BMC Health Services Research

RESEARCH

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Exploring challenges in accessing primary healthcare for pregnant women in Pakistan: a qualitative descriptive study

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Abstract

Introduction Maternal and newborn mortality are critical global health concerns. Achieving Sustainable Development Goal 3.8 (SDGs), which aims to improve these outcomes, is hindered by the poor quality of care in health facilities, a significant barrier to the utilization of antenatal care (ANC) services in Pakistan. This study aimed to explore the barriers to the underutilization of ANC services in Tehsil (sub-division of a district) Hazro, Punjab, Pakistan, from the perspective of pregnant women.

Method The study employed four focus group discussions (FGDs) with 36 pregnant women who had attended at least three ANC visits. Data were collected through purposive sampling and analyzed using NVivo 12, ensuring rigor through Lincoln and Guba's guiding principles.

Result The findings revealed three key themes, following the three delays model: 1. Decision to Seek Care, 2. Delay in Reaching Healthcare Facilities, and 3. Delay in Acquiring Satisfactory and Appropriate Health Care. Women often made the decision to seek care with the support of their spouse, family, and lady health workers, highlighting the importance of their decision-making autonomy. Financial constraints did not significantly hinder access to healthcare services. However, long distances, travel time, and associated costs were identified as major barriers. Most importantly, the majority of women lacked awareness of danger signs and the importance of seeking timely medical help. This issue was compounded by the unavailability of healthcare personnel, negative staff attitudes, insufficient medicines and equipment, and a lack of referral services.

Conclusion This descriptive study underscores the urgent need for affordable, accessible, and responsive maternal and child healthcare. To address these barriers, stakeholders – including policymakers, public health experts, and maternal, neonatal, and child health (MNCH) providers – must prioritize MNCH initiatives and reforms. Collaborative efforts are crucial to translating MNCH policies into effective strategies at the community level.

Keywords Maternal & child health, Three delays Model, Antenatal care

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Introduction

Maternal and child health is not just a local or regional concern but a universal issue that profoundly impacts societies and nations alike. The well-being of mothers and infants is a crucial component of public health, and access to quality maternal healthcare is pivotal in the global effort to reduce maternal and neonatal mortality rates. This fundamental issue is underscored by Sustainable Development Goal 3.8 (SDG), which sets ambitious targets to improve maternal and child health worldwide [1, 2]. Despite concerted global efforts to enhance maternal healthcare and reduce mortality, Pakistan continues to face alarming statistics. The maternal mortality rate in Pakistan stands at 178 deaths per 100,000 live births, while the neonatal mortality rate is equally concerning, with 42 deaths per 1000 live births [3]. These stark figures highlight the urgent need for more attention, research, and action to address the ongoing challenges in maternal and child health in Pakistan.

The maternal healthcare landscape in Pakistan is undeniably complex, shaped by a multifaceted interplay of sociocultural, economic, and healthcare system factors [4]. The journey of pregnant women in this context is fraught with barriers that often deter them from seeking timely antenatal care (ANC) services and skilled birth attendance. The consequences of these delays are profound, leading to adverse outcomes for both mothers and their newborns [5]. When effectively delivered, maternal and child health services have the potential to significantly reduce maternal and neonatal deaths [3]. These interventions are recognized for being cost-effective, accessible, and low-tech, making them essential tools in addressing maternal and child mortality. However, the utilization of these services varies greatly across the globe, particularly in developing nations, where social, cultural, and economic often hinder access [4].

There is some hope, as data from the United Nations Development Programme (UNDP) show a positive trend in the number of mothers visiting ANC clinics during pregnancy. This ratio increased from 37% in 1990 to 52% in 2012, marking a step forward [5]. While progress is evident, the gap in healthcare access and utilization remains wide, especially in Pakistan, where persistently high maternal and neonatal mortality rates emphasize the need for improved access to and use of maternal healthcare [6]. Achieving this goal, however, is a complex task due to the interplay of various sociocultural, economic, and systemic factors, all of which influence pregnant women's ability to access and utilize maternal health services [4].

This research takes shape within this intricate context, aiming to investigate the perceived barriers pregnant women face when accessing primary healthcare facilities in Pakistan. These challenges are not unique to Pakistan but are echoed in many other developing countries. Therefore, the insights gained from this study have the potential to transcend national boundaries, offering valuable lessons for other regions facing similar issues.

Method

In the qualitative descriptive study, we conducted four focus group discussions (FGDs) with a total of thirty-six female participants. The interview guide, initially developed as a semi-structured tool by a qualitative expert, was revised after pilot testing by the co-author research team and finalized by the supervisor. The eligibility criteria for participant selection required pregnant women who had attended at least three antenatal visits at the study site; those who did not meet this criterion were excluded. Informed consent was obtained from eligible participants using a purposive sampling technique.

During the FGDs, a qualitative expert facilitated the discussions, using the focus group interview guide to encourage open communication and interaction through conversational probes. Each session was recorded, and field notes were taken. The interviews lasted approximately one hour each. To ensure data rigor and completeness, a summary of the discussion was shared and reviewed with the participants.

Data confidentiality was strictly maintained by storing all collected data on a password-protected device accessible only to the research team. The interviews were conducted in Urdu, with subsequent translation and transcription into English for analysis.

The first step in the data analysis process involved transcription, during which detailed handwritten notes were recorded and retained. A manual analysis of the transcribed interviews was then conducted, including the creation of codes, categories, and themes. Any identifying information related to the participants was removed before transcription for analysis. The entire FGDs were transcribed in full for analysis.

Both inductive (bottom-up) and deductive (top-down) approaches were used to code each recording. To ensure validation, two independent team members assigned distinct labels to significant text segments representing participants' perspectives. The research team reviewed the codes to resolve any discrepancies. As a final step, the raw data was compared with the emerging themes. Two independent investigators conducted coding, created categories, and performed thematic analysis, resolving conflicts to minimize researcher bias.

The "Three Delays" model of maternal mortality served as the conceptual framework for identifying barriers to the utilization of maternal and child health services in the selected area. This model was contextualized for the Pakistani setting and became the conceptual foundation for this study.

Findings

Factors Associated with the Underutilization of Antenatal Services: An analysis using the 3-Delay Model of High-Risk Mortality Among pregnant mothers.

Theme I: Decision to seek care

Valued women's decision to seeking Health

Husbands and family members are generally supportive of antenatal care (ANC) at healthcare facilities, even before complications arise. This demonstrates that these individuals support the mother's decision. Moreover, they possess a good understanding of pregnancy. However, concerns remain about segments of the community that lack knowledge about the importance of timely medical care. Pregnant mothers typically do not make decisions to seek care on their own; the choice often rests with spouses or senior relatives.

All 36 study participants responded positively, stating:

> *"Their decision was valued, and they participated in the decision-making process for ANC care"- (FGD 1, 2, 3, & 4).*

However, one participant from FGD 3 mentioned:

> *"My husband and I both participate in decision-making, but the final decision is made by my mother-in-law" – (FGD 3).*

Supported from Family and LHWs for ANC visits

There is always someone to accompany the woman to the healthcare facility for an ANC visit. It is important to note that women have the right to see a doctor when they are unwell and to receive the care they need. All 36 participants confirmed that whenever they wanted to visit the hospital or healthcare facility, their husband or a family member would accompany them. However, a few participants relied on lady health workers (LHWs) for their ANC visits.

> *"If we say that we are unwell and want to see a doctor, we ask our husband' or mother-in-law to take us, especially during pregnancy or when feeling unwell" --- (FGD 1, 2, 3, & 4).*

A few participants also noted:

> *"Usually, my family trusts LHWs, so all the women in my family visit the ANC clinic with them".*

Financial implications of ANC visits

The primary obstacles to utilizing ANC services are poverty and the family's financial crisis. Although medical consultations are free at Basic Health Units (BHUs), Rural Health Centers (RHCs), and government hospitals, families can hardly afford the cost of medical care. A few women mentioned walking 15–20 minutes to reach the healthcare facility, but they managed because seeking antenatal care is important for both the mother and baby.

In response, all 36 study participants from the four FGDs stated:

> *"It is difficult to meet the expenses, but health is important, and it's the only option".*

(Refer to Fig. 1 for theme I)

Theme II: delay in reaching healthcare facilities

Distance to Healthcare Centers and hospitals

The use of RHCs or BHUs is challenged by factors such as distance and lack of transportation. Pregnant women identified several obstacles, including the cost of transportation, unpaved or non-existent roads (which can delay access), and uncertain service hours at healthcare facilities. Participants from FGD 1 said:

> *"Someone has to go with us; we cannot go alone as BHU Khagwani is far, and it takes about around 30 minutes"- (FGD1).*

- *1. Valued Women decision for seeking health*
  - *Value and accept women choice.*
    - *Permission*
    - *Supportive care*
- *2. Need Support for reaching to the facility*
  - *Accompanied by Spouse and Mother by marriage or LHWs.*
  - *Other family members support as caretaker of kids*
- *3. Financial implications*
  - *Expensive*
  - *Important for health*

Fig. 1 Illustrating reasons for the decision to seek care

Participants from FGD 4 noted:

> *"We prefer going to THQ (Tehsil Head Quarter) tertiary setup, which is about 5 km away and takes around 30 minutes." – (FGD 4).*

Availability and cost of transportation

Household factors, such as financial constraints, family disputes, or lack of knowledge about danger signs during childbirth, were mentioned occasionally. However, geographic access and transportation were cited more frequently as barriers. Participants found it difficult to arrange transportation for ANC and intrapartum care but managed by using local vehicle such as rickshaws, which cost approximately 1000 rupees ($ 3.58). A few participants mentioned using motorbikes with family members for transportation.

Participant Nine said:

> *"I rent a rickshaw to reach BHU Khagwani, which costs about 1000 rupees ($ 3.58)" – (FGD 3).*

Participant Four stated:

> *"We commute on our family members' motorbikes to the healthcare facility" – (FGD 3).*

Poor understanding of seeking care

> *Participants were asked about their understanding of obstetric complications. Conditions such as retained placenta, pre- and post-pregnancy discharge, puerperal fever, and convulsions were among the complications discussed. Many women and their partners lacked knowledge of danger signs and symptoms, which impacted their decision to seek timely medical help. Most participants reported inadequate counseling or empathy from healthcare providers at primary health centers (PHCs), leading some women to seek care from traditional birth attendants (TBAs) in private setups for delivery.*

Only a few participants recognized danger signs like fever, convulsions, blood discharge, and extreme pain. Most only reported:

> *"Pain near the due date" – (FGD 1,2,3, & 4).*

One participant from FGD 3 stated:

> *"I would prefer the availability of facilities, especially at BHU and RHC, to avoid referrals, save time and money, and not put the mother and baby at risk" – (FGD 3).*

(Refer to Fig. 2 for theme II)

Theme III: delay in acquiring satisfactory and appropriate health care

Unequipped facilities and inadequate medical supplies

Due to poor administration and the low-quality of care, many pregnant women who visited primary healthcare centers chose not to use public facilities. Participants mentioned a lack of staff, diagnostic tests, C-section facilities, and long wait times. All participants stated:

> *"We prefer to go to THQ because it's closer, cost less, is more comfortable, and all tests and procedures are performed under one roof – blood tests, C-sections, and other procedures" – (FGD 1, 2, 3, & 4).*

Participants noted that blood tests and anomaly scans were unavailable at BHU Khagwani and other BHUs. C-sections were not offered at any BHUs or RHCs, leading women to be referred elsewhere for delivery. Despite

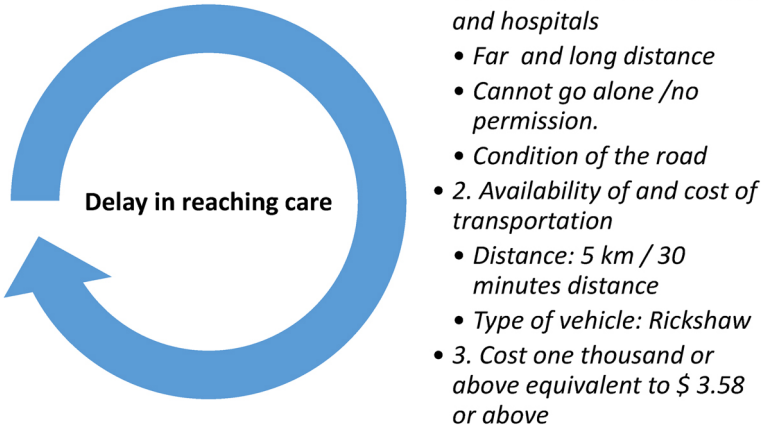

Fig. 2 Illustrating reasons for delay in reaching care

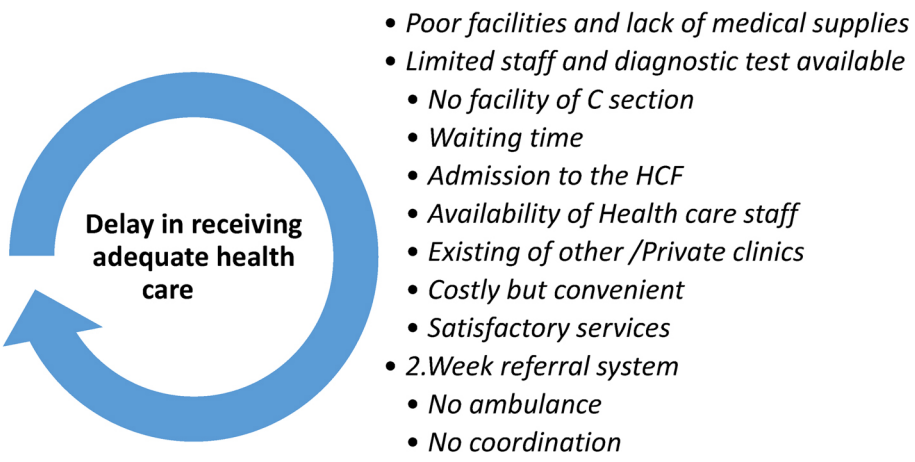

Fig. 3 Illustrating reasons for delay in receiving adequate healthcare

these challenges, some participants were still satisfied with BHU services.

One participant from FGD 1 shared:

> *"At BHU and RHC, no one answers initially, no one comes early to help us, and when they do, their attitude is bad, as if we are bothering them. Nothing special happens, it's just like that." – (FGD 1).*

Reasons for women's preference towards private clinics

Participants also noted that private clinics had better facilities, such as uninterrupted electricity and better ventilation. They mentioned that private clinics had stronger community outreach strategies and encouraged families to seek care there. The private sector offered all necessary medical services under one roof, and the doctors were perceived as more skilled and having better attitude than those in government healthcare. As a result, despite the higher costs, many participants preferred private clinics.

One participant from FGD 4 said:

> *"Private clinics call us and tell us that if we come, they will provide better care –(FGD 4).*

Another participant from FGD 2 mentioned:

> *"When we go to the private clinic, they take care of us, so we are happier going there, and it's less difficult" –(FGD 2).*

Weak referral system

Many participants noted that there were no ambulance services available in case of emergency. Community women and family members often had to arrange transportation themselves, typically using rickshaws. This lack of emergency services was one of the reasons they did not prefer deliveries at BHUs or the public-sector facilities.

> *"There are no ambulance services, so husbands and brothers must arrange transport in emergencies. This is why the community doesn't prefer BHUs/THQ" –(FGD 3).*

Another participant stated:

> *"No one attends to us when we are in need of emergency care" – (FGD 2).*

(Refer to Fig. 3 for Theme III)

Discussion

In the qualitative part of our study, we found positive family support and assistance from LHWs for women seeking antenatal care. However, poverty and financial crises were significant barriers to seeking care. Additionally, inadequate knowledge about obstetric care, unprofessional behavior of healthcare personnel toward women in the community, insufficient medical facilities, and the absence of ambulances further compounded the challenges to accessing healthcare services at the community level. These findings align with previous studies conducted in Pakistan [6–9] and other low-and-middle-income countries (LMICs), such as India [10], Nepal [10], and Bangladesh [11]. Decisions regarding antenatal care were often made by partners, mothers-in-law, and other senior family members, rather than by the pregnant women themselves. This study also highlighted the community's trust in LHWs, who facilitated a positive experience throughout the pregnancy.

The Three Delays Model can effectively identify barriers to emergency care-seeking and delivery in Pakistan [12]. Addressing these barriers requires raising maternal health awareness, addressing socioeconomic and cultural factors, improving transportation infrastructure, increasing the number of healthcare providers, enhancing their training and motivation, and strengthening referral

systems [8, 13]. These efforts can contribute to reducing maternal and neonatal mortality rates and improving the quality of emergency care in Pakistan [14].

Many pregnant women, particularly those living in rural areas, do not seek prenatal care due to the long distances they must travel to reach healthcare centers for antenatal check-ups and services. This barrier often outweighs the perceived importance of seeking antenatal care, as found in this study, which echoes similar findings [15]. Women's decisions were significantly influenced by the travel distance to ANC services [9]. Additionally, awareness of healthcare options was shaped by the accessibility of transportation and facilities [16].

The cost of accessing antenatal care services was another constraining factor that affected women's and their families' decisions to seek care, especially in rural areas. A similar study in Uganda identified several barriers, including poor quality of care, unprofessional attitudes of medical staff, socio-cultural practices, lack of support from husbands and families, institutional structures, and inadequate transportation for HIV testing and antenatal care [9, 17]. This study also highlighted the underutilization of public healthcare facilities, leading to an increased risk of delays for pregnant women.

To support maternal health, the LHW program needs further expansion, with a focus on the respectful treatment of referred clients. Budget allocations must be directed toward primary healthcare services and ambulance provision to ensure easier access to and affordability of antenatal care. There is a need for specialized training for healthcare workers to improve empathetic communication and responsiveness toward their patients.

Efforts should also focus on promoting the concept of birth preparedness and complication readiness among women and their families, which would reduce decision-making delays. Trusted community leaders and influencers can play a key role in encouraging community participation and promoting these messages. By incorporating familiar and culturally acceptable practices, the community is more likely to embrace these ideas.

Strengthening the link between trained birth attendants (TBAs) and healthcare facilities is crucial, as TBAs significantly influence delivery preferences. When skilled TBAs are available, women and their families are more likely to make positive decisions regarding antenatal care.

In LMICs, including Pakistan, the weak referral system for antenatal care poses a serious challenge, leading to poor service utilization and adverse health outcomes for pregnant women. To address this issue, we must increase access to community-based health professionals, enhance maternal literacy, remove socioeconomic and cultural barriers to maternity and neonatal referral services, and improve emergency care data collection [8, 18, 19]. These initiatives can enhance the quality of ANC care and reduce maternal and newborn mortality rates in Pakistan [20, 21] and other LMICs.

The implications of this research extend beyond Pakistan. The maternal healthcare challenges faced by pregnant women in Pakistan are not unique, and this study contributes to the global maternal health agenda. The humanitarian principle that every pregnant woman deserves safe and accessible healthcare is a shared commitment, transcending national and cultural boundaries [22, 23]. In alignment with this global commitment, Pakistan's National Health Vision 2025 aims to enhance the health of all citizens, especially women and children, by ensuring universal access to quality essential health services, financial protection, and a focus on vulnerable groups through resilient and responsive health systems [24].

Thus, this research holds the potential to significantly contribute to the improvement of maternal and child health in Pakistan. By understanding the barriers perceived by pregnant women, we can work towards building a healthcare system that is not only accessible but also responsive and supportive of their unique needs.

Conclusion

This study underscores the critical need for maternal healthcare that is affordable, accessible, and responsive to the needs of mothers. By applying the Three Delays Model in pregnancy risk assessment, several key insights emerged:

1. Delay in Decision-Making: While many women, with the support of their spouses, families, and Lady Health Workers (LHWs), confidently attended antenatal care (ANC) clinics, there were significant constraints. These included a lack of transportation and a widespread fear of potential complications, both of which hindered timely decision-making.
2. Delay in Seeking Care: The second theme revealed that the long distances to healthcare facilities, particularly tertiary care hospitals, posed a major barrier, especially at the time of delivery. Additionally, women lacked awareness of the danger signs during pregnancy and the importance of seeking medical help promptly. This points to a critical gap in health education.
3. Delay in Receiving Adequate Quality Care: The third theme identified systemic failures at the Basic Health Unit (BHU) level. Issues such as inadequate medical equipment, shortages of essential medicines, unprofessional behavior of staff, and the absence of ambulatory services to refer patients for specialized care were significant shortcomings of the health system.

Further research and recommendations

To address these challenges, future research should focus on identifying effective strategies to improve maternal health education, particularly in raising awareness about danger signs and the importance of timely medical intervention. Additionally, research should explore innovative solutions to overcome transportation barriers and ensure the availability of quality care at the BHU level.

Reforms needed

Stakeholders—including policymakers, the Ministry of Health, public health specialists, and Maternal, Neonatal, and Child Health (MNCH) providers—must prioritize MNCH initiatives. Reforms should include:

- Community-Level Interventions: Translating MNCH policies into culturally sensitive and accessible community-based programs.
- Infrastructure and Resources: Strengthening the infrastructure of BHUs by providing adequate medical equipment, essential medicines, and trained staff.
- Capacity Building: Enhancing the capacity of healthcare workers through continuous training and development to improve their responsiveness and the quality of care provided.
- Transportation Solutions: Implementing community-based transportation services to ensure timely access to healthcare facilities.

Way forward

At the local level, targeted interventions should be designed and implemented to address the specific challenges identified in this study. At the national level, a comprehensive approach is needed to ensure that MNCH reforms are integrated into the broader healthcare system, with a focus on sustainability and scalability. Collaboration among government entities, non-governmental organizations, and community leaders will be crucial in driving these reforms forward.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12913-024-11637-1.

Supplementary Material 1.

Acknowledgements

This master's thesis, authored by BK, is dedicated to expressing our deep appreciation to Dr. HM and all the co-authors for their invaluable guidance and support throughout this research. We are also grateful to all the participants, the Deputy District Officer of Health in Hazro, and the Senior Medical Officer at THQ Hazro, who generously contributed their time and insights, which played a crucial role in the success of this study.

Authors' contributions

BK was the Principal Investigator (PI), who conceptualized the study and was involved in study design. BK, HM, and BA designed the study protocol and obtained IRB approval. BK, BA, and HM were involved in formulating the study methodology, developing study tools, and finalizing the data analysis plan. JMA, RJ, and BK were involved in article writing, BK and HM conducted the literature review and helped review and edit the study tools. JMA, AM, & RJ contributed to editing the manuscripts. All authors reviewed the manuscript several times and provided critical feedback. All authors read and approved the final version of the manuscript.

Funding

Not Applicable.

Availability of data and materials

The datasets generated and/or analyzed during the current study are not publicly available due to privacy and confidentiality but are available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

The research presented in this manuscript received ethical approval from the Ethical Review Committee of the Armed Forces Post Graduate Medical Institute under reference number 208-AAA-ERC-AFPGMI. Written informed consent was obtained from all participants before their enrollment in the study. The consent process involved a comprehensive explanation of the study's background, rationale, and the associated advantages and disadvantages to the mothers. It is important to note that adherence to ethical principles was maintained throughout the entire research process, in accordance with the guidelines outlined in the Declaration of Helsinki.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 5 November 2023 / Accepted: 23 September 2024
Published online: 01 April 2025

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