Maternal mortality and morbidity in Pakistan: a situational analysis

Abstract

Background **The maternal mortality rate in Pakistan is high, which has been attributed partly to delays in accessing healthcare for women who are pregnant and in labour. This study aimed to explore the community's perspectives of delays to use of health services in pregnancy and labour, using the 'three delays' model and the framework for determinants of maternal mortality.**

Methods **An explorative-descriptive approach was used, with purposeful sampling of 382 participants selected from across Pakistan. Four groups of participants were selected: married women, married men, adolescent girls and adolescent boys.**

Results **Several factors led to delays seeking healthcare. Women were unable to decide for themselves whether to attend a healthcare facility, there were issues reaching a facility in time and at the facility, either the resources or healthcare workers were lacking.**

Conclusions **Women must be given education and access to healthcare in order to reduce maternal mortality and morbidity.**

Keywords

Maternal mortality | Three delay model | Women's health

Since the inception of the millennium development goals, and with the subsequent sustainable development goals, maternal mortality and morbidity have been highlighted as major global issues. However, reduction of these rates on a global level appears stagnant (Mehboob et al, 2020). In 2017, the global maternal mortality rate was 140 per 100 000 live births (UNICEF, 2018). The sustainable development goals aim to reduce the global neonatal mortality ratio to 12 per 1000 live births and the maternal mortality ratio to 70 deaths per 100 000 live births by 2030 (National Institute of Population Studies and The DHS Program, 2019).

In Pakistan, the maternal mortality rate was 319 per 100 000 live births in 2017, and other indicators showed similarly high levels (neonatal mortality: 49.4 per 1000 live births, stillbirth: 53.5 per 1000 births) (UNICEF, 2018). Although the proportion of births attended by skilled birth attendants in Pakistan increased to 71% in 2019, compared to 52% in 2013 (UNICEF, 2022), it has been found that compared to other countries, including Kenya and Zambia, there is less frequent implementation of safety measures, such as the use of gloves, to reduce maternal and neonatal morbidity and mortality (Aziz et al, 2020).

Cultural context and perceived gender roles play an important role in delays to seek maternity healthcare. A study in India reported that 90% of women who did not receive antenatal care experienced delays in the decision to seek maternity healthcare (Sk et al, 2019; World Health Organization, 2019). Sk et al (2019) also reported that Muslim women more frequently experienced delays when travelling to a healthcare facility compared to women of other religions, potentially as a result of greater dependence on their husbands to allow them to attend a healthcare facility.

In Pakistan's culture, decision making is the responsibility of a woman's husband and in-laws, including for family planning methods and how many children to have, as well as when to seek healthcare services during pregnancy and labour. A research study in the Punjab province of Pakistan explored delays in

Nimira Asif
Assistant professor[1]
Nimira.asif@aku.edu

Farzana Adnan
Senior instructor[1]

Shahnaz Shahid Ali
Senior instructor[1]

Dr Zahid Memon
Directors Project[2]

Dr Tazeen Saeed Ali
Professor[1]

[1]School of Nursing and Midwifery, Aga Khan University, Pakistan

[2]Centre of Excellence in Women & Child Health, Department of Paediatrics and Child Health, Aga Khan University, Pakistan

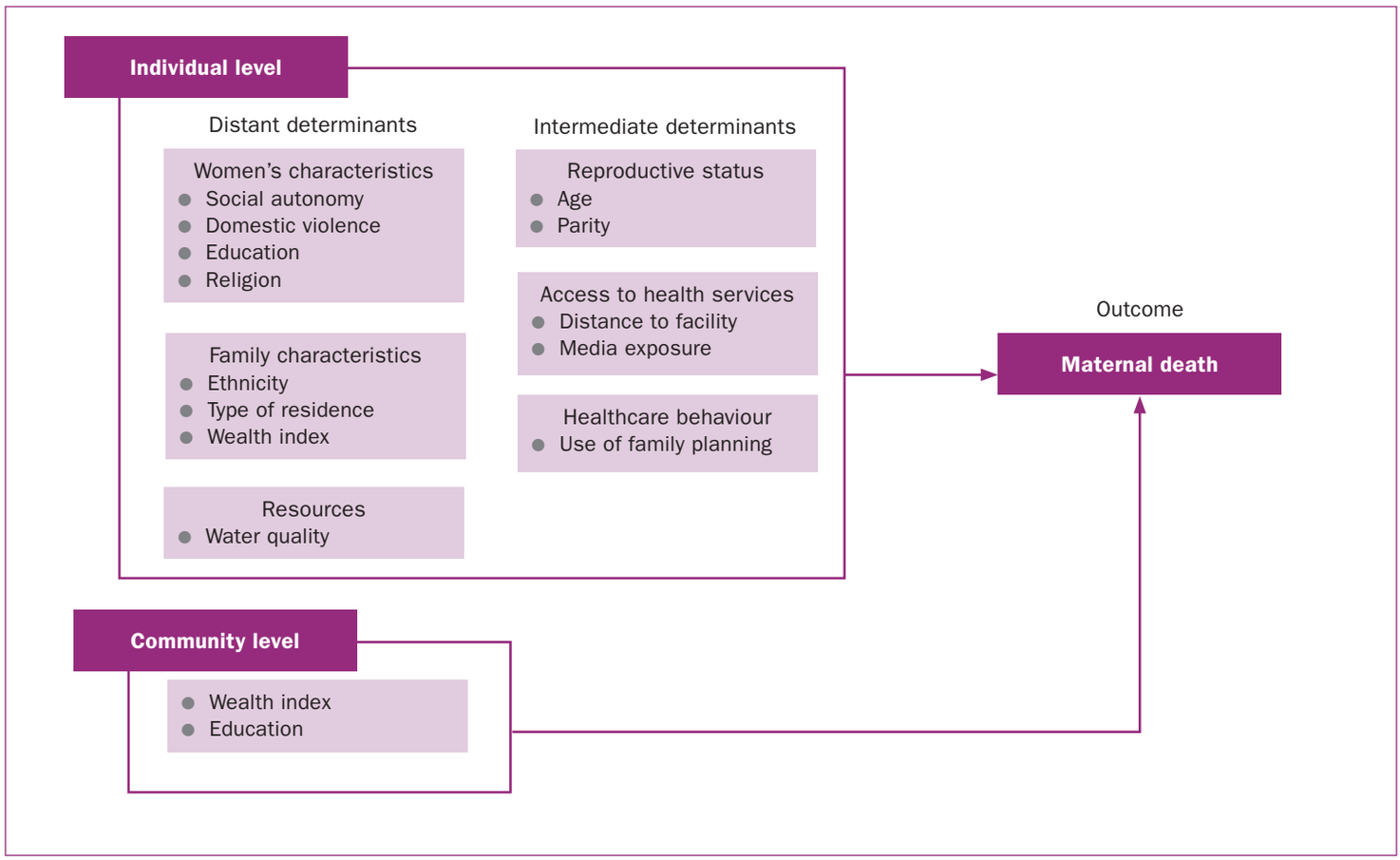

Figure 1. A framework for analysing the determinants of maternal mortality

accessing maternity healthcare services in connection to cultural and social practices of the region (Omer, 2019). It was found that poverty, unemployed women having poor social status, gender imbalance and lack of awareness of maternal health concerns were the primary causes of delays (Omer, 2019). Similar research conducted locally reported that 70% of respondents faced delays in deciding to seek healthcare, and the majority of women attributed this to their husband's choice (Mattoo et al, 2019). The researchers concluded that the cultural and social profile of women in the nation contributed to the high maternal mortality ratio (Mattoo et al, 2019).

In Pakistani culture, men are seen as more powerful, and society is generally non-inclusive to women; 'while [women] play a substantial role in food production and food security, they are largely unpaid, suffer from greater time poverty and are far more vulnerable to exploitation than men' (Pasha et al, 2020). Men are prioritised for financial and nutritional care from their family, as they are considered to be more important as the 'bread winner'. This inequality means that there are fewer functional healthcare facilities in Pakistan that provide care for women (Pasha et al, 2020); mountainous regions in Pakistan experience this issue to a greater degree because of the harsh terrain and lack of resources. The healthcare system in Pakistan faces challenges as a result of inadequacy of resources, inequity, lack of and untrained human resources that also include a mismanaged structure and gender insensitivity (Hassan et al, 2017).

Pakistan's healthcare system includes private and public services. It is estimated that 70% of the population are served by private facilities (Hassan et al, 2017). The remaining 30% of the population who use government facilities can experience delays to healthcare, as a result of a lack of essential drugs, medical and surgical equipment at these sites (Pacagnella et al, 2014; Mgawadere et al, 2017).

The three delays model (Thaddeus and Maine, 1994) describes delays to seeking maternity healthcare at three points: the decision to seek healthcare, reaching an appropriate facility, and receiving adequate care when a facility is reached. This model identifies the responsibilities of family, the community and healthcare personnel in addressing the challenges of childbirth in order to reduce maternal mortality.

The framework for determinants of maternal mortality (McCarthy and Maine, 1992), modified in 1992, describes factors that influence maternal mortality,

including pregnancy or pregnancy-related outcomes, a woman's health and reproductive status, accessibility of healthcare and health-seeking behaviour. The most distant influencing factors are cultural background and socioeconomic status (*Figure 1*). The framework advises that there are three key ways to reduce maternal mortality: decrease the chances of a woman becoming pregnant, decrease the likelihood of experiencing pregnancy-related complications, and improve outcomes for women who do experience complications.

The present study aimed to explore the insights and experiences of people in the Pakistani community about maternal mortality through sexual and reproductive health awareness. The objectives were to explore the community's perspectives of delaying use of health services in pregnancy and labour, using the three delays model and the framework for determinants of maternal mortality.

Methods

The study design used a qualitative paradigm with an explorative-descriptive approach to explore the community's perceptions and experiences of maternity care and delays seeking healthcare. The study sites included selected districts from Khyber Pakhtunkhwa (Chitral), six districts from Gilgit-Baltistan (Gilgit, Ghizer, Hunza, Nagar, Astore, Skardu) and two districts from Sindh (Matiari and Qambar Shahdadkot). These districts were purposively selected as representative of the population, based on stakeholder information shared with community leaders.

Sampling

Purposeful sampling was used to select participants, with the help of a community liaison who supported identification of suitable participants. Two age groups, split into men and women in each group, were recruited: married adults aged 18–49 years (80 women, 103 men), and adolescents aged 14–19 years (94 adolescent girls, 105 adolescent boys). A total of 382 participants were recruited. Qualitative studies have no fixed approach for sample size calculation, unlike quantitative methods (Quinn Patton, 2002); therefore, attaining meaningful data to recognise themes was the goal, not a predetermined number of participants (Hanson et al, 2011).

Data collection

Focus group discussions were held between October and December 2020. Four sets of focus group discussions were carried out with adolescent boys, adolescent girls, married men and married women in each of the 10 selected districts; research associates moderated the discussion and a research assistant took field notes and transcribed the discussion.

Each group was held face to face with 10–12 participants who spoke for an average of 75–120 minutes. Each discussion was audio-recorded, and conducted in mixed languages including Urdu, English and local languages. A local moderator and translator was present at each discussion. The purpose of the study and process of data collection was explained to the participants, and their demographic data were collected. Participants were also asked to check the transcript of their discussion, to ensure it was accurate.

An interview guide was used to conduct the discussion. The guide was created based on the available literature and the anecdotal observations and experiences of the research team. The tool was confirmed after a dry-run with the data collection team at each field site. Following the team's suggestions, the wording of questions was revised for better understanding at the contextual level.

Data analysis

After data were collected, the interview transcripts were translated and transcribed into English by the research team. The Creswell (2013) steps were used to analyse the interview transcripts. First manual analysis was carried out by thoroughly reading each transcript, and codes were classified. Data were segregated by contextual similarity and categories were derived. Then themes were developed and manual analysis was carried out with the help of an expert data analyst. Three broad themes were elucidated from the data: safe motherhood, maternal mortality and health system building blocks. This article reports the findings of the 'maternal mortality' theme, and the data are structured around the three delays model, and the framework for determinants of maternal mortality.

Analysis was facilitated by the QSR NVivo 10 software. Inquiries were added to the software to explore the frequency of particular words, check a word cloud, identify tree maps, and create nodes. This supported an in-depth understanding of the main concept for the study: maternal mortality and morbidity in the data. Team members then compiled the results and linked the analyses for verification. The research team visited the sites for results validation, including a presentation of the results to participants, creating trustworthiness and confirmability.

Ethical considerations

Approval to conduct the study was granted by the ethics review committee of Aga Khan University (approval number: 2021-3606-18261). All participants who met the inclusion criteria were informed that participation in the study was voluntary. Written informed consent was obtained from all participants. Codes were assigned to each participant to maintain confidentiality and anonymity.

Table 1. Demographic characteristics of married women

Characteristic		Frequency, *n*=80 (%)
Age (years)	18–35	56 (70.0)
	36–55	24 (30.0)
Education	Illiterate	11 (13.8)
	Primary	16 (20.0)
	Secondary	13 (16.3)
	Intermediate	16 (20.0)
	BA/BSc	19 (23.8)
	Masters	5 (6.3)
Occupation	Business owner	4 (5.0)
	Privately employed	4 (5.0)
	Housewife	58 (72.5)
	Student	4 (5.0)
	Teacher	10 (12.5)

Table 2. Demographic characteristics of married men

Characteristic		Frequency, *n*=103 (%)
Age (years)	18–22	28 (27.2)
	23–35	40 (53.3)
	36–61	35 (46.7)
Education	None	19
	Primary	19
	Secondary	19
	Intermediate	8
	BA/BSc	19
	Masters	19
Occupation	Government job	8 (10.7)
	Privately employed	27 (36.0)
	Shopkeeper	12 (16.0)
	Student	2 (2.7)
	Unemployed	5 (6.7)
	Teacher	5 (6.7)
	Labourer	8 (10.7)
	Driver	6 (8.0)
	Farmer	2 (2.7)
	Did not share	28 (27.2)

Results

The participants' demographic characteristics showed that the majority of married women included the study were 18–35 years old (70.0%) and were housewives (72.5%) (*Table 1*). The largest proportion of the married male participants were 18–22 years old (53.3%) and the privately employed (26.2%) (*Table 2*). The majority of adolescent girl participants were 14–17 years old (64.9%) and had attended secondary school (47.9%) (*Table 3*). The majority of adolescent boy participants were 14–19 years old (75.2%) and had attended intermediate education (56.2%) (*Table 4*).

The three delays model

The qualitative findings were framed in terms of the three delay model: delays to deciding to seek care, delays to reaching an appropriate facility and delays to receiving care once at an appropriate healthcare facility.

Deciding to seek healthcare

Women delayed seeking healthcare when necessary because they lacked empowerment and autonomy. The participants reported that women waited for their husbands to decide to seek medical care if needed during pregnancy. Culturally, it was important that a woman followed her husband's commands.

> ***'Their cultural and religious beliefs encouraged them to follow their husbands' decisions. [The women] thought that accepting their husband's decision is an important factor as per the guidance of religion and for the stability of family'. P7, married woman, Gilgit***

Reaching an appropriate obstetric facility

As a result of the long distances from many of the participants' homes to healthcare facilities, it was difficult for many women to reach a facility to receive care. Consequently, many relied on home remedies and nearby birth attendants, instead of seeking a medical facility.

> ***'People from the neighbourhood help each other, for example helping with conveyance'. P13, married woman, upper Chitral***

> ***'[Family members] arrange money for the delivery, as money is required, so they arrange it for complications and treatment during pregnancy'. P12, married woman, upper Chitral***

This illustrates delays experienced for financial and transportation reasons. One participant reported that a child had recently died as the family was unable to reach a health facility.

'Emergency ward should be available because it is compulsory. Two weeks back, a child was sick so we were taking him in ambulance to Hunza and he died in the way to hospital'. P12, married woman, Nagar

Receiving adequate care

At times there is no oxygen in the emergency ward if they reach, the supplies are lacking, and there is a lack of qualified health care providers. It also includes birth attendants' lack the knowledge, skills, and equipment to perform a clean and safe delivery. It was also observed that there was a lack of emergency care for high-risk pregnancies. Postpartum care for mother and child was marginal at some places.

'Lack of availability/administration of an essential medicines, lack of caesarean section/surgery, lack of blood transfusion facilities are basic concerns at the referral hospitals due to which most of the women had to suffer'. P8, married woman, Gilgit

Distant determinants of maternal mortality

The participants reported a lack of autonomy in decision making, feeling that they could not disagree with their husbands if they did not feel ready for pregnancy or preferred to have more time between pregnancies. These issues were closely related to their wellbeing. Distant factors that influence morbidity and mortality according to the framework include women's personal characteristics, such as having social autonomy, experiencing violence, education, religious influence, family characteristics and the available resources to support growth and development, for example water and sanitation conditions at home.

Women's characteristics

Women reported that they felt powerless, and did not prioritise their own wellbeing as a result.

'We don't look after ourselves and there are a lot of house chores that we need to do and don't consider our health and diet'. P3, married woman, Gilgit

'My health does not allow me to have more than two children and it should be [a] woman's basic right to decide [if] she is able to raise the children instead of having more babies'. P14, adolescent girl, Gilgit

Participants from the group containing married women reported that they felt it was normal to follow everything told to them by their husband. This included prioritising his feelings, and ignoring her own, if necessary.

Table 3. Demographic characteristics of adolescent girls

Characteristic		Frequency, *n*=94 (%)
Age (years)	14–17	61 (64.9)
	18–21	33 (35.1)
Education	Illiterate	4 (4.3)
	Primary	4 (4.3)
	Secondary	45 (47.9)
	Intermediate	32 (34.0)
	BA/BSc	9 (9.6)

Table 4. Demographic characteristics of adolescent boys

Characteristic		Frequency, *n*=105 (%)
Age (years)	14–19	79 (75.2)
	20–23	28 (26.7)
Education	Illiterate	3 (2.9)
	Primary	1 (1.0)
	Secondary	34 (32.4)
	Intermediate	59 (56.2)
	BA/BSc	8 (7.6)

'[The] majority of females depend on their husband and family to take decisions related with sexual and reproductive health'. P2, married woman, Skardu

'In our society, husband make his wife feel his superiority over her and would make her realise that it is him, who has all the authority and power'. P6, married woman, Chitral

Religion also shaped women's perspective in terms of family planning and raising children. Religious views on men and women's roles were important.

'Let me give you an example. One woman [was] doing family planning, but her husband was not ready. Men often say that it is haram (not permitted) in the religion, Allah will provide everything for all the children, as explained by the scholar of the mosque about family planning. This is what most women are saying, so it is explained to them by a scholar'. P1, healthcare professional, Gilgit

Family characteristics

Married women reported that they felt that they should be at home, looking after the children and doing chores,

as well as teaching their daughters how to do chores, without considering their own health and wellbeing.

> ***'Yes it happens because women here work a lot physically and give birth to premature babies'. P18, married woman, upper Chitral***

Families were reported to be dominated by women's husbands. Men were the decision makers; therefore, young boys felt they should become strong and learn to take control.

> ***'Males have authoritative roles in the house'. R14, adolescent boy, Chitral***

On the other hand, women were seen as caregivers for their family and provided affection for everyone.

> ***'For women, according to cultural aspect, they are more associated with caring roles within the household'. G8, adolescent girl, Gilgit***

The participants highlighted that a man's role was to be the leader of the family and provide financial support.

> ***'The man is the head of the family, it is his responsibility to take care of his household. If he is married, he has to take care of his wife and children, especially the education of his children…Women should stay at home and do household work. R1, adolescent boy, Sindh***

Resources

Creating and accessing available resources is an important factor in maternal morbidity and mortality. As many women stayed home, they were dependent on their husbands for financial support. Some relied on neighbours and relatives for financial support as well.

> ***'People have to manage financial preparations and manage money'. C2, married woman, Skardu***

> ***'We have to manage vehicles in cause of any emergency'. C3, married woman, Skardu***

> ***'We have to manage money in case of any complication'. C4, married woman, Skardu***

> ***'Many people face problems when they have an operation. Or financial problems for reaching the hospital'. P2, married man, Ghizer***

While pregnant, many women worked in fields from early morning to dusk, lifting heavy materials and collecting drinking water. This was unavoidable, as the work needed to be carried out, but left little time for childcare and was difficult if women were pregnant.

> ***'"Are you able to provide basic needs to children?" That is the question every couple should ask themselves while planning for a family'. G16, adolescent girl, Chitral***

Discriminatory practices meant that when women inherited land, it was of poor quality and size, because those who controlled land gained social and political power and authority.

> ***'Women are most vulnerable, either as family members or wives due to discriminatory, customary practices. They come across different problems…during uneven distribution of resources'. P7, adolescent girl, Gilgit***

Intermediate determinants of maternal mortality

The immediate determinants of maternal morbidity and mortality included their reproductive status, accessibility of healthcare services and the state of the facilities themselves.

Reproductive status

Participants reported that although they felt that they should marry after they were 18 years old, it was common for girls to be married when they were only 15 years old. Those who were unmarried by age 15 were given additional chores, including taking care of younger siblings. According to the participants, early child marriages were common in the study area. Although the participants were aware of its consequences, girls were often seen as a financial burden, and thus married to remove this concern.

> ***'Most of the parents planned marriages of their girls at early age to reduce the financial burden'. SA, married man, Sindh***

Access to health services

Access to health services in remote areas was reported to be difficult, especially in times of rough weather. Access was affected by the associated costs of travelling to a healthcare facility.

> ***'Lack of funds inhibit us to seek care from the health care facility during pregnancy'. P2, married woman, Gilgit***

The participants also reported that the road system was of poor quality, and there was a lack of ambulance services to facilitate access.

'[We are] unable to reach health facility, especially where there is land sliding, and due to lack of accessibility'. P5, married woman, Chitral

The predominant culture of male dominance was also reported to affect access to health services. Husbands who allowed their wife to decide when to access healthcare were viewed poorly by the community. Women who were using contraception, such as condoms or pills, required their husband's permission to use it.

'Majority of females depends on their husband and family to take decisions related with sexual and reproductive health'. P2, married woman, Skardu

'[When asked if women think it is important to take permission from their husband or elders in order to use family planning facilities] I've no idea about elders but we have to take permission from our husband'. P6, married woman, Nagar

Healthcare facilities

Several factors related to the state of maternity services impacted women's access. High staff turnover was reported, as well as wasted resources and concerns over healthcare professionals' capacity to build a rapport with the women they cared for. Participants reported that women feared that nurses at the facilities would treat them badly, particularly if they had been unable to attend antenatal care before attending the hospital.

'She was vomiting throughout the night. The following morning, her husband decided to take her to the health centre but she refused…she had not yet got an antenatal care card. She feared the nurses because if she goes to complain about the vomiting, she will be asked for the card and without it they will tell her all salty words. She may be insulted or may even not be given medicine'. S3, married woman, Sindh

Discussion

This study explored the perceptions of married adults and adolescents regarding maternal mortality and morbidity, focusing on delays to accessing maternity services and determinants of mortality. This was done through focus group discussion held across districts in Pakistan. The findings showed that women delayed seeking care for a number of reasons, including feeling the need to care for others and not prioritise their own needs, family structures that encouraged male dominance and a culture that allowed men to make decisions on reproductive health. Once a woman did decide to seek care, the environment, including the available facilities and the state of the roads potentially delayed reaching a facility. At the facility, the lack of qualified personnel and resources led to further delays. These all contribute to maternal mortality and morbidity.

Causes of maternal death are frequently preventable, by considering women as equal in society and allowing them basic rights, including access to healthcare. However, in some cultures and religions, women are encouraged to defer to their husbands, who decide when to seek healthcare, including when to access maternity services. It has been reported that this often leads to delays in seeking a healthcare facility after the onset of labour (Mattoo et al, 2019). This was reflected in the present study's findings, where husbands were reported to have control over decision making.

Delays in accessing maternity services can arise from a number of factors, including lack of a decision on healthcare during pregnancy (resulting in a rush to reach a facility in an emergency situation), and issues reaching a facility in time, as a result of distance, or bad road conditions resulting from harsh terrain and weather. Health centres in mountainous regions are particularly difficult to access. In these cases, it is difficult for a pregnant woman to reach a facility, and challenging for a 'lady health visitor' (a professional role in Pakistan) or obstetrician to reach a pregnant woman's home. Participants in the present study reported concerns such as land sliding on roads, which inhibited access to healthcare facilities. Yousufzai (2023) reported that roads in some places in Pakistan are not fully built or are damaged by flooding; this delays ambulances from reaching patients in cases of emergency, because of the poor condition of the roads. As evidenced by Hanif et al (2022) in Nepal and Bangladesh, improving transportation and communication can lead to increased accessibility of health facilities, which will reduce mortality rates.

A lack of human and material resources at maternity services can also lead to delays in women being provided with healthcare, leading to maternal mortality and morbidity. A study in Gambia reported that the time to reach to a facility led to delays in seeking care, and discriminatory behaviour and poor practice from healthcare professionals discouraged women from seeking care from trained professionals (Cham et al, 2005). Similarly, a participant in the present study reported that one woman was afraid of attending a healthcare facility, even for persistent vomiting, as she thought that she would be mistreated by the staff at the facility.

It has been reported that maternal and delivery characteristics are associated with increased risk of death among women (Bauserman et al, 2020). A woman's role in society and its culture also influence access to healthcare

Key points

- This study was carried out in Pakistan, and used situation analysis to assess maternal mortality and morbidity, by examining community perceptions of access to maternity services.
- The three delays model and the framework for determinants of maternal mortality were used to analyse the data from focus group discussions carried out with both adults of reproductive age and adolescents.
- The results showed that women were not empowered to exercise their rights, and culturally, it was seen that their work wa at home and in caring for their children.
- Women were prevented from making decisions regarding family planning and accessing healthcare for maternity services; instead, their husbands were encouraged to take on the role of decision maker.
- Religion plays an important role in Pakistani culture, and religious leaders should be involved in efforts to educate the community on the importance of women's rights and accessing maternity services to reduce maternal morbidity and mortality.
- Stakeholders collaboration in the community should be pursued, to improve women's health outcomes through generating awareness, encouraging good practice and ensuring the availability of resources.

and delays in seeking maternity services. The participants of the present study reported that women were encouraged to focus on caring for others, particularly her family, often at the expense of their own health and wellbeing. Women who did not have this attitude were reportedly considered disobedient. Participants reported that Pakistani culture viewed women as less powerful than men, granting husbands the right to take decisions on her behalf, including on when to seek healthcare during pregnancy, and removing the right to decide for themselves from women. Similarly, Jafree (2020) reported that the majority of women in South Asia lacked decision making power, including when to seek maternity care.

In order to combat the violation of women's rights, the Pakistani community has begun education programmes for young women (Ali et al, 2020). Several community support programmes have been implemented by the Aga Khan rural support program, an agency for the Aga Khan Development Network (Khashkelly et al, 2018), and in northern Pakistan (Hussain and Hussain, 2018; Aloudat and Khan, 2022).

Male dominance was evident in the present study's participants' discussions. Along with religious leaders, whose role is very important to social and moral development in the districts selected for this study (Nargiza, 2022), fathers, husbands and brothers must be taught about the importance of accessing maternity services and women's rights. The present study's participants reported that culturally, women were prevented from being independent decision makers, including in decisions regarding their own health and access to maternity services. Combined with the lack of resources and poor use of health facilities, these factors are major influences on high maternal mortality.

The lack of community resources and difficulties in providing safe and efficient routes to access health facilities reportedly encouraged women to seek out alternative care for concerns during pregnancy, as these were accessible and inexpensive. Similarly, Shaeen et al (2022) reported that a third of their participants in Pakistan did not seek prenatal care because it was deemed either unnecessary or too expensive. Dahab and Sakellariou (2020) reported that the high cost of maternal care meant that families from low socioeconomic backgrounds remained following a birth. However, alternative sources of care can be risky, if not delivered by a trained health professional. Additionally, the COVID-19 pandemic led to rising poverty rates as businesses and industries were affected by lockdowns, putting pressure on those who do not have the financial means to support themselves and making healthcare inaccessible (Shanmugasundaram, 2021). Transport costs also pose a financial burden, potentially preventing women from accessing a healthcare facility. Even when it is possible to reach a facility, shortages of medical supplies, including those needed for an emergency, such as a blood transfusion or caesarean section, and of trained healthcare professionals, lead to delays in women receiving necessary care (Shanmugasundaram, 2021).

The World Health Organization (2019) has guidelines to inform efforts to combat maternal mortality. These guidelines focus on preventable issues such as by ensuring that:

- Women's rights are respected
- Safe motherhood is possible
- Emergencies are responded to promptly
- Infections are prevented through good hygiene practices
- Reassuring health practices and arranging related medicine at the facility,
- Unwanted pregnancies are avoided
- Post-abortion care is improved.

These are practiced to some extent in Pakistan; however, constant effort and infrastructure are needed support interventions that reflect these guidelines. Education in the community is important to further women's awareness of their rights and general awareness of the importance of respecting those rights, in order to reduce maternal morbidity and mortality. This requires engagement from government and non-government organisations.

Recommendations

The authors recommend that efforts to improve community awareness should be planned, with a

focus on maternal rights, as well as maternal and child mortality and its causes. Community stakeholders should be engaged in efforts to empower women to exercise their rights and prioritise their own health and wellbeing. The involvement of religious leaders in these efforts is also recommended, because of their influential standing in the community.

At a district level, welfare and health organisations should put in place strategies to prevent maternal deaths by improving co-ordination, access to resources and mapping for accessible healthcare. The government should provide a budget for resources, support in mapping activities, providing weather alerts and planning safety nets for the community. A monitoring framework to decrease the maternal mortality ratio is recommended, which can be used at a national level (Jolivet et al, 2018).

Limitations

The main limitation of the present study is that the issues under discussion were potentially controversial or may have put pressure on the participants to answer in a way deemed socially acceptable by the rest of the discussion group. This may have prevented some participants from truthfully presenting their thoughts on women's rights, the predominant culture and other topics. Fear of stigmatisation after giving a 'wrong' answer may have influenced participants' responses. Additionally, only those willing to discuss these topics were recruited for the study, meaning there may have been under-representation of those who felt uncomfortable expressing views that contradicted the majority.

As data were collected from selected districts in Pakistan, the results may not be a complete representation of community perceptions across the country. Additionally, participants' education may have affected the results, as those who had received further education were noted to speak more often than those who had not.

Conclusions

Women experience all three delays in accessing maternity healthcare; these are delays in deciding to seek care, delays in reaching a healthcare facility and delays in receiving appropriate care at a facility. It is important for women to be empowered to make their own decisions regarding healthcare, to mitigate the first delay. Education programmes to raise awareness of the importance of seeking care from trained professionals for obstetric emergencies is also important. Reducing maternal mortality and morbidity requires an integrated programme of interventions across sectors including education, healthcare, religion, communication and media, and the government. **BJM**

CPD reflective questions

- If women from cultures that discourage autonomy are empowered to access healthcare during pregnancy and labour, what consequences might they face socially? How might this affect their decision to seek healthcare?
- Is collaboration with community stakeholders a sustainable solution to encourage women to access healthcare during pregnancy and birth?
- How can location impact women's ability to access maternity facilities? Does your facility consider this when making efforts to ensure access?

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