Tertiary care manages advanced and specialized treatment. Community outreach adds another layer of support. Lady health workers and community midwives help deliver preventive and promotional services, which improves key health indicators. Public services include a network of Basic Health Units (BHUs) among other primary-care facilities. However, the budget allocated to healthcare sector by the government is very low, approximately 1.2% of GDP. This results in low quality care in most of the rural areas, underserved populations struggle to access quality healthcare that causes financial burden resultant in high out of pocket expenditure. Public healthcare sector infrastructure including basic health units (BHUs), sub-health centres, rural health centres (RHCs), maternal & child health centres (MNCHs), pharmacies/dispensaries, and dedicated tuberculosis (TB) clinics (Khan et al., 2023).

Healthcare sector of Pakistan faces continuous challenges, such as insufficient finance, brain drain of health professionals, limited importance on preventive and primary health care, unfair distribution of resources including man power among elite, underserved and marginalized populations, and gaps in infrastructure and service delivery (Afridi et al., 2025). Pakistan's health-care system is marked by a sharp urban rural divide in service delivery, and many remote areas suffer from a serious shortage of health-care personnel from health managers and nurses to paramedics and skilled birth attendants making it difficult for outlying communities to obtain adequate care (Khan et al., 2023; Saifullah et al., 2023). After constitutional reforms in 2010 notably the 18th Constitutional Amendment responsibility for health services in Pakistan was transferred to the provinces, with the aim of ensuring fair access to healthcare and equitable health financing at the local level (Hasan et al., 2022; Khan et al., 2023). As a result, provincial governments now bear the primary responsibility for crafting health policies, enacting relevant laws, regulating medicines, hiring health-care staff, and planning and running healthcare programs within their territories (Akhlaq, 2016).

The province of Sindh stands out economically; it is the second-largest economy in the country after

Punjab. Its capital, Karachi, is the most populous city in Pakistan and its main financial center, hosting major industries and seaports, and driving much of Sindh's industrial and commercial activity. Outside Karachi, much of Sindh is agriculturally based. Despite its economic strength, many social and health-related indicators in Sindh remain below national averages pointing to persistent inequities in health and social outcomes across the province (Haider et al., 2025; Hasan et al., 2022). According to a fact sheet from World Bank, Sindh records higher pregnancy-related deaths (345 per 100,000 live births) and a maternal mortality rate of 224 per 100,000 live births figures that exceed those reported for Punjab (219 and 157 respectively) and Khyber Pakhtunkhwa (175 and 165). The same report indicates that Sindh's under-5 mortalities is 77%, close to the national average of 74%, and like Balochistan at 78%, but noticeably higher than Khyber Pakhtunkhwa's 64%. In many rural areas, health facilities suffer from serious deficits. They often lack enough trained staff, essential medicines, and up-to-date medical equipment. At the same time, infrastructure is poor clinics may be understaffed, under-equipped, and unable to meet even minimal standards for delivering quality care (Khan et al., 2023). As reported in the latest fact sheet for World Bank on Sindh, over 54% of women in the province face difficulties when trying to access health care and nearly 46% say they are unwilling to visit a health facility alone. Moreover, many women confront barriers to exercising their reproductive health rights, and among those unable to access services, at least 10% blame family restrictions often tied to cost or prevailing social norms (Belay et al., 2025; Kamal et al., 2025).

Researchers suggested in their studies that a holistic effort by the government is required to overcome these barriers (Bouckley et al., 2025; Haider et al., 2025). In a country with limited resources, to improve maternal and child health services, ensuring that life-saving interventions are accessible to everyone, and strengthening health-care system, all stakeholders including communities, healthcare professionals, institutions and evaluation and monitoring organizations should be on same page (Bouckley et al., 2025; Khan et al., 2025; World Health Organization, 2025). There is a need to explore the specific barriers and facilitators to the implementation of sustainable health equity in Sindh, Pakistan (Haider et al., 2025; Saifullah et al., 2023). To fill the gap, the study addresses the following research questions developed through a critical review of global and South Asian health equity literature and SDG implementation studies.

METHODOLOGY

The study used qualitative, in-depth, semi-structured interviews with nine participants who held important positions in district administration and provincial government (district health officers, officials from evaluation and monitoring institutions, healthcare providers, including physicians and paramedical staff). The potential participants were contacted by phone and email. Nine out of the eighteen people that were invited consented to take part in the interviews. Six male and three female individuals participated in a total of nine interviews. The participants' availability and convenience were taken into consideration when scheduling the interviews. Participants were recruited using the purposeful sampling technique, and data saturation was taken into consideration while determining the sample size. They had to have at least three years of experience working for the Department of Health or a private sector organization in Sindh with direct or indirect involvement in the implementation of sustainable health equity to be eligible to participate. As seen in Table 2, the participants held positions in both governmental and private sector organizations.

Table 1

Key characteristics of Participants

Interviewees	Gender	Location	Domain	Interview Method
ZS_S1	M	Nawabshah	MNE_S1	Online
FL_S2	F	Hyderabad	HCO_S2	Online
SB_S3	F	Badin	MNE_S3	Online
SA_C1	M	Larkana	ACD_C1	Online
KS_D2	M	Karachi	ACD_D2	In person
SZ_E1	F	Mithi	GOS_E1	Online
SS_W1	M	Karachi	INT_W1	In person
WM_K1	M	Urban Slum	DOH_K1	In person
AZ_U1	M	Karachi	INT_U1	In person

Interviews were conducted. Before the interview started, informed consent was obtained. According to Al-Busaidi (2008), the qualitative technique enabled the researcher to examine the participants comprehensively within their setting (Al-Busaidi, 2008). In contrast to a conventional question-and-answer session, the interview questions were posed in a conversational approach, allowing the interviews to be performed in an unhindered, natural manner. Based on a tool used in a previous study to investigate stakeholders' perspectives on sustainable health equity, a semi-structured interview guide was created (Shah et al., 2024). It was reviewed by subject experts in public health and health policy and piloted with two participants to assess clarity, relevance, and contextual appropriateness. Minor refinements were made based on pilot feedback. Participants' comprehension and awareness of sustainable health equity, the sources from which they obtained the information, their opinions regarding the reasons behind the provincial government's adoption of the sustainable health equity policy and the delays in its implementation, and their opinions regarding the obstacles and enablers in the policy's implementation were all covered in the flexible interview guide. English was used for the interviews.

The interviews lasted 45 minutes on average. With the participants' consent, all the interviews were audio recorded and then verbatim notes were transcribed. Braun and Clarke's theme approach served as the foundation for the analysis (Braun & Clarke, 2019). NVIVO was used by the researcher to do the analysis. A set of within-case themes was assigned to each interview based on a significant passage in the transcript. Based on the goals of the study, a straightforward framework was then used to classify the themes. The Consolidated Criteria for Reporting Qualitative Research (COREQ) criteria were adhered to by the approach (Tong et al., 2007). To enhance trustworthiness, triangulation across stakeholder groups was employed, and peer debriefing was conducted during theme development. The Institute of Business Management's Research Ethics Committee granted the project ethical permission.

RESULTS & FINDINGS

Interviews were conducted with 06 male and 03 female participants. Analysis of 09 in-depth interviews revealed several interconnected themes that reflect the barriers, enablers, and systemic challenges influencing sustainable health equity in Sindh. The analysis of interviews, documents, and field notes revealed several barriers and facilitators to implementing sustainable health equity. Themes and subthemes are shown in Table-2.

Table 2
Themes and subthemes

Themes	Subthemes
Barriers to Sustainable Health Equity	Barriers to Equitable Healthcare Access
	Poor governance and policy gaps
	Human Resource Challenges
Facilitators to Sustainable Health Equity	Human Resources Initiatives
	Expansion of Healthcare Infrastructure for better Accessibility
	Raising awareness and education
	Systemic Reform for Sustainability
	Strengthening Primary Healthcare

Barriers to Sustainable Health Equity

Barriers to Equitable Healthcare Access

The major barriers reported by the respondents under this subtheme included socioeconomic disparities in access to health-promoting resources, lack of facilities for vulnerable populations, weak functionality of primary healthcare units, overreliance on tertiary care hospitals, geographic and infrastructural barriers in rural and remote areas. A District health officer of a rural Sindh area consistently highlighted the unequal access to healthcare between privileged and marginalized groups that was deep-rooted socioeconomic disparities limit equitable access to healthcare in Sindh. This divide, according to interviewee, makes true health equity between rich and poor difficult to achieve.

"..... poor people cannot access essentials for good health like clean environments, hygiene, and sanitation, unlike the better-off who can. Therefore, health equity between rich and poor is unattainable" SB_S3

Equity concerns were raised by community representatives. They reported that women, children, and low-income families face limited access to quality healthcare, long travel distances to facilities and financial barriers restrict their ability to seek timely care. There were no special measures for vulnerable population including the elderly, disabled people, pregnant women and children, highlighted by the community representatives.

"There is no arrangements exist for vulnerable people like the aged, disabled, children, or pregnant women" FL_S2

"... unavailability of accessibility features in hospitals like ramps or lifts, forcing vulnerable people to use stairs, which is very inconvenient for them to access to care." SZ_E1

Participants including community representative and a healthcare professional highlighted that the primary healthcare non-functionality is a major concern. They shared that basic health units (BHUs) were often non-functional, under-staffed, or operated by a single paramedic. Working hours of these centres, usually limited to morning shifts, further decreases their service for communities. Due to these reasons people prefer to visit tertiary care hospitals even for minor illnesses, resultant in overcrowding and overburdening of healthcare providers.

"... people don't have confidence in nearby BHUs, due to unavailability of proper facilities" FL_S2

".... Most of the people visited tertiary care hospitals even for minor illnesses causes the hospital and staff overburdened" SB_S3

"..... in marginalized areas as well as rural Sindh, basic health units are mostly non-functional or run by one paramedic. due to unavailability of doctor patient travel long distances" SA_C1

"..... in most of the areas primary health care units works in the morning shift only, not 24 hours" SZ_E1

A respondent from an international organization discussed about geographic barriers, that many rural and remote areas, including riverine, mountainous, and desert regions, remain underserved. The respondent also shared that in these areas people often travel long distances to reach functioning healthcare units, reflecting gaps in healthcare planning and service delivery across Sindh.

"..... one of the untapped area is Kaccha areas. Like we have around 200 union councils lying across a rural riverine belt, mountainous belt and then desert area" SS_W1

Poor Governance and Policy Gaps

This subtheme covers lack of accountability mechanisms, weak policy execution, political interference and administrative instability, unavailability of data, limited capacity and of district health officers, the government's focus on vertical healthcare programs rather than horizontal, weak governance structures, poor awareness of government policies, dominance of non-medical staff in management roles, weak monitoring systems, lack of coordination among implementing bodies and lack of awareness about equity policies. A health officer described fragmented service structures where primary healthcare was managed by separate organizations such as People's Primary Healthcare Initiatives (PPHI), while secondary and tertiary care remained under government control. This fragmented service structure disrupted referral pathways and weakened continuity of care.

".....when primary care staff refer a patient to secondary or tertiary care, they often refuse to accept the patient." FL_S2

".... there is no coordination system among the three levels because each has a different management. As a result, the patient suffers." WM_K1

According to monitoring and evaluation officers, the district health officers were responsible for policy implementation. However, when they were asked about health equity policies, they stated that no directives had been given by the government to implement them. District health officers also shared that their powers were limited and they only act on instructions from higher authorities.

"..... government focuses on vertical healthcare programs rather than horizontal programs" AZ_U1

Some of the senior public health care officials and healthcare professionals shared that although the 18th Constitutional Amendment (2010) devolved health responsibilities to provinces, Sindh still struggles with policy coordination and inter-departmental collaboration. weak monitoring, delayed budgeting, and absence of district-level autonomy were also cited as key barriers. Furthermore, absence of accountability

mechanisms weakens the implementation of health equity policies in Sindh, shared by the respondents. They expressed the need for a dedicated institutional framework to ensure transparency and monitor the progress of initiatives.

"... there should be an institution with accountability" WM_K1

Many participants noted that although health policies exist, they are often not translated into action. These policies remain confined to official documents, with limited follow-up or evaluation. The lack of enforcement mechanisms prevents policies from achieving their intended impact. Political interference and frequent administrative transfers were also identified as major factors that disrupt program continuity. Respondents emphasized that frequent leadership changes within health departments hinder long-term planning, weaken institutional memory, and lead to inconsistent policy execution across districts.

"Policies exist but they are not implemented..... political influence and transfers destroy continuity in programs". AZ_U1

Policies exist, but they remain only on paper." ZS_S1

Almost all respondents said that there is no proper system for data collection in Pakistan, nor is there any technical or trained staff, especially in interior Sindh. When reliable data is missing, resource distribution cannot be fair. If resources are not allocated based on equity, achieving equity in health service delivery is not possible.

"..... based on this collected, ill-collected data, what type of analysis will be done" SS_W1

"... to implement equity data collection process should be improved" SZ_E1

"... without correct data.... no fair resources distribution no fair and just services delivery" ZS_S1

Human Resource Challenges

Nearly all participants identified human resource shortages and poor motivation as major obstacles. Incompetent salary and benefits, lack of skilled workforce due to poor incentives, non-medical staff dominate management roles, non-doctor leadership in health departments overburdened health service providers, divided administrative structure, ineffective training, unavailability of technical support, high turnover rate and funding bias, lack of follow-up and feedback mechanisms, poor engagement and motivation, need for practical, hands-on learning and monitoring of training outcomes by institutions where they work. Almost all respondents pointed out severe human resource disparities across Sindh. Many doctors avoid postings in interior Sindh due to low and unattractive salary packages, poor living conditions, and lack of quality educational facilities for their children.

"... underfunding of primary healthcare, vacant posts, irregular training, and lack of incentives causes workforce instability" WM_K1

"..... the salary, of course, there is need for improvement in that aspect..... since this is not being addressed, that's why we are exploring and experiencing brain drain. " SS_W1

"... doctors prefer urban centers..... rural postings lack security, facilities, and housing even paramedics are reluctant to stay." FL_S2

"..... doctors don't want to go interior Sindh.... unattractive salary packages, unavailability of good schooling for their children etc." SS_W1

Accessibility challenges further compound the issue. Respondents noted that many Basic Health Units (BHUs) and Rural Health Centres (RHCs) are located in remote areas with poor transportation links and no residential facilities for health workers.

"BHUs and RHCs are located far away... travelling is a big problem.... no houses available nearby" SZ_E1

One of the participants reported that management positions in the health department, particularly at the provincial level, are often held by non-medical staff. This administrative dominance by non-doctors was perceived to weaken technical decision-making and reduce the system's responsiveness to healthcare needs.

"..... the team which are working health departments at the management level, provincial management, they are totally non-doctors". ZS_S1

Respondents from government medical universities emphasized that one of the major cause of the

absence of health equity is that the medical curriculum does not adequately include health equity content.

“The community medicine book contains only one paragraph about health equity, which is insufficient” SA_C1

“.... students study to pass the course, no special attention is given to this topic it is just the PMDC curriculum that it is an essential part” KS_D2

Public healthcare officials emphasized that training and workshops for doctors exist but lack effectiveness due to poor follow-up and absence of feedback mechanisms. Some participants mentioned that such sessions are often treated as formalities rather than genuine learning opportunities, which limits their impact on professional development and healthcare quality.

“.... workshops and training sessions for doctors are conducted, but they are often ineffective because feedback is not collected” SB_S3

“..... many doctors attend these sessions primarily for leisure rather than professional learning” ZS_S1

“.... they are willing to establish health facilities over around 200 union councils lying across a rural riverine belt, mountainous belt and then desert areas. But the problem is no HR is willing to go there” SS_W1

Facilitators to Sustainable Health Equity

Human Resources Initiatives

Respondents identified human resource initiatives as a major facilitator. They mentioned the government has started hiring of healthcare professionals in underserved districts and is offering good incentives for rural postings. Equitable distribution of human resources was seen as essential for reducing service gaps between urban and rural areas. Participants also linked workforce training to improved motivation and service quality.

“.... they have hired lots of hundreds of doctors in the past five years, they have also hired hundreds of EPI vaccinators” SS_W1

“.... as far as lady health workers, they are already working on it” SZ_E1

Expansion of Healthcare Infrastructure for better Accessibility

Subthemes included establishment of specialized healthcare branches in multiple districts, strengthening of rural healthcare network and government initiatives to expand coverage in remote and underserved areas. Officials from monitoring and evaluation institutions highlighted the government's active role in expanding healthcare infrastructure across Sindh.

“..... Sindh government has also opened the branches of NICVD in Hyderabad, Larkana, Sukkur Sehwan, Tando Muhammad Khan and Khairpur, ... also planning to expand it to the Thatta region as well” SA_C1

A respondent from monitoring institute shared that another branch of SIUT in Karachi is a positive development to improve access to specialized care.

“..... we have now another SIUT branch in Karachi” ZS_S1

Government aimed at establishing healthcare facilities across approximately 200 union councils located in riverine, mountainous, and desert belts, mentioned by one of the respondents from an international organization. To expand healthcare access and reduce geographic disparities in service delivery within Sindh, these efforts reflect a growing commitment by the government.

Raising Awareness and Education

Facilitators under this theme included awareness about health equity as a key enabler, education improving healthcare equity, public sensitization on health equity and capacity building through continuous learning. Medical professors suggest that for implementing sustainable health equity and raising awareness about providing equitable healthcare should be a priority for both hospital management and clinical staff to overcome these problems. They suggest that health professionals, administrators, and support staff require ongoing skill development to deliver equitable healthcare.

“..... medical students should be made responsible for promoting equity during their studies” KS_D2

“..... they should be taught the importance of equity at that stage, and adherence to equity should be made

mandatory in their professional practice” SA_C1

Healthcare providers shared that awareness campaigns, health education sessions, and community dialogues can help people recognize their rights, demand equitable services, and participate in improving local health systems.

“... communities often lack understanding of what health equity means and why it matters” WM_K1

Systemic Reform for Sustainability

The major facilitators under this theme included adequate and stable funding, integration of (vertical) preventive and (horizontal) curative care, accountability and transparent governance and data driven decision making. A respondent from public health sector underlined that reliable data systems are essential to guide reforms, allocate resources effectively, and track progress on health equity goals.

“... to promote equity resources should be distributed as per requirement.... now data is required” SS_W1

One of the District health officers stressed the importance of institutional sustainability in achieving long-term equity. It was noted that short-term donor-funded projects often end without integration into the provincial system.

“Every new project starts from zero. Once the donor leaves, everything collapses. We need a permanent provincial equity framework.” WM_K1

One of the medical professors highlighted that sustainable health reforms require systemic coordination across academia, governance and service delivery systems.

“.... there is a lack of coordination among academia, government, service providers and local communities collaboration is required to generate context based solutions” KS_D2

Strengthening Primary Healthcare

Respondents from tertiary care hospitals had the perception that strengthening the primary healthcare system is central to achieving equity. They said that well-functioning basic health units and rural health centers increase access for low-income populations and reduce the load on tertiary hospitals. They shared that primary healthcare improvements led to better referral systems and early disease detection.

“.... If you will see at the basic health units, rural health centres support, you will see that this is 90% more concentrated in rural districts” FL_S2

One of the respondents from monitoring institution also highlighted that strengthening primary healthcare is a key enabler to promote health equity.

“.... BHUs, RHCs or DHQs and THQs where doctors, labs and staff etc. are available, people do not visit tertiary care hospitals for minor illnesses...this is one of the facilitators to health equity” ZS_S1

“.... government is willing to establish health facilities over around 200 union councils lying across a rural riverine belt, mountainous belt and then desert areas” SS_W1.

Discussion

This article is based on a qualitative study and the objective of this study was to explore the barriers, facilitators, and stakeholders' perspective for the implementation of sustainable health equity within the healthcare system of Sindh, Pakistan. Findings from this study reveals a set of inter-related barriers including structural and institutional barriers such as infrastructure, medical equipment, essential supplies, healthcare professionals, maintenance and management, socioeconomic barriers like low household income, high out of pocket expenses, low education, gender and social norms, and geographical barriers like long travel distances, lack of transport that significantly hinder the conceptual and practical understanding of sustainable health equity in Sindh. Other studies have found that the lack of health equity leaves many rural and marginalized populations facing persistent shortages of healthcare professionals, inadequate infrastructure, and limited access to essential medicines and equipment. All these factors undermine the capacity of healthcare facilities to meet minimum standards of quality care (Bouckley et al., 2025; Haider et al., 2025).

The study findings are interpreted using established global health equity frameworks to deepen analytical insight. Barriers and facilitators identified across themes are examined through the WHO

equity ladder (Hosseinpoor et al., 2023) and the Social Determinants of Health framework (Marmot, 2020), demonstrating how structural, institutional, and political dynamics shape progression toward equitable health outcomes. This perspective highlights how limitations in governance, financing, and accountability constrain advancement beyond basic access toward sustained and effective equity, as reflected in recent equity implementation research (Castro et al., 2021; Hogan et al., 2018). By situating the results within these frameworks, the analysis clarifies the mechanisms through which equity is enabled or hindered in subnational health systems (Bergen, 2020).

According to WHO report on social determinants of health equity (World Health Organization, 2025) cultural and social limits especially among women create an added barrier to inclusion. Seeking care may require approval from family or social norms often guide decisions. These constraints lessen women's autonomy and limit their access to maternal and reproductive health facilities. A girl's life expectancy can be more than 80 years if she is born in some countries where social determinants of health equity are strong but less than 45 years if she is born in others where cultural beliefs and social determinants are poor. Large gaps also appear within countries, where health outcomes are closely linked with degrees of social disadvantage (Afridi et al., 2025; Sarikhani et al., 2024). While improving service quality is a central aim of sustainable health equity, the participants stated that quality improves only with the improvement of governance. (Shah et al., 2024; Shaikh & Ali, 2023). The results are further aligned with SDG 3 and SDG 10 indicators, highlighting gaps between policy commitments and subnational implementation. This framework-based interpretation underscores the implications of the findings for equity-oriented health system strengthening and sustainable policy action in low- and middle-income settings.

The findings show ongoing challenges in promoting sustainable health equity in Sindh. Most of the people faces uneven access to healthcare facilities but rural and vulnerable groups facing the greatest barriers (Afridi et al., 2025; Ahmed et al., 2024). Many communities rely on NGOs and private providers, and this fragmented structure deepens gaps in the healthcare system of Sindh (Mehboob, 2023). Governance and policy issues like weak accountability, political influence, and poor implementation not only reduce health equity promotion but also interrupt policy goals and hinder real progress. Limited monitoring also prevents early correction of inequities (Mahmood et al., 2024). Although Human resource shortages remain a major constraint but other factors such as uneven distribution of staff, limited training opportunities, and low motivation reduce service quality and weaken the system's ability to meet community needs (Shahbaz et al., 2023). Training programs curricula often do not match current health needs and restrict the workforce's ability to deliver modern equitable care. Sustainability also suffers due to dependence on donors, poor integration of services, and the absence of clear equity indicators continue to slow reforms (Odwe et al., 2024). These findings highlight the urgent need for a strong long term provincial plan that prioritize equity in health planning, equitable resource allocation and province wide strategies.

Stakeholders also pointed to key facilitators and opportunities that can support progress. The devolution of health responsibilities to provincial governments created space for local context driven planning that provide an important structural platform for achieving equitable healthcare system that fit district needs. This approach works when governments back it with clear policies and better distribution of funds. However, as our findings show, devolution alone is insufficient without targeted investments in human resources, infrastructure, and community-responsive strategies that requires regular engagement with stakeholders. According to Duncan (2025), structural inequity is rising in many regions causing wider gaps in health outcomes. These trends have pushed researchers to focus more on health equity. The growing body of evidence can guide policy decisions. Better policies can improve health and reduce inequities. Recent work from LMICs shows similar patterns. Studies report that absence of health equity caused by limited budgets, workforce shortages, and weak healthcare facilities reduce the success of health programs. These constraints appear in most health equity initiatives. For example, a review by Gustafson et al., (2023) found that inadequate financing and staff burnout were major barriers to long term program of sustainable health equity in South Asia and East Africa (Ahmed et al., 2024).

This study's findings reveal that to implement sustainable health equity in Sindh is not achievable through service availability alone but it requires stronger governance focused on equity, better coordination across institutions, and active inclusion of populations from marginalized areas. This transformation requires finance, monitoring of health services and outcomes, and sustained political support. A key strength of this study is its comprehensive approach. By combining insights from stakeholders with an

analysis of systemic factors such as resources, infrastructure, and social determinants, the study offers a detailed view of what is required to achieve sustainable health equity in Sindh. The findings also help to reinforce their relevance and credibility together with recent empirical and policy literature. However, our study has some limitations. The cross-sectional, qualitative nature of the stakeholder perspective means that not all aspects of inequity may be captured, particularly in certain districts or among marginalized subgroups and not to reach areas. This risk is likely small because participants were required to have at least three years of experience in the Department of Health or in a private organization with direct or indirect involvement in implementing the sustainable health equity.

CONCLUSION

This study examined the views of nine stakeholders on sustainable health equity in Sindh, focusing on the barriers and facilitators that influence its implementation in the healthcare sector. Most participants had only a basic understanding of the concept, which shows the need for clearer communication and targeted awareness efforts. The provincial department of health should review its current approach and policy and take steps to build stronger understanding of what sustainable health equity means and how it can improve health services. The study also shows that sustainable health equity in Sindh is a complex challenge. Increasing the number of facilities alone will not resolve existing gaps. Real progress requires attention to several issues at the same time. These include strengthening the health workforce, improving infrastructure, addressing socioeconomic barriers, tackling gender norms, ensuring stable financing, improving governance, and involving communities in planning and decision making.

The involvement of healthcare staff is essential for successful implementation. Stakeholders should be included in policy discussions, their concerns should be acknowledged, and any implementation steps should be refined with their input. There is also a need for a detailed assessment of the existing initiatives and policies related to sustainable health equity. This should be done using clear indicators, supported by qualitative insights from both providers and service users, to ensure that future strategies are grounded in real experiences and needs. In short, equity under UHC or under any health-system vision is not automatic it must be deliberately designed, financed, and managed.

Competing Interests

The authors declared no competing interests.

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