

# BMJ Open Factors influencing utilisation of services provided by community midwives and their non-retention in district Thatta, Pakistan: a qualitative study protocol

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## ABSTRACT

**Introduction** Drawing on the well-acknowledged evidence of community midwives services to address the issue of high maternal mortality, the Government of Pakistan initiated the Community Midwifery (CMW) programme in 2006 to provide skilled birth attendance to pregnant women living in rural areas. Despite a large investment in CMW programme, the availability of community midwives in rural areas following their training is a constant struggle. The concerns related to the training, support and acceptability of community midwives need to be studied in order to identify gaps in the provision of skilled maternal and newborn healthcare. Therefore, this study aims to explore factors influencing the utilisation of services provided by community midwives and their non-retention in district Thatta, Pakistan.

**Methods and analysis** The study will use a qualitative exploratory research design. The data will be collected through semistructured interviews and an approach of purposive sampling for the selection of participants for interviews. The study will be conducted in one of the rural districts Thatta of Province Sindh, Pakistan. The data will be collected through key informant interviews (KIIs) and in-depth interviews (IDIs). The KIIs will be conducted with officials of the health department (Thatta), the provincial maternal and newborn child health programme, and the Midwifery Association of Pakistan. The IDIs will be conducted with midwifery students, community midwives working and not working in the district, and community women of district Thatta. Data will be analysed through qualitative data analysis software NVivo V.10 and the thematic analysis approach.

**Ethics and dissemination** Ethical approval for this study has been obtained from the Aga Khan University Ethical Review Committee (2020-3391-11138). The results of the study will be disseminated to the scientific community, to policy-makers involved in CMW programme training and implementation, and to the research subjects participating in the study.

## INTRODUCTION

Globally, it is estimated that approximately every day about 810 women die due to preventable complications related to pregnancy and

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The rigour of the study will be achieved by enhancing the credibility of the findings from different data sources.
- ⇒ The telephonic data collection will hinder the recording of facial expressions and physical observations.
- ⇒ The use of telephonic interviews will exclude informants who do not have access to phones.
- ⇒ The exclusion of potential 'gatekeepers' (eg, husbands, mothers-in-law) from the sample might be a major limitation.

childbirth such as maternal infections, postpartum haemorrhage and pre-eclampsia.<sup>1</sup> Access to antenatal, childbirth and postnatal care is crucial in decreasing maternal and newborn deaths.<sup>2</sup> Antenatal care comprises services that can prevent, detect and treat risk factors early on in pregnancy.<sup>1 2</sup> Women who do not receive antenatal and perinatal services are susceptible to complications and may require medical interventions that increase financial as well as physical health burdens.<sup>3</sup> These complications can be prevented by services provided by skilled health workers including a competent midwife, nurse or a doctor during pregnancy, childbirth and postnatal period.<sup>4</sup> WHO emphasises skilled care at birth to reduce maternal and newborn deaths.<sup>3</sup>

There is collective evidence about the role of midwives in positive pregnancy outcomes for women and newborns.<sup>5</sup> Nordic countries including Sweden, Finland, Norway and Iceland provide useful examples of efficient midwifery practice.<sup>6</sup> These countries dealt with the issue of perinatal and maternal mortality by training and deploying midwives.<sup>6</sup> The maternal mortality ratios (MMR) in Nordic countries are among the

lowest worldwide, and the caesarean section rate in these countries is recorded as 18%.<sup>7</sup> This is greatly associated with the inclusion of midwifery services into their health systems.

The model of midwives has been adapted by several countries.<sup>8</sup> Many countries in Asia introduced the model of community midwives in their health systems.<sup>9</sup> Countries like Thailand and Sri Lanka have made significant improvements in MMR by using community midwives and contributed towards the MMR reduction to a level of 50 deaths per 100 000 live births.<sup>10</sup>

According to a United Nations Population Fund (UNFPA) report, low-income and middle-income countries have improved maternal and newborn health; however, there is still a deficiency of skilled and educated midwives in these countries.<sup>11</sup> In these countries, midwives who are trained on standardised international principles can provide 90% of important care to women and newborns.<sup>12</sup> In Pakistan, 62% of the population resides in rural areas with poor healthcare infrastructure and limited basic facilities related to maternal and newborn health services.<sup>13</sup>

Hence, drawing on the well-acknowledged evidence of community midwives' contribution to addressing the issue of high maternal mortality, the Government of Pakistan initiated the Community Midwifery (CMW) programme in 2006 to provide skilled birth attendance to pregnant women living in rural areas.<sup>14</sup> CMW programme is one of the vertical programmes of the Maternal Newborn and Child Health Programme executed at the provincial level.<sup>14</sup> The programme was planned as an essential part of the existing health system of the country.<sup>15</sup> The thrust of the programme is to extend maternal and newborn services to communities, through the selection and training of community midwives from rural areas, and their deployment to local communities.<sup>15 16</sup>

The CMW programme has been planned to establish home-based clinics to provide antenatal care, childbirth, postnatal and newborn services to rural communities.<sup>15</sup> In the low-income setting of rural Pakistan, community midwives have the potential to reduce maternal and newborn mortalities within their communities through services accessible to childbearing women, at a primary care level. There are training institutes that prepare a number of community midwives each year; however, there are issues related to the unavailability and non-retention of community midwives in rural areas of Pakistan.<sup>17</sup> Therefore, this study aims to determine factors influencing utilisation of services provided by community midwives in district Thatta and it will add to our understanding of this emerging picture of poor CMW programme function. There are less data concerning maternal and newborn services provided by community midwives following deployment. This information could potentially help to formulate policies and strategies to improve CMWs services in rural areas and improve their performance not only in district Thatta but also in areas with a shortage of community midwives. The evidence



**Figure 1** Conceptual framework—community midwifery model. CMW, Community Midwifery; HCPs, Healthcare Providers.

is important in the planning of strategies addressing the sustainability of services to promote and improve maternal and newborn health.

The CMW model (figure 1) has been adapted from Chitral Newborn Survival Programme (CCSP).<sup>18</sup> This model was developed with the Government of Pakistan's maternal and newborn child health (MNCH) programme strategy to expand community-level CMWs services. The uptake and sustainability of CMWs services and their retention can be influenced by the six factors discussed in the model. These factors are:

1. **CMWs skills competency:** The factor which can affect the ability of a community midwife to contribute toward services provision and retention in their profession is the quality of preservice training and access to continued professional development. The capacity development and clinical skills of CMWs are grounded on the quality of their training programmes.
2. **Supportive supervision:** Reference to the monitoring and supervision of community midwives, the programme divided its components into technical and administrative components.<sup>16</sup> The technical component for field monitoring of CMWs' is the domain of district tutors; and the administrative supervision is the area of a lady health supervisor (LHS), an employee of the National Programme.<sup>19</sup> The support and supervision of community midwives provide them with opportunities for the successful delivery of health services.
3. **Affordability for CMWs services:** CMW is the only cadre among MNCH vertical programmes that have been working as private independent practitioners who are to generate money through services charges from their clients.<sup>20</sup> In Pakistan, traditionally the government, as well as some non-governmental organisations, pro-

vides healthcare services for free while the providers are provided wages.<sup>18</sup> Yet, CMWs work on a private entrepreneur-based model.<sup>18</sup> Although the CMWs' fee is low, most people could not afford it.

4. Community acceptance and support: CMW is not only the wage earner for their families but has been trained to provide a major role in maternity care to women from her community.<sup>21</sup> Therefore, the trust and acceptance of communities towards CMWs services could serve as a motivating factor.
5. Linkages between CMWs and facilities: The CMW's linkages with doctors, lady health workers and LHSs of the immediate facilities could assist in prompt referral and teamwork. Access to transport, consultation with experienced providers, and the distance from a quality health facility are imperative to CMWs for referral services.
6. Dynamics between CMWs and other healthcare providers: In many settings, the scope of community midwives practice in the dominance of the medical profession is hindering factor for their services.<sup>22</sup> The positive relationship between community midwives and other teams of healthcare providers such as doctors, lady health visitors and traditional birth attendants is important to work in communities.

These are some of the identified factors influencing community midwives' services and their retention.

This framework (figure 1) will be used to identify the above mentioned factors in district Thatta. Any of the unknown factors, identified through this study, for services utilisation and non-retention of CMWs in the district will be integrated into the framework.

## METHODS AND ANALYSIS

### Study design

The study will use a qualitative exploratory research design to address the research questions. It will provide a better understanding and in-depth investigation of the factors that influence services utilisation provided by community midwives for maternal and newborn care. The data will be collected through semistructured interviews and an approach of purposive sampling. The data collection technique for this study will include key informant interviews (KIIs) and in-depth interviews (IDIs) to understand factors influencing the utilisation of services provided by community midwives and their non-retention, and to explore the current scope of services provided by community midwives in the district Thatta.

### Study setting

The study will be conducted in district Thatta of Province Sindh, Pakistan. Thatta is located in the southern area, called Laar, of the province Sindh with a total population of 979 817.<sup>23</sup> The number of community health centres available in the district is adequate<sup>23</sup> and there is a midwifery school to train midwives.<sup>24</sup> The number of trained community midwives is sufficient in the district as

**Table 1** Study participants for KIIs and IDIs

Participants for KIIs	Sample range
General secretary, Midwifery Association of Pakistan	01
Director, General Nursing and Midwifery Programme	01
Coordinator, Maternal and newborn child health programme, Thatta	01
Principal, Midwifery school, Thatta	01
District Health Officer, Thatta	01
Participants for IDIs	Sample range
Midwifery students	05
CMWs working in district Thatta	05
CMWs trained but not working in their roles as CMWs	05
Community married women who have been pregnant at least one time	05

CMW, Community Midwifery; IDIs, in-depth interviews; KIIs, key informant interviews.

evident by the health profile of the district,<sup>25</sup> however, the maternal and newborn services provided by community midwives are unidentified.

### Study participants

Key informants such as officials from the Health Department of Thatta, provincial MNCH Programme and Midwifery Association of Pakistan (MAP) will be invited to understand their views about factors influencing utilisation of services provided by community midwives and their non-retention in district Thatta (table 1). This will also provide an understanding of the supportive administration and supervision provided to community midwives working in the district.

IDIs will be organised with the working and the non-working groups of community midwives, midwifery students, and community women of district Thatta. Table 1 provides the anticipated numbers for KIIs and IDIs. However, additional interviews will be conducted until data saturation.

### Eligibility criteria

The inclusion and exclusion criteria for participants are defined below

### Inclusion criteria

Community midwives working in the district.

Community midwives who are trained but not working.

Community married women of district Thatta who have been pregnant at least one time.

Key informants' such as officials from Health Department (Thatta), provincial MNCH programme and MAP.

### Exclusion criteria

Participants who are not willing to take part in the study.

Community midwives working in some other geographical areas than Thatta.

Midwives with qualifications other than CMW diploma (24 months) such as Bachelors of Science in Midwifery and nurse-midwifery diploma

### Data collection procedure

Interviews will be conducted online via telephonic calls considering the COVID-19 standard operating procedures (SOPs) to be followed. Interviews will begin in August 2020. KIIs will be invited to participate in the study by sending a letter or an email inviting them to contribute to the study. Participants will provide verbal consent (online supplemental file 1) for interviews and discussion to be noted and audiorecorded for transcription purposes. The conversation will include a general discussion about the availability and accessibility, scope and significance of community midwives, facilitating and hindering factors for the utilisation of their services, their current role, training and deployment.

Participants for IDIs will be approached by the study team and those who would agree to participate will be included in the study following their verbal consent. The conversation will include a general discussion about the training and deployment of community midwives, their scope and significance, and the facilitating and hindering factors for the utilisation of their services. The information will be collected till saturation is achieved.

Separate semistructured interview guides have been developed for KIIs and IDIs (online supplemental file 2) using the themes from the conceptual framework (CCSP model). The interview guides will help explore participants' views towards perceived hindering and facilitating factors for services utilisation provided by community midwives. These will be reviewed by experts to validate that it has covered all the themes covered in the framework. A free flow of information would be encouraged during data collection, using probes arising from the interviews. All semistructured interviews will be conducted online via telephonic calls. Interviews will be scheduled at the participant's convenient day and time. Interviews will be conducted by BMHK, who is proficient in local languages (Urdu and Sindhi), and is trained in qualitative research.

### Data analysis

The audiotaped data will be transcribed to the English language for further analysis and will be analysed through qualitative data analysis software NVivo V.10. Quality control of the information will be ensured by cross-checking the information for completeness and consistency before and during data processing by the research team. Thematic analysis will be done to analyse transcribed data collected through KIIs and IDIs. This will include an iterative process where data will be coded, compared, and refined to produce emergent themes. Transcripts will be read several times to develop an interpretation. The

transcribed text will be turned into 'meaning units' which will be condensed and labelled with a 'code' without losing the context. Codes will be analysed and assembled into categories. In the final step, similar categories will be assembled under central themes. Two investigators will perform the coding and category creation, and any inconsistencies will be resolved to reduce the researcher's bias.

### Ethics and dissemination

Ethical approval for this study has been obtained from the Aga Khan University Ethical Review Committee (2020-3391-11138). Study participants will be asked to provide verbal consent, which will be recorded prior to participation in the study while ensuring complete anonymity and confidentiality. Informed verbal consent will be translated into local languages. Every aspect of the consent form will be well explained to study participants including the purpose of the study, possible risks and discomforts, possible benefits, the confidentiality of information and the withdrawal procedure. Participants' anonymity will be preserved and no identifying characteristics will be specified on the transcript.

The study results will be disseminated to the scientific community, to the policy-makers involved in CMW training, supervision and deployment, and to the research subjects participating in the study. The findings will help us explore the factors influencing services provided by community midwives and will help in strengthening the identified facilitators, and in improving the identified barriers.

### Discussion

This qualitative study will provide an understanding of the factors influencing services utilisation provided by community midwives to the rural population of district Thatta. Such in-depth insights will be crucial to understanding the factors that may facilitate or hinder the services of CMWs in the local context. This study will also provide evidence on whether a 24-month education programme is sufficient to provide CMWs with all the skills and competencies needed to provide high-quality services.

The study findings and recommendations will guide government and policy-makers to formulate appropriate legislation to strengthen and support midwifery curriculum, training, deployment and interventions to improve maternal and newborn health services delivery.

### Patient and public involvement

Patients or the public were not involved in the design, conduct, reporting or dissemination plans of our research.

**Contributors** The qualitative study was conceptualised by BMHK, SS and ASF. BMHK prepared the first draft of the manuscript. SS reviewed the manuscript several times and provided feedback. All authors (BMHK, SS and ASF) have contributed to this manuscript, and reviewed and approved the final version of the paper.

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