

## ORIGINAL ARTICLE

## SOCIAL AND SOCIETAL BARRIERS IN UTILIZATION OF MATERNAL HEALTH CARE SERVICES IN RURAL PUNJAB, PAKISTAN

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**Background:** The health status of pregnant women depends largely on the quality of the antenatal and delivery services available to them. Maternal mortality remains a major public health problem with antenatal and delivery care utilization remaining low in Pakistan. This study explores the perspectives of rural community members about the antenatal and delivery care services' utilization by the community. **Methods:** A qualitative study was undertaken in the rural community of District Attock. Focus Group Discussions (FGD) were conducted with husbands, married women of child-bearing age with young children and mothers-in-law. Data was analysed manually using content analysis techniques. **Results:** Majority of the respondents sought antenatal care (ANC) after 3–4 months. They further reported that home was the preferred place of delivery followed by the local 'rural health centre'. The preferred attendant for delivery was the local *Dai* (traditional birth attendant). Major limitations to accessing ANC and delivery services were lack of knowledge about ANC, long distance and high transport costs to health care facilities. People had strong beliefs on faith healers (*Pirs*) and insufficient knowledge about danger signs. Traditional and customary practice as *taweez dhaga*, *saya*, *purdah*, non-availability of health care providers, and lack of trust on young community midwives led to people favouring the home based package of services provided by traditional birth attendants (*Dais*). **Conclusion:** The findings of this study indicate that demand side barriers such as lack of knowledge regarding home based care, social barriers, financial constraint and non-acceptability of community midwives (CMW) because services offered by traditional birth attendants (TBA) were more accessible in terms of distance and cost are a major challenge affecting utilization. Efforts towards ensuring the utilization of ANC and delivery services should be targeted towards rural areas and the importance of skilled care should be emphasized. Women should be encouraged to utilize antenatal and delivery services.

**Keywords:** Maternal health services, antenatal care, utilization, Community Midwife, delivery care

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## INTRODUCTION

Maternal Mortality remains an intractable issue, especially in developing countries, where maternal mortality ratios have scarcely fallen in the last few decades, even as other health indices have shown improvement.<sup>1,2</sup> Most maternal deaths continue to occur at home in low resource settings against a backdrop of poverty, unskilled home deliveries, sub optimum care seeking and weak health systems.<sup>3</sup> These outcomes are mainly attributed to direct obstetrical complications, i.e., haemorrhage, obstructed labour, sepsis, eclampsia and abortion<sup>4</sup> mostly occurring around the time of delivery and cannot be predicted beforehand. Scientific evidence suggests that skilled attendance at delivery; timely emergency obstetric care and effective postnatal care are essential in promoting maternal health. In fact increasing rates of skilled care during childbirth is widely advocated as the "single most important factor in preventing maternal deaths" and the "proportion of births attended by skilled health personnel" is one of the target indicators to measure progress toward the attainment of improving maternal health.

Pakistan was among the top six high burden countries in which half of global maternal deaths occurred with an

estimated maternal mortality ratio of 533 in 1993.<sup>1</sup> With persistent focus through a series of initiatives, recently updated statistics show that the burden has come down to 260.<sup>5</sup> Over the past years, the government of Pakistan has initiated policies to improve maternal health outcomes and among varied efforts, introduced a new cadre of community-based midwives (CMWs) to make skilled care available and accessible in low-resource settings to address the issue of skilled birth attendance. The CMWs while trained to conduct home deliveries are responsible for providing individualized care to the pregnant women throughout the maternity cycle and the new-born, helping her in self-care, guidance, counselling and communicating with the community for healthy habits, and involving the family in preparation for childbirth and for unforeseen emergencies. However, in order to be effective, the services of the CMWs need to be utilized by the communities where they serve.

According to the latest Pakistan Demographic and Health Survey 2012–13 even now, only about 48% of births take place at a health facility and 52% are attended by skilled birth providers.<sup>5</sup> Hence, the intended

impact in increasing skilled attendance at deliveries in rural areas of Pakistan has not been achieved.

A large number of women fail to utilize the community-based services due to unidentified reasons and end up delivering without skilled supervision.<sup>6</sup> A large body of evidence on factors contributing to poor delivery service utilization across the region comes from quantitative studies, which consistently report physical and financial barriers as well as low social status of women as important barriers.<sup>7</sup> Other studies emphasize traditional beliefs and socio cultural influences on use and non-use of health care facilities in developing countries.<sup>1,7-10</sup> This warrants an in-depth understanding of the multiple factors that hinder use of available maternal healthcare services in the local context, especially in rural areas and focuses on the beliefs, perceptions and knowledge regarding pregnancy and delivery and how health care seeking behaviour among pregnant women is conditioned in rural Pakistan.

This study is part of a larger project, the first phase of which entailed conduction of extensive formative research to provide information on rural community's knowledge, attitudes and behaviours regarding maternal health issues, elicit the factors limiting uptake of skilled care during pregnancy and delivery and identify opportunities for feasible community engagement assisting uptake and maintenance of healthy behaviours.

## MATERIAL AND METHODS

A qualitative study was done to explore and describe community's perceptions regarding antenatal and delivery care in rural settings. The study was conducted in District Attock of the province of Punjab, Pakistan.

Attock is located in the extreme north of the province, and among the 36 districts of the province, is relatively better off in terms of socio-economic indicators. Attock has a population of 1.58 million, rural to urban distribution of 80 percent vs 20 percent and comprises six administrative Tehsils, namely: Jund, Fateh Jang, Pindi Gheb, Hasanabdal and Hazro. The main economic activities in the villages are agriculture and livestock rearing. Literacy rate is 49.3 percent with 67 percent males and 32 percent female literacy.<sup>11</sup>

The public-sector healthcare infrastructure in the district includes: 1 DHQ hospital, 5 THQ hospitals, 5 RHCs, 57 BHUs, 7 MCH centres and 3 sub-health centres.<sup>11</sup> At the time of this study, there were 33 trained CMWs deployed in the district, with 951 LHWs covering about 57 percent population and 41 LHS supervising the community health workers.<sup>12</sup> The maternal mortality data is not available so far but the MMR of Punjab is 300 per 100,000 live births.<sup>9</sup> Maternal health indicator for District Attock are given below.<sup>11</sup>

For the purpose of this study, participants were selected by means of purposive sampling from the three

villages of Attock (Bahter, Mianwala and Pind Mehri) and Hassanabdal. Married women of reproductive age (MWRA) and married men (with young families) and mothers-in-law (assumed to be involved in the decision making process about maternal care services) were identified. Participants were approached through the local lady health workers (LHWs) and social organizer of MNCH program. Those who agreed to participate were included in the study. The research team carried out focus group discussions with 20 mothers, 18 mothers in law (MiL) and 20 married men. A predetermined, open ended question guide was used while discussions with the community members, probing during the discussion to allow each participant to respond in a way that reflected their perceptions and opinions. Data was collected till saturation was achieved.

Six FGDs were conducted with mothers and mothers-in-law (three with each group); while five FGDs were conducted with married men/fathers. Each FGD session involved 5-8 community members and was conducted in the home of one of the participants. During the FGDs, vignettes related to specific scenarios like normal delivery, Ante partum haemorrhage, obstructed labour, and pre-eclampsia were used as a tool to identify barriers, patterns of resort related to uptake of ANC and delivery services.

Comprehensive transcripts were developed from the recordings and field notes for analysis. Quality control of the information was ensured by cross-checking the information for completeness and consistency before and during data processing by the research team. The transcribed data were analysed using content analysis to obtain the information, which answered the research questions and addressed the objectives. Content analysis is a research method for subjective interpretation of content of textual data through a systematic classification process of coding and identifying themes or patterns.<sup>13,14</sup> Data was reduced while preserving the core meaning. The transcribing process involved repeated review of transcripts and listening to the audiotapes. Meaning units were identified, condensed and then coded. Codes were then clustered together and sub-categories followed by categories and created. Categories were merged and a main theme was identified.

Ethical approval for this study was obtained from the ethics committee of Health Services Academy and Pakistan Medical & Research Council. Verbal consent was obtained from all participants before conducting data collection. The consent statement, which explained the study objectives and expectation of the study participants, was read aloud and participants were assured of confidentiality. Participants were informed of their right to voluntary participation in the study and that they could leave at any time without fear of intimidation.

**Table-1-Maternal Health indicators of District Attock<sup>11</sup>**

Indicators	Rural (Attock)	Urban (Attock)	Total (Attock)	Total (Punjab)
Antenatal care coverage	55.7	66.5	57.9	53
Births attended by skilled providers	44.1	56.5	46.7	43
Institutional deliveries	39.3	53	42.1	38
Postnatal care coverage	41	56.3	44.1	41

## RESULTS

The main theme “Community Midwife not a preferred provider for rural community” emerged from the analysis and illustrates the community’s lack of trust in the Community Midwives as a skilled birth attendant. The FGDs were conducted to explore issues related to ante natal care (ANC) and delivery services, utilization of skilled care, factors influencing choice of source of care and the participant’s perceptions regarding the quality of maternal health care services being provided by CMW.

The results are presented in table below starting with the theme and their relation to the categories of analysis (Table-2).

The study results show that the community members preferred home deliveries as they were convenient and trusted the traditional birth attendants for the same. Most of the participants shared that they were not aware of a CMW working in the area. But some people preferred to get the delivery done by CMW as she lived close by and or belonged to the same cast. The pregnant women knew and appreciated the benefits of delivering in a health facility by lady doctor and from lady health visitor (LHV). Younger mothers and especially those with some education preferred hospital deliveries. In rural setting public sector health facilities provide services for a limited time during the day and hence maternal care services are not available 24 hours round the clock. These perceptions are reflected in the following quotes:

*“By the grace of Allah the child should be delivered at home, nowadays girls are not strong; we take them to the hospital to prevent any harm to the mother and the baby. Mothers do go for check-ups from CMWs but do not go for the delivery because they do not have confidence in their skills.” (FGD, mother-in-law)*

The above theme was driven by the following categories:

**Lack of knowledge regarding home based care:** The rural community did not recognize the importance of availability of skilled care during pregnancy and childbirth. They were mostly not aware of the danger signs and care during pregnancy. Community members had faith on faith healers.

### a. Traditional beliefs

Women had strong belief in using “*taweez dhaga*” (Amulet with Quranic verses written on it; used for

protection against evil eye, curses, unholy beings) from faith healers during pregnancy for normal delivery and to prevent from “*Athra*” in which baby delivered is either blue or still born. People believed that “*Athra*” was the result of an internal disease and it is due to a “*saya*” (Evil Spirit) on that person. This can affect the pregnant women and the local term for this condition is “*sarishna*”. They believed that the only remedy was through “*taweez dhaga*” or praying to Allah. Due to the perceived risks to baby or mother, expectant mothers were not allowed to meet women who were suffering from “*Athra*”, women who had delivered still born babies in the past and go to homes where someone had passed away.

*“Our elders say it is sarishna. During pregnancy, a woman is affected by a saya and the baby is affected” (FGD, mothers)*

### b. Deficient knowledge of danger signs

Participants cited minor discomforts and disorders of pregnancy as complications that could arise. Very few of them were aware about the danger signs and how to handle them. The majority of participants responded that the hospital is the only place where all the complications of the pregnancies can be managed effectively and efficiently. They expressed that CMWs were not competent to handle complications.

*“When I was pregnant with my last born, my hands, my legs, my abdomen and my face was swollen and my blood pressure was also high. I don’t know why it happened.” (FGD, mothers)*

When asked about what they considered to be normal delivery respondents gave varying durations, ranging from a few hours to an entire day. One elderly woman had a self-created explanation for the duration of labor and the other women in group agreed with this model.

*“A woman should have 360 cycles of labour pain before delivering the baby otherwise the baby will not deliver normally. You people are educated and should know better!” (FGD, mothers in law)*

### c. ANC not considered essential

Participants expressed that a pregnant woman can have her condition checked and monitored during pregnancy by going to an ANC clinic, deliver her baby with the assistance of a trained health worker and attend the PNC clinic for the treatment of any complications that arise from pregnancies or deliveries. However they did not consider antenatal care and postnatal care services essential in cases when one had no complaint or illness during pregnancy and after delivery.

*“I did not go to for a checkup because I felt usually normal during my pregnancy. But Shamim dai, bibi baji, salima, jamila, sara masi, they all are experienced and good dais. We can go to them if there is anything wrong” (FGD, mothers).* Some women, especially younger mothers recognized the importance of ANC services and believed it to be important as a means of

reducing the risks of complications and ensuring good health of the unborn child. However, the mothers-in-law were not supportive of antenatal care, especially from a health facility, as they believed that unnecessary intervention will definitely lead to some complication in pregnancy.

*"During our age it used to be that pregnancy was normal and we would deliver at home. But now these girls go to doctors unnecessarily, and then have to get barra operation."* (FGD, mother in law)

d. *Deficient knowledge of diet /care during pregnancy*

Participants lacked knowledge regarding appropriate pregnancy care. They expressed that they were not aware of any special care required during pregnancy. Women shared that they were not particular about diet during pregnancy; while some shared they took energy foods. Mothers-in-law claimed that despite eating everything mothers of today did not have energy and stamina like they did when they were young. They also complained that young mothers did not listen to the advice given by the elders. Mothers however reported performing their household work as they did prior to pregnancy and took rest only when they felt unwell.

*"Nothing in particular, we eat what's available; we don't care much for diet during pregnancy and have not heard about taking energy foods. My children were all born at home and were healthy"* (FGD, mothers)

**Delayed Decision Making:** Participants shared that most residents were poor and could not afford to pay for health care at a facility and the required transport. Dais was the preferred choice of provider as she delivered the baby at home and which did not compromise the purdah norms. The families usually did not have money saved for any emergency arising during pregnancy and for delivery. The decision to seek care and from where largely depended on the husbands and mothers-in-law. In some cases, the pregnant woman was consulted. In complicated cases the local Dai referred the family to a hospital.

Participants expressed that they were not comfortable to go to the hospital and discuss pregnancy related issues. As they observe *purdah* their physical mobility further limited their access to and use of health services.

*"I feel shy to get baby delivered at the hospital because hospital is so crowded. I never got myself checked at hospital either as I observe purdah. Our babies were delivered at home by Dai. It is comfortable at home; I have privacy."* (FGD, mothers)

Delay in seeking health care services was also found to be due to lack of knowledge regarding danger signs, delayed recognition of an emergency and delays in arranging for transport. This was then further compounded by the shortage of medical supplies at the health facility and negative attitude of staff.

*"One of my neighbors started feeling pain at 10.00 pm and she did not inform anybody, it was her first baby. She did not consult CMW and went to the LHV by arranging a car, but both mother and baby dies. LHV said that they were late."* (FGD, mothers)

**Non-acceptability of CMW:** Participants shared that they trusted the dais more than other maternal care providers. Some had sought care from a CMW who lived close by and had a good experience of delivery of their children. But they expected free services and medicines from the CMW. Participants who had had a good experience with the CMW considered her to be skilled health care provider and because of her close proximity felt that seeking care at hospital was 'wastage of time.' They also realized that CMWs were working under sub optimal conditions at low salary with no conveyance facilities. Moreover, as she did not carry any medicines, they failed to see her as a better provider than a local dai.

a. *CMW not preferred by community*

The participants expressed varied emotions about the type of care they received from CMWs; initially all participants indicated that the care they received was good, but when questioned about why people were not going for delivery to her, they all highlighted the young age and less experience of the CMW as a hindering factor. They also said that she had no medicines or equipment and mostly ended up referring to a doctor which just added delay in seeking care.

*"She is not experienced, people are afraid of her, she is new and young. CMW advises us if we seek for it but we don't approach her for her advice. Because we know that she doesn't have proper facilities available therefore we mostly go to clinic."* (FGD, mothers)

b. *Community trusts on Dai (TBA)*

Most deliveries were conducted at home by the local dais. Women trusted them because of their long prior association with the community members. Their expertise was valued due to their long experience in providing services to mothers and infants, and their close links with the villagers, which created loyalty and understanding, particularly when other health care services were not accessible. The community members found her to be a more affordable health care provider for their delivery services as it included both pre and postnatal care for the woman and household work support following delivery.

*"Women here usually go to dai for check-up, girls do have a check-up from her sometimes. She is old and experienced, and we trust her"*. (FGD, mothers in law)

**Role of father as a decision-maker:** Majority of fathers shared that expecting the birth of a child was a joyful event but it also meant more responsibility in terms of arranging for proper check-ups, providing nutritious food such as desi ghee (clarified butter), meat

and milk to their wives, delivery services and hospital visit. All of these meant more expenses for them.

*“Yes, we feel very happy when we are expecting a child. After that we become conscious about baby’s growth and wife’s health.”*(FGD, Fathers)

The fathers saw themselves as the main financial providers for seeking healthcare. The choice of services to be availed was driven by economic constraints. They had to plan and save for delivery costs, medicines, supplies and transportation costs. Fathers expressed that if a CMW was well equipped for the delivery services and had medicines they would prefer to seek care from her as it would be safe and also economical.

*“There was no one to guide us and provide us proper treatment here in this village. If CMW is available in the village than it is better so that we may not have to go out of the village.”* (FGD, Fathers)

During the discussions, it also emerged that men saw their mothers as the ‘go to’ person and decision maker for matters regarding maternal health and maternity care of their wives. However, the conundrum for them was giving both the wife and mothers their due respect, while not offending the other. This sentiment appeared to be a main concern for most of the men who participated in discussions with the research team.

*“I have to keep them both (mother and wife) happy; my mother is in favor of home delivery and she has her own reasons for that; while my wife is educated and she wants to go to the lady doctor. I have heard that these CMWs are trained and qualified girls but the problem is that they don’t have the medicines or equipment or a proper clinic. If they have all that in the village, it will save us from the trouble of making arrangements for going out of village and other expenses. And both of them will also be happy”* (FGD, Fathers)

**Table-2: Results table depicting main theme, sub themes and categories**

Theme	Community Midwife not a preferred provider for rural community						
Sub-Themes	Lack of Knowledge regarding pregnancy and maternity care				Non-Acceptability of CMW		Father – Primary Decision Maker
Categories	Traditional Beliefs	ANC not essential	Deficient knowledge of danger signs	Delayed decision making	Trust in local Dai	CMW not preferred	Responsibility and Financial support

## DISCUSSION

This study aimed to explore the issues surrounding low use of ANC and delivery services in rural region of Pakistan, despite availability of a skilled, community based maternal care provider, CMW. Community members for various reasons did not prefer to use available skilled care during pregnancy and childbirth available at their villages. Not surprisingly, some of the results emerging from this qualitative study are similar to those reported in studies conducted in other South East Asian countries including Indonesia, Bangladesh, India and Afghanistan.<sup>15-18</sup> Limited knowledge regarding appropriate care practices in pregnancy and danger signs due to limited contact with community health care workers was identified as one of the major reasons for low uptake of skilled birth attendance.

Our study shows that women who knew about danger signs and importance of ANC preferred to deliver in a health facility or under care of a CMW as compared to those without such knowledge. Because of *Dai*’s long presence in the community, she was the preferred choice of provider for the elderly women and those women who are illiterate. Studies from Afghanistan identified low female literacy to be associated with lower skilled birth attendance.<sup>15</sup> The respondents who preferred home delivery with a *Dai* perceived many benefits of home delivery which included convenience, less expensive, comfort of home and consistent with norms of *pardah* and

female seclusion in the South Asian context. The norm of *pardah* is also the one of the constraint, which hinders the utilization of skilled services. Other studies conducted on issues of seclusion and *Purdah* in Pakistan has also reported similar findings.<sup>19-23</sup>

Traditional birth attendants' services are also utilized more as rural communities trust the *Dais*. They are easily accessible, are part of the local community with networks within, particularly in remote areas. The service package that the *dais* provided particularly support in household chores, postnatal care, care of the new-born (bathing, changing, washing of clothes) added to women’s preferences for them. The midwives services cannot compete with such a flexible service package. The preference for *dai* and her package of services is also commonly reported in literature regarding other cultures and rural areas.<sup>24-26</sup>

In comparison, the services offered by midwife were unacceptable and unaffordable for the community. The community was reluctant to pay CMWs for their services, as the *Dai*’s services are free of any ‘cash’ cost attached. The payments made in kind to *dai* (wheat, lentils, milk, poultry, eggs) are home produce of the local community and hence are not considered as having an economic burden. This behaviour is common to all agrarian communities.<sup>27-29</sup> The rural community women welcomed the free ANC services offered by CMWs, whereas the

delivery for which a CMW charged, local *Dai* was preferred. Public health facilities were availed only in case of complications or any other emergency. This has also been observed in Nepal that although women use government facilities for ANC care, however they prefer to deliver at home in many cases.<sup>24</sup> Financial difficulties limit the community's ability to use skilled services. The evidence/finding presented in this paper has also been reported in other studies from developing countries, which demonstrate that communities with low household wealth were more likely not to use skilled birth attendance.<sup>29-31</sup>

The community members also did not prefer CMW as a service provider because of her perceived 'inexperience' in reproductive health matters and young age. For them, doctors are more experienced and responsible than the community based service provider (CMW). If the midwife who is perceived as young and unmarried, inexperienced, with no children and lacking maturity, is placed in a rural area then the gap may widen further.<sup>32</sup> However, the Community members in Attock were not entirely averse to the CMWs services, provided that they were free of cost, and she possessed the necessary medicines and other supplies. Insufficient supplies and equipment with community based maternal care providers has been identified as a major constraints by studies conducted in other South Asian, rural settings.<sup>33</sup> The rural community members in our study area of Attock did recognize the fact that CMWs were working under sub optimal conditions at low salary with no conveyance facilities, but they had their own limitations to consider as well in context of maternal care, cost of services and choice of provider.

Study results also show that the fathers assumed lead responsibility for providing maternal care services while encountering financial difficulties. They took advice of elderly community members especially their mothers who have evolved as one of the primary decision makers for pregnancy and delivery related care. Such a role of mother in law is supported by several other studies conducted in the region. In most of the reported studies, women as daughters in law, living in a joint family system have very less say in matters regarding their pregnancy and child care.<sup>34-36</sup>

Despite efforts to bring skilled services closer to the community, physical distances due to lack of a road network with limited transport facilities, remains a major problem in the study area. Our study results show that lack of accessibility due to this factor, results in limited interaction and communication between the community and health care provider, which further leads to underutilization of services. Evidence from literature shows that a

lack of communication between health workers and women in the community has led to delayed uptake of antenatal care visits and deliveries by skilled birth attendants.<sup>25</sup>

Considering the community-based midwives' limited ability to reach rural community to provide health services, the rural communities are inclined to persist in their decades old trend of utilizing traditional birth attendants' (*Dais*) services. Our findings also demonstrate a lack of understanding among community members concerning the importance of maternal and child health care services. The physical distance between community and CMW is an obstacle in some areas, while unavailability of requisite medicines/supplies, low density and young age of the CMWs appear to be other factors affecting uptake of skilled birth attendance services by the rural community members in District Attock.

## CONCLUSION

This study was a qualitative exploration into the perspectives of antenatal and delivery care services in rural communities. The results can inform policy makers to develop strategies to increase service uptake in such settings based on the local evidence thereby assisting the government in improving indicators related to deliveries assisted by the skilled birth attendants. The use of qualitative methods enabled us to explore and understand the perspectives of community members on ANC and delivery care services. Triangulation by collecting data from heterogeneous group, along with the use of social mapping increased the validity of the results.

Home based antenatal and delivery services are still under-utilized in the rural community. The importance of skilled care as provided by CMWs should be emphasized through health education programs aimed at increasing community awareness about the importance of antenatal and delivery services. Strengthening community-based participatory programs to actively engage all stakeholders in overcoming these constraints will be beneficial. Actively engage all stakeholders in overcoming these constraints will be beneficial.

As the study was conducted in one district of Punjab only, therefore the barriers identified from the community may not necessarily be representative of all rural areas of the country.

## AUTHOR'S CONTRIBUTION

MS and ST conceived the study design, coordinated data collection and analysis. MS, ST and SH drafted the final manuscript. NI assisted in data collection and analysis. All authors have read and approved the final manuscript.

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