Community Perceptions of Facilitators and Barriers to Maternal and Child Health Service Use

Implementation research from the Maternal, Neonatal Child Health Services Project in District Dadu, Sindh, Pakistan





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Acronyms

AKU	Aga Khan University
ANC	Antenatal care
BHU	Basic Health Units
-	
CHW	Community Health Worker
CMW	Community Midwife
CoP	Community of Practice
DHQ	District Head Quarter
EmONC	Emergency Obstetric and Newborn Care
EOC	Emergency Obstetric Center
FGDs	Focus Group Discussions
HCP	Health Care Provider
lls	In depth Interviews
LHS	Lady Health Supervisor
LHW	Lady Health Worker
MNCH	Maternal, Neonatal and Child Health
MMR	Maternal Mortality Ratio
NVD	Normal Vaginal Delivery
PDHS	Pakistan Demographic and Health Survey
PMMS	Pakistan Maternal Mortality Survey
PNC	Postnatal Care
PNC	Pakistan Nursing Council
RHC	Rural Health Center
SDGs	Sustainable Development Goals
SBA	Skilled Birth Attendant
SRC	Swiss Red Cross
TBA	Traditional Birth Attendant
THQ	Taluka Head Quarter
UC	Union Council
WHO	World Health Organization

Abstract

Objective of the study

To explore community's perceptions about facilitators and barriers, which determines facility-based delivery and uptake of maternal health care services in rural areas of Sindh, Pakistan.

Methods

This case study based design research was carried out in 2021 in rural Sindh, Pakistan. Qualitative data was collected in order to elicit community-level norms, experiences and perceptions related to facilitybased delivery service use. Eleven interactive group discussions, which draw on participatory research techniques to engage participants in analyzing the local situation or problem; and 35 individual semistructured interviews with women, their husbands, and local health care providers, were conducted. They were encouraged to share their stories, points-of-view, and suggestions through an open-ended and "narrative" format using a topic guide in the local language Sindhi.

Results

Most of the women were passively engaged in decision making for choosing a health care provider or facility for their routine antenatal care and delivery. They mostly relied and agreed on the decisions taken by their mothers-in-law and husbands. Their male counter parts had endorsed to make final decisions for uptake of MCH care, irrespective of being engaged during antenatal care visits and being fully informed of their wives' pregnancy cases. Presence of a reputable and community based health workers like *Lady Health Worker* (LHW) or *Community Midwife* (CMW) has been one of the main motivators to avail maternal health care services or an influencer for making a choice to have a home or facility birth. The study found that women' were keen to have initial visit at a health facility for confirmation of their pregnancy. In the rural areas, the CMW was preferred for routine care and delivery, as this involved proximity to home, less financial burden and the likelihood to not having to undergo a Cesarean Section. Lack of a health facility, unavailability of transport, damaged roads and poverty were reported as barriers to uptake of maternal health care service.

Conclusion

There is a need to empower women to take active part in decision making for their health care. On one hand outreach health workers like LHWs and CMWs can play a vital role in promoting facility based births. On the other hand ensuring the infrastructure like roads and financial schemes or support systems specifically for pregnant women are a need of the country in order to achieve maximum coverage for high-quality maternal health services uptake and better health outcomes. The role of CMWs as preferred health providers needs to be further explored to get more evidence on the birth outcomes and the quality and sustainability of the CMW scheme.

Chapter 1: Introduction

Background

The Swiss Red Cross (SRC) International Cooperation is supporting the implementation of programs in 26 countries around the globe in health and disaster risk management. In Asia, four country programs focus on reproductive health, namely Bangladesh, Laos, Nepal and Pakistan. These four countries have been part of a Community of Practice (CoP) since 2016, sharing experiences and learning from each other. Since April 2017, each member country joins a regular monthly Skype conversation, complemented by occasional in-person workshops. At one of these workshops in late 2018, the CoP discussed shared challenges in decreasing maternal mortality and neonatal mortality, concluding that there was insufficient programme-relevant data on community-level barriers to women's access to maternal health care, especially safe birth in facilities. In particular, the lack of women's "voice" in understanding low use of facility birth was noted. Qualitative methods are well suited to providing community "voice" and deepening understanding of local dynamics around decision-making and care seeking in specific social contexts. Qualitative studies can produce findings useful for better local targeting of health interventions in the context where the research took place, but also can contribute broader insights with relevance to other settings. The proposed research is a part of four country case studies, conducted independently, but linked through shared aims and objectives. Findings are intended to be applied both to in-country programming and to informing future regional planning.

This report is related to the findings of the research in the SRC supported program in Dadu district (Sindh province) of Pakistan. The research aimed to understand decision-making in regards to the place of delivery and the place of care both in normal and emergency obstetric situations with a special focus on the needs and experiences of disadvantaged women of all ages in rural areas. In particular, the barriers to and facilitators of skilled attendance for care in the antenatal, labour and birth, and postnatal periods were examined.

Global context

Globally the burden of maternal mortality is very high, approximately 810 women died daily in 2017 with preventable causes of pregnancy and childbirth [1]. Ninety-four percent of maternal deaths occurred in low and lower middle income countries. Pakistan is one of the countries with a high maternal mortality ratio (MMR). Evidence from the Pakistan Maternal Mortality Survey 2019 (PMMS 2019) and the Pakistan Demographic and Health Survey 2018 (PDHS 2018) revealed and MMR of 186 maternal deaths per 100,000 live births and under five child mortality rate of 74 deaths per 1000 live births respectively. In order to achieve the Sustainable Development Goals (SDGs), countries around the world are making efforts to reduce maternal, neonatal and child deaths by implementing various interventions. To achieve *SDGs 3 and 5* the World Health Organization (WHO) recommends encouraging all women to seek facility-based delivery, skilled care before, during and after childbirth and family planning to save the lives of mothers and newborns. Despite the WHO recommendation and proven effectiveness of facility-based delivery as an intervention that reduces maternal and neonatal morbidity and mortality, there are still numerous social, health systems and demographic factors that negatively influence uptake of facility-based delivery. For example, poor healthcare services, distance to health facility, financial barriers which include service fee, medicine and transportation costs, lack of education, lack of information about

services, low empowerment of women, and some cultural practices are barriers to increasing facility based deliveries [2,3,4,15]. Studies from Pakistan confirm that household wealth, parity, education status, place of residence, province, women decision-making power and mass media campaigns are determinants that impact institutional or facility-based deliveries in Pakistan [12,13].

There is substantial evidence from low and lower middle income countries that further indicate that the level of education among couples, urban or rural residence, age of women and the child birth order are important variables which determine access to facility-based deliveries [4,5,6,7]. Furthermore, antenatal care (ANC) during last delivery, a family's perceptions about home delivery, required permission and support from family, and lack of knowledge about pregnancy and delivery services have great impact on facility-based delivery [6,7,8].

Country and local context

According to the Pakistan Maternal Mortality Survey 2019 Pakistan's Maternal Mortality Ratio (MMR) (186 per 100,000 live births) is 26% higher in rural areas than in urban areas. The overall pregnancy-related mortality ratio for Pakistan is 251 pregnancy-related deaths per 100,000 live births¹. Compared by residence, there is a substantial difference between urban areas (220 pregnancy-related deaths per 100,000 live births) and rural areas (272 pregnancy-related deaths per 100,000 live births). Pakistan still faces high maternal and neonatal mortality despite interventions from government, national and international organizations. Recent national data from the Pakistan Demographic and Health Survey 17-18 state, that 69% of deliveries were conducted by a skilled birth attendant (SBA) and 66% deliveries were done in a health facility in the country. Among these, 83.8% births to urban mothers were assisted by a skilled health care provider and 81% were delivered in a health facility, as compared to 63% of births assisted by skilled health care provider and 59% facility based deliveries among rural women [9].

The progress on facility based delivery in rural Sindh is similar to the national average. In Sindh about 74.8% of births were delivered by a SBA followed by 71.7% births delivered in a health facility. The figures for rural Sindh showed that only 63% births were assisted by SBA and 58.3% of deliveries occurred in a health facility [9]. This unfinished agenda needs renewed efforts under the Sustainable Development Goals (SDGs), with special focus on ensuring provision of quality maternal and newborn care that is both clinically appropriate and delivered in a respectful and dignified manner [2]. Many previous studies highlighted inequalities between rural and urban areas in health services, education, accessibility of health facility, availability of skilled birth attendants and geographical distances [10, 11]. According to the literature, poor quality of antenatal care, disrespectful attitudes of health care providers towards patients, lack of privacy and confidentiality are barriers to utilization of facility-based delivery. Participants from a tertiary hospital of Karachi reported abusive, disrespectful and obnoxious behavior during child delivery from staff, which was associated with underutilization of that health facility [14]. Previous studies demonstrate that quality care at the health facility also plays a vital role to increase the use of a health facility. Women of rural areas are most likely to use a public health facility than a private facility due to poverty but substandard and delayed care to women at public facilities, on arrival, at hospital and after the delivery prevent women from availing health care services [15, 16, 21].

¹ Pregnancy related mortality ratio defines a pregnancy-related death as the death of a woman while pregnant or within 1 year of the end of pregnancy from any cause related to or aggravated by the pregnancy.

Further health care seeking behavior and decision-making are established reasons to reduce maternal and neonatal mortality. Appropriate and timely care is very essential for positive health outcomes. A study conducted in rural Sindh highlighted the factors for the first two delays (delay in deciding to seek care and in reaching it). The decision to seek appropriate medical care is influenced by women commonly requiring permission from their husbands or other family members to seek health services, inadequate knowledge about danger signs among couples and also inadequate Traditional Birth Attendant (TBA) knowledge, which influences the decision-making process. The second delay in reaching health care has been observed to be due to lack of access to appropriate transportation, inability to reach emergency obstetric care (EmONC) because of lack of transport and the lack of knowledge about the location of the nearest EmONC facility. The chances of maternal mortality increases if the hospital is 65 or more kilometers away [12, 19]. These results are also supported by a study that found lack of awareness followed by financial issues as key determinants of the 1st delay and long distance to health facility followed by late referral of 2nd delay among participants [20]. Delays in seeking care during pregnancy and after delivery have several barriers. A study carried out in rural Sindh found that difficulty in access to health facility includes poor access to transport and long distance to facility, absence of male companion to the health facility and cost of health services and transportation. There are also some traditional practices in rural areas that hinder utilization of healthcare services such as preference for alternative treatments from local religious leaders related to concerns about supernatural involvement, and preferring locally based informal health providers such as TBAs and pharmacists over professional health service providers. [12, 21].

Nevertheless, a higher level of education among couples and financial stability of households contribute to facility-based births [17, 25]. Recent findings showed that 56% of births to mothers with no education were assisted by a skilled provider and 52% of these were delivered in a health facility. Whereas 94% of women with a higher level of education had their last delivery assisted by SBA with 93% held at the health facility [9]. Previous studies in Sindh found that women having middle level or more education were more likely to have 4+ ANC visits and give birth in health facility. A similar relation is observable for wealth quintile, utilization of maternal health services and facility-based deliveries that are low among poor women [22, 23, 24, 25].

Ghani et al. (2019) found in their study on interfamilial relationships on birth preparedness and complication readiness in Pakistan that almost 60% of the respondents considered their husband to be at the top of the power hierarchy in the family. Consequently, in most cases the decision regarding place of delivery was made by the husband (33.5%) – followed by husband and wife jointly (26.5%) or by the mother-in-law (23.8%). Women who enjoyed a good relationship with their mother-in-law were more likely to receive antenatal care than those who did not. Furthermore, financial capacity and education are important determinants of the use of antenatal care [26].

Additionally, in a qualitative study about perceptions and practices among married women of childbearing age regarding obstetric danger signs in rural Islamabad, cultural practices were found to be deep-rooted. Among 75% of women, traditional practices and several home remedies were commonly used to manage complications in pregnancy prior to seeking medical care, which was only sought when the condition became unmanageable at home [28].

MNCH services in Sindh Province in Pakistan

In the rural districts of Sindh province, Maternal, Neonatal and Child Health (MNCH) services are normally allocated to three different types of health facilities. Basic Health Units (BHUs) provide preventive MNCH services and normal deliveries. One BHU is usually designed to support a population of around 8,000 people but the provision is not generally sufficient to meet this requirement. It is more common to find one BHU per Union Council (UC). BHUs represent the first tier of the government health service delivery infrastructure. They are small units providing outpatients services, ANC, post-natal care, normal deliveries and treatment of minor ailments. BHUs refer more complex cases to Rural Health Centers (RHC), Taluka Headquarter Hospital (THQ) or District Headquarter Hospital (DHQ). While BHUs operate only on weekdays between from 9 a.m. to 2 p.m., RHCs, THQs and DHQs provide services 24/7. RHCs provide basic Emergency Obstetric and Newborn Care (EmONC) services as a second level. Comprehensive EmONC services are provided only in the DHQ hospitals and in those THQs who have the necessary equipment and manpower.

Most notably, the Government is committed to achieve the SDGs in MNCH, which are directly linked with goals 4 and 5. The Lady Health Worker (LHW) Program was established in 1994, with the goal of providing primary care services to underserved populations in rural and urban areas. LHWs are deployed throughout all five provinces of Pakistan. These workers are attached to a local health facility, but they are primarily community based, working from their homes. After a three months classroom training and a 1 year of on-the-job training they provide promotive, preventive, curative, rehabilitative services to the target population. Their work scope includes cultivating community participation through enhanced awareness, attitude change, and mobilization. In the area of MNCH services, they are supposed to raise awareness on mother and health child in the community, increase immunization coverage in children aged 12-23 months (fully vaccinated), to expand Family Planning services in urban slums and rural areas for increase in Contraceptive Prevalence Rate and to contribute to an improved nutritional status of mothers & children.

The shortages in the health workforce, especially in rural areas and specifically of female healthcare provider, has negative consequences for the health of mothers and children. Therefore, aiming to bring down the maternal and neonatal mortality rates a female community-based workforce for rural areas was trained and made skilled to provide standardized maternal and newborn care in 2007. This new cadre of `Community Midwife', following graduation from an 18 month certified training course, act as front line providers of care to women and newborns and are deployed within communities to provide a link between the home-based care and the secondary and tertiary levels. Their knowledge and practical skills concern the care for mothers and babies during the pre-conceptual, ante-natal, natal and post-natal period; community members and leaders, and health providers within and outside the public health system. After successful completion of the training, a community midwife is certified by the Pakistan Nursing Council. The "Community Midwifes" (CMWs) work independently and free-lance and without supervision or a quality control by the public health system. They conduct normal deliveries in their "practice/house" or in the home of the pregnant woman, and refer cases to the next higher level of facility.

Rationale of the study

In order to improve outcomes, researchers advise policy makers to expand their focus beyond simply improving rates of education to examining effects of cultural norms, which constrain the independence of women in making decisions about their own health care [27]. The present study intends to contribute to this aim. Despite the variety of existing data, there is still a lack of evidence when it comes to factors influencing decision-making around the time of pregnancy and birth. A holistic study exploring the decision-making in communities and households, by women, their husbands and other family members as well as influential community members about where to give birth, taking into account births with and without complications/emergencies, and focusing on disadvantaged women in Sindh Province is missing to date. The present study will close this gap.

Chapter 2: Methodology

Case Study Design

Pakistan is one of the case studies conducted in four countries where SRC supports MNCH services. In Pakistan, the SRC has been contributing to improved Maternal, Neonatal, Child and Adolescent Health (MNCH) Services in collaboration with Aga Khan University (AKU) in District Dadu, Sindh Province since 2012. While the project started in the Taluka KN Shah in the first six years, it shifted to the Taluka Johi in 2019. The study sites included four union councils as Johi city 1, Johi city 2, Kamal Khan and Peer Mashaikh. These study sites have been the MNCH intervention program area by SRC and AKU.

Study aims and objectives

The **aim** of the study was to generate knowledge about low or delayed health care-seeking for maternal health services² in order to inform design or adaptation of interventions that will improve timely engagement with care and thus lead to reduction in the mortality and morbidity of mothers and their babies.

In particular, the study **objectives** were as follows:

- To understand the process of decision-making mainly related to facility birth, including birth planning and choices made if complications emerge.
- To identify facilitators and barriers to use of existing services under normal circumstances and at onset of complications/emergencies.
- To explore experiences and perceptions of relevant maternal health services as defined above, including local views of their accessibility, acceptability and quality, and how these affect care-seeking.

² Maternal health services are defined for this study as antenatal care (ANC) and facility-based birth, during situations of pregnancy and labour considered "normal" as well as at the onset of complications or obstetric emergency. Questions around PNC have been included, yet elaborated specifically for those respondents, where women experienced complications following birth.

To document experiences and perceptions of local health care providers, including their opinions
regarding community decision-making, facilitators and barriers related to maternal health care
use.

To meet the study objectives, the following **guiding questions** were formulated:

- How do women make decisions about whether to use/ not use available services during pregnancy and labour, and what are the respective roles of women, family members, and other stakeholders in this decision-making?
- What are the facilitators and barriers to using available services, both during pregnancy/ normal labour and in cases of emergency?
- At the onset of complications/ obstetric emergency, what contributes to the "3 delays" from the perspective of community members?
- How do health care providers view facilitators and barriers experienced by the community to uptake of facility-based delivery and related services, including during complications or emergency?
- How do women, family members, and others in their communities perceive the quality of services?

Study Sites and Sampling

The study site has been the intervention/program area of Swiss Red Cross in the Taluka Johi to improve uptake of MNCH services for the last consecutive three years. Additionally, the study area included both an urban and a rural site. The urban site has availability and access to public and private health facilities including Taluka Head Quarter (THQ) and District Head Quarter (DHQ) hospitals. The rural study sites have access to local health care providers (HCPs) in the BHUs and/or to the locally residing Community Midwifes, and are remote from secondary health facilities. Further, sampling was guided mainly by local diversity in socio-economic status, and ethnic composition.

	Community Women	Community Men	Health Care Providers	Other
Group Discussions	Rural/urban Ethnic group	Rural/urban Ethnic group	-	-
Individual Interviews	 Women who delivered in last 18 months in community Women who delivered in last 18 months in facility Women with complications during pregnancy Women with complications during birth 	 Husbands of women who had normal pregnancy/labour Husbands of women who experienced complications/emergency at different stages 	Community based health provider Facility based health provider Private provider (if relevant) Traditional health care practitioners	 Community key informants identified through group discussions Family members of deceased women (if appropriate)

Table 1: Inclusion criteria for the sampling

Methods

Qualitative data were collected in order to elicit community-level norms, experiences and perceptions related to facility-based delivery service use. Two methods were applied: interactive group discussions, which draw on participatory research techniques to engage participants in analyzing the local situation or problem; and individual semi-structured interviews, which encourage respondents to share their stories, points-of-view and suggestions through an open-ended and "narrative" format.

Focus Group Discussions (FGDs)

Focus Group Discussions incorporated structured, interactive activities to encourage participants' engagement with one another, and avoid the typical weakness of focus groups where respondents take turns answering the facilitator's questions individually. These activities are referred to simple participatory research techniques. Participatory approaches have a long legacy in development programs as means to collect data as well as to build collaborative skills and group confidence in identifying and analyzing shared problems as a precursor to working toward feasible solutions. They are thus well suited to research designed to produce actionable findings.

The FGDs were designed to last 60-90 minutes and to move from "ice breaker" activities to those that required more critical thinking and analysis. These activities included community mapping, pregnancy pathway and "horse & cart" activities aiming to generate discussions around the availability of and feasibility to a health care service, common and local experiences during pregnancies and, facilitators and barriers to health care seeking. The specific activities used during FGDs can be found in this report's Annex.

After the ice breaking activities, FGDs were conducted to yield various information:

(1) knowledge and perceptions of accessibility and relevance of the MNCH health system infrastructure; (2) "typical" decision-making journeys of pregnant woman from deciding whether or not to engage with facility care up through normal labour and/or onset of emergency and,

(3) facilitators and barriers to timely engagement with care at each stage of the pregnancy and delivery.

In total 11 FGDs, including 6 at rural and 5 at urban sites were held with: (1) community women and (2) community men. Each group had 8-14 participants.

Focus Group Discussions				
Area Type	Men	Women	Total	
Rural	2	4	6	
Urban	2	3	5	
Total	4	7	11	

Facure Crown Discussions

Table 2: Distribution of FGDs

The study site had ethnic diversity including Sindhi, Seraiki and Balochi population groups. The study participants age ranged between 20 to 40 years. During the recruitment of the FGD participants, fieldworkers informed about the aims of the discussion. They explained that the research was exploring local attitudes and behavior related to maternal health care, that no one would be required to share personal or sensitive information and that participants could leave at any time. All participants and facilitators had to wear facemasks and kept physical distance between individuals to reduce potential Covid transmission.

Individual Semi-structured interviews

Interviews were conducted through a narrative approach, starting with general topics and introductory questions to build rapport before focusing on experience and perceptions of health care-seeking during pregnancy and birth. Community respondents were encouraged to tell their own stories, focusing on how they took decisions about available local care throughout their (or their family member's) pregnancy, with whom they consulted and from whom they took advice/instruction, and how their own intentions may have differed or been influenced by others. Respondents were asked to reflect on the criteria they used for deciding whether and where to seek services, and their perception of the accessibility and quality of available choices. In total, 35 individual interviews with various respondent groups were conducted:

Individual Interviews (IIs)					
Specific Interest	Population Group	No. of IIs	By area type		
Community Women with normal birth outcome and without complications	Community Women (CW) who delivered at home (HD) with normal vaginal delivery (NVD) (Women who delivered in last 6 months, parity at least one).	3	Urban = 1 Rural = 2		
	Community Women (CW) who delivered at Health Facility (HF) with SBA (Women who delivered in last 6 months, parity at least one).	2	Urban = 1 Rural = 1		
Community Women who delivered with complications	Community Women (CW) who delivered at home (HD) with normal birth outcome-NVD (Women who delivered in last 6 months, parity at least one).	4	Urban = 2 Rural = 2		
	Community Women (CW) who delivered at Health Facility (HF) with SBA (Women who delivered in last 6 months, parity at least one).	1	Urban = 1 Rural = 0		
Currently Pregnant Women	Pregnant women with ANC visit and pregnant without ANC (WANC) visit	4	Urban = 2 Rural = 2		
Community Men	Community men (husband of women gave birth in last 6 Months home+ Facility)	13	Urban = 7 Rural = 6		
Health Care Providers	HCPs like LHWs, CHWs, TBA, midwives, LHV and Public or Private General Practitioner	5	Urban = 2 Rural = 3		
Key informant	Religious / Health Administrative Management/Health local authority / Family members of deceased women	3	Urban = 2 Rural = 1		
Total IIs			35		

Table 3: Distribution and criteria of participants for individual interviews

The interviews explored the process of decision-making and birth choices, actual experiences of using services, including challenges of being able to obtain chosen options (e.g. barriers related to cost, transport, time/opportunity) and levels of satisfaction (perceived technical quality, staff attitudes and friendliness, efficiency and convenience). For those respondents who experienced complications or a sudden emergency, additional questions were asked related to reactions at the time, how decisions were made to seek care (or not), and by whom, and what followed in terms of reaching and obtaining required care, and how the experience was subsequently perceived. However, these differed according to whether the complication/emergency was experienced during pregnancy, during labor or after giving birth.

The majority of interviews were taken from women and their husbands who have experienced different types of service use during pregnancy and child birth with various health outcomes. This included women who delivered at home/in the community, women who delivered in the facility, and women in both cases with adverse experiences prior to, during, or after giving birth had occurred. Finally, key informants were selected to provide an "overview" of experiences in their community. These included local health workers

and in some cases, family members of women who died from maternal causes. They were interviewed as key informants to understand whether/how health care-seeking behavior differed from other "near miss" or normal pregnancy situations. Such interviews were carefully managed due to their sensitive nature, and the potential of causing distress to bereaved family members.

Enrolment and Data Collection Method

Ethical approval no. 2020-5642-15327 for this study was received from the Ethical Review Committee of the Aga Khan University. After receiving the approval, fieldworkers were recruited and signed a "Code of Conduct" confirming their adherence to the SRC's and AKUs requirements for privacy, confidentiality, and other principles of ethical research.

Field supervisors and data collectors had visited the study sites to introduce themselves and this research study to the locals of the community. The local women and men were invited for the focus group discussion (FGDs). These FGD participants were also helpful in identifying the eligible participants for Individual interviews (IIs). Individual Interview respondents were selected through a combination of methods:

(1) Focus group discussions- where specific individuals appeared to have in-depth knowledge or clearly meet interview-sampling criteria.

(2) "Snowball sampling" where through recommendation of other key informants or community members different potential respondents eligible for the study were identified.

(3) Key health facilities: Local health facility/ Community providers who are familiar or informed with women and household specific information, aware of the pregnancy related outcomes, experience and their care management. Local staff of these health care facilities were contacted in identifying and tracing eligible participants.

Individual interviews were also conducted with husbands of these women, other key informants or influential persons such as health care providers (e.g. LHWs, Midwives, any other government and private practitioner), local health authority representatives (e.g. Medical superintendent) and any local leaders like volunteers, religious or political leaders. They were identified by the local men and women of the community through the FGDs.

These individual interviews were carried out in respondent's house in privacy. Similarly, FGDs were organized for a time and location convenient to the study participants. Women focus groups were carried out at a house in neighbourhood at a suitable location where privacy was ensured throughout the discussion. Focus groups with men were carried out in community meeting rooms.

All interviews were conducted by study team including study supervisors and fieldworkers employed and deployed for the study. All identified respondents were contacted at least 24 hours prior to the interview in order to confirm the time and location and answer their queries, if any.

Training and Pilot Testing

The field study team was comprised of 10 members (4 men and 6 women) who played different roles like moderator, note taker, transcriber, interviewer and field coordinator to conduct both FGDs and IIs. Four of these team members were already regular staff of AKU. In a 3-day training, the team was trained by the study supervisor and principle investigator to conduct the FGDs and IIs. Third day of the training was the field practice day where the team was split into two and conducted FGDs and IIs with target groups in non-study area. The study supervisor provided feedback on their moderation, note taking and transcriptions.

Recording and Transcription

FGDs and IIs were conducted in local language (Sindhi) through translated study tools. All interviews were coded and kept until the report writing was finished. All discussions were audio taped which helped in developing verbatim transcriptions. All transcriptions were later analyzed and finally the results were translated into English for report writing. Recordings were deleted after the transcriptions.

Data Analysis

We analyzed qualitative transcripts using ATLAS.ti software (version 8; ATLAS.ti Scientific Software Development GmbH, Berlin, Germany). We used basic thematic content analysis to organize, code and interpret our data. First, the analyses team read all group discussion notes and interview transcripts several times to become familiar with the data. Then they started to categorize data into broad thematic areas. We developed a coding framework in ATLAS. ti, which included a series of codes based on predetermined topics from the interview guides and broad themes that emerged through our initial review of the transcripts. The analysis team included 2 members one having language understanding of Sindhi and Urdu and the other one knowing Urdu and English. This team composition was important to review the primary coder's analysis and made additions or changes based on their impression of the data. We coded the first three transcripts as a team to finalise the coding framework, after which no new themes were added. Once all transcripts were coded, cross-checked, and verified, we re-read the coded transcripts to synthesize important narratives.

Chapter 3: Results

The results are grouped by the themes of the findings from the focus group discussion (including the findings from the community mapping, the horse and cart activity) and the individual interviews of community men, women and health care providers.

Knowledge about health facilities and their use

Male and female participants named Basic Health Units (BHU's), private health facilities, health centers, community midwifes, lady health workers, private male doctors and also spiritual healers where they had gone for medical assistance and treatment. Rural participants mentioned specifically the following health facilities: BHU Kamal Khan, BHU Allah Yarani, THQ Johi, DHQ Dadu, Sehwan Government Hospital and Nawabshah Private Hospital, as their major health care facilities. Most of the participants named a BHU as their primary and most preferable health care facility to go to for their various medical treatments, in order to stay healthy. The participants had various reasons for this:

'Well, we go to BHU for our general treatment. We go there when we are in any sort of pain. We also choose to go there when medical tests needs to be done. This is the health care facility that is mostly availed by participants (of the FGD)" (Women community; Allah Bachaya Village – Rural area)

"The medical staff is available 24/7, always open. Basically, three doctors are always available as per their shifts. There is a doctor who is available from 08:00 am till 2:00 pm, after which the other doctor is available from 2:00 pm onwards" (Women community; Meeran Shah Village – Rural area)

The participants of the urban areas shared that the THQ Johi and the LHW as their preferable choice. According to them, THQ was situated nearby, at the main Johi road, where already a large number of people resided. Being in close proximity, it is easier for them to visit THQ Johi, making it one of the main reasons also to go there. Due to the short distance, they mentioned that they did not have to worry about the high transportation costs.

"We visit the THQ to avail the medical services. The essential medical facilities are available. And most importantly, we do not have to travel to areas which are far for our medical checkups, as this hospital is located nearby at a walking distance from our homes" (Women community; Ward 1 – Urban area)

The participants from the urban area shared about the affiliation of the Lady Health Workers with the THQ. Many participants stated that they rely on the LHWs, as they felt more comfortable discussing their general as well as particular medical issues with them.

The initial period of pregnancy: sharing the news and accessing services

After becoming aware of their pregnancy, rural women said that they first share the news with their mothers-in-law or with their husbands. They added that they shared and discussed all with their mothers-in-law, as they held them in high regard and have great respect for them. Women said they have a good family support system at home throughout the period or pregnancy. Further, one woman during her interview discussed about the support she had received from her brother during a critical time. As her

husband was unemployed and did not have sufficient financial resources, her brother came forward when she needed the support most. He financially helped her and took care of her needs during her pregnancy.

The participants of urban areas also were of the same views, thus, following same practices. They also informed their husbands and mothers-in-law first about their pregnancies.

"I inform everything to my husband even if I have mother-in-law, I will prefer to initially discuss the things with my husband."

(Women community; Meeran Shah village UC, Kamal Khan)

"We share the news of our pregnancy with our mothers- in-law and husbands. We always inform them first and take decisions accordingly"

(Women community; Allah Bachayo Village – Rural area)

Some participants also shared that during the very early stages, they go for blood and urine tests in order to confirm their pregnancies. Participants from the rural area shared that they had the option of going to BHU Kamal Khan and THQ Johi for the pregnancy tests. After getting the tests results, they take medications as per the doctor's prescription. The participants chose different timelines to go for their tests. Some got the tests done in their first trimester, while others in their second trimester. It was observed that all the women from both the urban and rural areas had always gotten the urine test done in order to confirm their pregnancies. Some of the participants from the rural area shared that usually women consult the doctors during the third month of their pregnancy. It is entirely an individual's choice as to when a woman who is pregnant is willing and comfortable to go for the initial treatment. However, the data collected from both the sides suggests that most of the women chose to get the confirmation of their pregnancy and first antenatal care visit in the first three months of their pregnancy.

"We get the confirmation of our pregnancy from urine and blood tests. Through these tests we find out about our pregnancy"

(Women community; Bachal Khashkheli Village – Rural area)

"Well, if we do not get enough support in BHU then we go to private facility at Johi."

(Men community; Meeran Shah Village – UC, Kamal Khan)

Similarly, the women from the urban area shared that they go for regular check-ups until the very end of their pregnancy. One of the participants from the urban area shared that if any complications occurred, she chose to go to THQ Johi.

"In the first three months we go for the required care, we go for the urine test and blood test as well"

(Women community; Meeran Shah Village – Rural area)

"We always consult the doctors and regularly stay in touch with them till the end of our pregnancy

(Women community; Ward 1 – Urban area)

"In initial phases husband takes wives to doctor. She gets treatment of first three month initially. After months then she goes for a checkup and Ultrasound."

(Men community; Village Sahib Khan, UC; Kamal Khan)

Women shared about the medical health facilities that were available to them. Women from the rural study site had mentioned that they have access to BHU and THQ health facilities. They further named some health care providers including CMW. Most women (2/3 of the interviewed women) also said that they see spiritual healers during their pregnancies. Most of the participants mentioned that they received antenatal care from a CMW or BHU. They highlighted several services, which they had availed in BHU. Firstly, they had free of cost treatment, availability of doctors and ambulance facilities. Most of the individuals said that it was convenient for them to go to the BHU for treatment because they can easily get the medicines free of cost as well. According to them, the required medicines were not available at local shops. Therefore, they thought it is better to seek treatment for the health facility right away.

"I always go BHU Kamal Khan. There are many facilities available. We can get the treatment from there free of cost. And doctors are also available there round the clock."

(Interview with women – Case Type: Normal delivery - UC Peer Mashaikh-Rural)

"We usually have the same opinion when it comes to acquiring any medical facility. And I always take the decisions alongside with my family that where I need to get my delivery done".

(Interview with women – Case type - complications after delivery-Ward 8 Juhi-Rural)

Normal delivery services are offered at the BHU and by the CMW. Women said they did not have any difference of opinion with their family members regarding the decision of the health care provider (HCP).

"There are many facilities available in BHU. I always go there as doctors are mostly cooperative and treatment is also of desired level".

(Interview with women – Case type - normal delivery - Jam Chandio UC Kamal Khan-Rural)

Husbands and mothers in law are perceived as supportive decision-makers

The women from both the rural and urban areas also shared from where they had sought the needed medical advice and suggestions. They acknowledged the gracious support from their mothers-in-law and husbands when they needed it the most. The participants of both areas said that they mostly relied on their advice and suggestions. Mothers-in-law and husbands played a huge and vital role in decision-making during the medical process. It was obvious from the discussions of female participants that they held a passive role in decision-making. They mostly relied and agreed on the decisions taken by their mothers-in-law and husbands. According to them, their mothers-in-law were mostly supportive and

helpful. The perspective of the men from the FGDs depicts a similar impression as they highlight themselves and their mothers as decision makers.

"I took decision by myself, but I must say that the assistance of the mother-in-law is of great importance. She helps a lot in such a situation. In case if a mother-in-law is not available then we (husbands) accompany her." (Men community; Village Meeran Shah, UC, Kamal Khan)

As their mothers-in-law and husbands were cooperative and supportive, the participants were mostly encouraged to talk about their medical issues. They generally did not face any obstacles in discussing or getting advice from their family members.

"Women seek advice from their husbands and mothers-in-law" (Women community; Bachal Khaskheli Village – Rural area)

'We always discuss and take advice from our mothers- in -law. They always support us. Our husbands are also very cooperative. They always listen to us and guide us" (Women community; Meeran Shah Village – Rural area)

However, a few participants were of the opinion that they were more comfortable in taking advice or suggestion from their husbands only. One participant from the urban area did share that she was deprived of the support of her mother-in-law, as she was always reluctant and hesitant to give her any proper advice or support. She shared that her mother-in-law had always boasted about her time when she was young, how comfortably she had survived without seeking any medical care or suggestions. Other than this one case, all the other participants from both the rural and urban areas highly acknowledged the support of their mothers-in-law and husbands. It is important to note that all mentioned to live in joint families, with all generations dwelling together.

The participants from both the urban and rural study sites shared that they were always generously supported by their family members. Their husband and mothers-in-law had always cooperated with them in their time of need. Participants considered them also as one of their facilitators. In case of any emergencies, they were well taken care of, and provided for.

"Our husbands and mothers- in -law have always been cooperative. They have always ensured that we are well taken care of and provided for in difficult times"

(Women community; Bachal Khashkheli Village – Rural area)

Men were aware of many medical complains that a pregnant woman can suffer during her pregnancy. Men of rural study site had also talked about the severe health concerns, which their women face. Those included heartburn, palpitation, heaviness on chest and nausea. Further, the participants from urban study site had also mentioned pain in legs, body shivering, weakness, and excessive vomiting as the troubling health concerns during the early stages of pregnancy. All the participants had mentioned that support from the family members is of critical importance when a woman goes through pregnancy. According to them, the mother in laws and husbands themselves had always been there for the women in every difficult situation. According to them, maintaining proper diet, avoiding house chores, and taking proper rest are important for the health of pregnant women.

'It is imperative for women to take proper diet and avoid taking part in household activities for their health and wellbeing. In addition, proper rest is also mandatory'

(Interview with Community men - Raja Khashkheli Charo Village; Husband – Case Type: complications during pregnancy)

Women were aware that they had to take proper care and rest for their good health. They said to avoid doing house chores and asked their husbands to arrange for their proper diet. The individuals had also shared that most of the time their mothers-in-law were available in their homes to help in any emergency during their pregnancies.

The respondents had also shared about the common complains that they had during the initial stages of their pregnancy. Nausea, heaviness on the heart, legs pain, body trembling and weakness were the most highlighted conditions.

"I feel heaviness on heart and nausea. This is the problem that I mostly had to go through, during my all three pregnancies. When I came to know about my pregnancy, I immediately informed to my husband and mother-in-law."

(Interview with women – Case Type: complications after delivery-Dodo Panhwar-UC Peer Mashaikh-Rural)

"I felt severe pain in my legs and weakness when I became pregnant. But I always have had great support from my family members."

(Interview with women – Case Type: complication during labor -Ward 6-Thaheem Muhalla Johi- Urban)

Men also shared that the decision for accessing a health care facility or HCP is jointly made. They said that they have mutual understanding with women and other family members about from where they should avail a health care service.

'I avoid taking individual decisions when it is about choosing a health facility. Therefore, mostly women are taken into confidence about choosing any specific health care provider. hence, the decision is taken in accordance with mutual consent'

(Interview with Community men - Raja Khashkheli Charo Village Shaffi M Khashkheli - Case Type: complications during pregnancy'

Community Midwifes play an important role

CMWs are a popular first point of contact for pregnant women in the rural area

All the participants shared their individual experiences, as well as the choices they made regarding their antenatal care. They mentioned several health care personnel, whom they chose to go to avail the health care facilities. Pregnant women from the rural areas mostly named the Community Midwives (CMW) as one of their preferable options. They chose to go to her in the initial stage of the pregnancy as a first contact person. Some shared that they chose services provided by the CMWs because they could not

afford other available health care services. Women said that they were familiar with the CMW, as she also resided in the same locality as them. Some participants also shared that the CMW were always available to provide them with the necessary medical assistance. Furthermore, they also claimed that the CMWs have great expertise and experience in dealing with normal pregnancy cases. One of the participants revealed that the CMW always used a particular oil to ease the process of giving birth. She stated that this was the main reason for opting for the CMW for normal delivery. Another participant revealed that one of the CMWs is her relative and made it much more comfortable for her to seek her help. Others shared that their main reasons for preferring CMW related to transportation, as they cannot easily commute to other locations for the medical services. While some participants always had CMWs available in their areas, some had to call them from the surrounding villages.

One of the participants shared that the CMW also accompanied them to the hospitals when needed. Since CMWs were mostly easily accessible to the majority of the community women, their recommendations to go to the medical doctors also did matter the most. One participant from the rural area shared that a CMW referred them to private male doctors, if she could not handle the case. These doctors were available in the Allah Bachayo village in the rural area.

'We find it more painful to go to doctors and go through the regular delivery process in the hospitals. However, with the aid of CMW it is less painful, as she uses oil during the delivery process. For example, there are two kinds of operations, one is of low level, and one is of high level. We mostly prefer a normal delivery. Moreover, a CMW uses oil for pregnant women which we prefer, while a doctor goes for a normal delivery process which is extremely painful" (Women community; Meeran Shah Village – Rural area)

"We call CMW at our home. She is skilled and experienced in managing the normal pregnancies. Her knowledge is excellent in dealing with such cases. Furthermore, she uses this particular oil which aids in easing the pain during the normal delivery process" (Women community; Allah Bachayo Village – Rural area)

Despite the advantages of the CMWs, some participants also mentioned the risks associated with consultations with CMWs, such as their lack of facilities and supplies when complications arise. Some of the women of the area preferred to go to the BHU for medical services, in order to avoid taking any unnecessary risks.

"We take a pregnant woman to the Community Midwife when she is in slight pain, if the pain increases then we go to a doctor. CMW informs us about the initial condition, if she feels that she cannot handle the patient, she also accompanies us to the doctor" (Women community; Allah Bachayo Village – Rural area)

"Mostly women in our village either go to BHU or consult with CMW for their prenatal care. Further, they always have a support of their mother in-laws who are very generous"

(Interview with Community men - Gulzar Ahmed Hussain Absad Colony UC johi 2 – Case Type: Complication during labor-Urban are)

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CMWs are important gatekeepers to normal deliveries

Some women reported to choose to deliver at home with the assistance of a CMW. They had the perception that a CMW can avoid Cesarean section and will ensure normal delivery. Mostly women wanted to avoid caesarean operation for delivery and according to them, BHU will not manage Cesarean section and they will further be referred for a caesarean operation at THQ Johi. Women shared to take necessary medical suggestions and advices from her. According to the participants, CMW had always facilitated them well. Women expressed that CMW supports them during pregnancy and after birth, they also visit them and do the antenatal and postnatal check-ups.

"I went through severe pain all night long at the time of delivery. The lady nurse provided all the necessary assistance which was required"

(Interview with women – Case Type - with complications during labor-Ward 1 Babar Muhalla-Urban)

Men said women think if they go to BHU for their normal delivery, eventually they will be further referred to THQ Johi for a caesarean operation. In the case of CMW, they were confident that CMW will somehow manage to get their normal delivery done at home.

Women are mostly reluctant to go to a doctor at the time of their delivery. Their first choice is mostly a CMW. As, according to them they relatively have to suffer a less pain with CMW as compare to doctor, during their delivery process'

(Interview with Community men - Zafar Bahoto New Colony Ward 8 UC Johi 2 – Case Type: complications during pregnancy and labor)

Traditional practices are still prevalent

Further, some of the participants shared to go to a spiritual healer. According to them, they went to him to acquire blessings. The male participants said that women go to the spiritual healer as he gives them some holy verses to read which proved to be beneficial for protection of their health and overall well-being.

"We also go to spiritual healer he gives us the verses to read which helps us to improve our health."

(Interview with women – Case Type - with complications during pregnancy- Dodo Panhwar-UC Peer Mashaikh)

Some female respondents also stated to visit a spiritual healer, having a firm belief in them. They shared that the spiritual healer had always given them Quranic verses to recite. Some of the women shared that their health, or any underlying medical condition improved after getting help from the spiritual healers. However, it always remained an individual choice. After analyzing the data of the discussions from both urban and rural sites, it seemed it important for some women to go the spiritual healers, as they had immense faith in them.

"We go to our spiritual healer. He is very learned and skillful. We recite Quranic verses which he gives to us, and we feel much better after reciting them."

(Women community; Bachal Khashkheli Village – Rural area)

Poverty determines health-seeking behaviour

Poverty and lack of resources being a huge factor for not availing any health care services, until the women's condition further deteriorated, and they were in unbearable pain.

"It depends on our pocket that which facility we can easily afford. Those who cannot afford mostly go to BHU. There is also a problem of damaged roads. Therefore, there is an issue to travel easily. Sometimes we also borrow money from our neighbors. Well, there are also unemployed people, and they face problems. (Men community; Meeran Shah village, UC, Kamal Khan)

"We mostly take women to BHU. There are many facilities available. We can get the treatment from there free of cost. And doctors are also available there round the clock"

(Interview with Community men - Azeem Gopang peer Mashaikh – Case Type: normal delivery at health facility)

Most of the interviewed men were associated with farming and agriculture for their daily wage income. According to them, they suffer financial hardships and usually are the only earning member of the family. Moreover, interviewees had highlighted the problem of transportation in their areas. There were only a few who believed they had easy and comfortable travel as they own a motor bike. In the opinion of the majority of interviewees, arranging the transport and reaching to any HCP was one of the issues, which they are helpless about and had mostly suffered from.

'I am the only one who bear the complete expenses of my family. Transportation issues has remained persistent with us'

(Interview with Community men- Inayat Hussain Babar Hussain Abad Colony UC Johi 2 -Case Type: normal pregnancy at home)

Only some of the participants were easily able to manage and bear the expenses of private transport like rickshaw, taxi etc.

"Transportation had also remained a huge challenge for us. We are already not financially stable. On top of it, we have to bear the cost of transportation to reach anywhere we need."

(Interview women with complications after delivery - Ward-8 Subhanallah Muhalla-UC-Johi -2)

Most of the women also shared that they live in a joint family system with only one breadwinner thus, being usually short of resources and facing financial challenges. They also shared that doctors tell them that their children are malnourished.

"We are a joint family. My in-laws also live with us. Further, there is only one person who earns in the entire family, which is my husband. Thus, it is always difficult for us to manage our expenses."

(Interview with women – Case Type: complications after delivery- Salar Panwar UC Peer Mashaikh-Rural)

Even though feudal culture³ is gradually eliminated in Pakistan, it still very strongly exists in Sindh province. It exists in the form of large landholders having social, political and often extending from legal to religious power. According to the respondents, the feudal lords hold important responsibilities to help overcome poverty barriers. The participants from the rural areas shared that the feudal lords' cooperation was much needed and of high importance for them. According to them the feudal Lords helped them in their time of need. They were of the view that the feudal Lord had a major influence in the rural areas where they resided, hence, if they looked and gave attention into a prevailing situation of the area, things could change for the better. Some shared that they always relied on them and requested them to solve their problems, find a solution for them. The main reason why the participants mentioned the feudal lords as facilitators, because some of them had helped them.

"We go to feudal for help. They help us and give us a loan during tough times and difficult days. And, they have a major influence in our areas"

"We also expect feudal to cooperate with us and work for the betterment, prosperity and general well-being of the people of our village"

(Women community; Meeran Shah Village – Rural area)

Participants from the rural area talked about the BHU Kamal Khan as being a "facilitator". In the BHU the facilities and services are available free of costs and easily accessible. Free of cost treatment, provision of medicines, free medical tests, round the clock availability of doctors and transport facility were the main reasons for the residents of the area to address it as one of their prime facilitators.

Since most of these participants were living in poverty with limited resources, hence, availing a private health care facility was rather difficult for them. One of the participants from the rural area reported that CMWs normally charge a sum of PKR 5000 for a normal delivery. In terms of access for poor people respondents stated that

"The health care facility at BHU is always free of cost. They do not charge us a single penny. We are poor people, so it is of great help to us"

(Women community; Shahmeer Khan Village – Rural area)

³ Feudalism can be broadly defined as a system for structuring society around relationships derived from the holding of land, in exchange for service or labor. It is referred to as a concept from the past in rest of the world while poor people of Pakistan are still coexisting with the landlords.

The participants from both study sites also highlighted the impact of COVID-19 on the poverty level and thus their health. They said that many people amongst them had lost their jobs due to the pandemic. They lost the opportunity to earn daily wages. Furthermore, due to lack of adequate education, they could not travel to the city to find any suitable jobs for themselves. Due to inadequate financial resources people were unable to make both ends meet. Covid-19 had badly affected the livelihoods of the people. They had to be in isolation in their homes, affecting their overall well-being. Due to poverty, most of the women were deprived of a proper diet, having a direct and devastating impact on their health and pregnancies.

"Our husbands have lost their jobs due to the pandemic. We have been finding it difficult to survive. Most of the pregnant women are unable to have a proper diet"

(Women community; Ward 1 – Urban area)

"Dearth of sufficient financial resources is also the consistent issue for us due to which we cannot take proper diet. Thus, our health is compromised"

(FGD with Community women- Allah Bachayo Village- Rural area)

"Weakness has been our continuous health issue and mostly it happens because of the lack of sufficient diet"

(FGD with Community women- Allah Bachayo Village- Rural area)

Participants mentioned that mainly women suffer from lack of nutrition because of poverty. Anemia was also identified as one of the serious health challenges most pregnant women had to face. They shared that anemia proved to be most dangerous and harmful for them, and prevalent at the time of their delivery. Some women felt that lack of proper diet had been the major cause for anemia. Due to poverty, most of the women couldn't afford a good diet. Therefore, poverty being a major factor in being unable to get the proper and required care. However, the participants also stated, that pregnant women receive better attention for a balanced diet at the later stage of pregnancy, if the family can afford it. During the second phase of pregnancy, women shared that they do take proper care of their diet, ensuring they stay healthy. They focused on maintaining good health during the second phase, trimester of their pregnancy. The women request their husbands to bring for them fruits, vegetables, and other food items they prefer to eat during the pregnancy. The elders in their families also advise them to take extra care, take a nutritious diet to maintain good health. Some women develop aversions to certain food items like chicken or meat, and vegetables.

"And in the second phase we take good care of our diet. We ensure we take a balanced diet in order to avoid any kind of weakness. During the third trimester of our pregnancy our family members advise us to avoid doing household chores, hence, we mostly take rest during six to nine months of our pregnancy"

(Women community; Bachal Khashkheli Village – Rural area)

Transport availability is crucial to reach health services

The participants from urban and rural areas concluded own transport as one of the facilitators. According to them, those who had their own transport did not have any problems in travelling to any kind of HCP. Individuals who had their own transport always had the advantage to reach anywhere with comfort and ease. Those who did not have their own transport had difficulties to reach certain HCPs. The participants particularly mentioned motor bikes as they considered it the cheapest form of travel.

"If we have our own motorbikes then we do not have any issues related to travelling anywhere"

(Women community; Meeran Shah Village – Rural area)

Most participants also discussed about the damaged roads. They had severe issues in transport due to the damaged roads. Due to the flooding, the infrastructure had collapsed. Thus, pregnant women had to face problems to reach any HCP timely, particularly in the middle of night. This is a huge matter of concern of both the areas, as the locals of the areas want an improved infrastructure, new roads etc.

Mostly, the roads were destroyed creating severe barriers, in order to reach any health care facility, particularly for the pregnant women. This caused delays, and all kinds of other problems.

"The roads are in bad shape. They are totally damaged. We are unable to travel easily"

(Women community; Meeran Shah Village – Rural area)

Some participants from both the rural and urban areas had also highlighted those long distances to the hospitals from their homes as one of their barriers. They shared that they always failed to reach HCP in time in case of an emergency.

The damaged roads made it unable to reach the health facilities in time in both rural and urban areas. Communities wanted the relevant authorities to address this issue urgently. Respondents shared that the feudal Lords would also help, and influence in resolving these pending issues, as they had the power to do so, with strong political connections. The participants shared that were in constant contact with the ruling political parties, and they expect them to settle the issue of damaged roads.

"We need feudals to help us. They are powerful. They can talk to concerned authorities to tackle this issue of damaged roads"

(Women community; Allah Bachayo Village – Rural area)

Transportation was the most persistent issue highlighted by the majority of the participants. Some said they had their own motorbike. However, most of the participants were dependent on public transportation. According to them, managing the transport and reaching to a health care provider or a facility was a huge problem.

The participants from the urban area in Johi town mentioned the services preference of the THQ hospital, because the THQ is situated nearby in walking distance from where they reside.

Provider skills and facility equipment influence institutional delivery

The participants from the urban area preferred the services of LHW and THQ, they had availed the services during their normal pregnancies. The felt that LHWs were more skilled and reliable, as opposed to the CMWs.

"CMW does not have any facilities available. She only relies on her experience and knowledge, thus, handles normal pregnancies" (Women community; Bachal Khaskheli Village – Rural area)

"Sometimes when a child is born, he needs oxygen urgently and this facility is not available at CMW's houses. Due to non-availability of oxygen the child may loss his life. Therefore, I prefer to go to BHU." (Men community; Village Sahib Khan, UC, Kamal Khan – Rural area)

"We go to BHU Kamal Khan for our initial treatment during our normal delivery" (Women community; Meeran Shah Village – Rural area)

"We feel that the knowledge and skills of LHW as most reliable than anyone else. We always go to her. She is available in THQ Johi, and it is situated nearby at a shorter distance from from our homes" (Women community; Bachal Khaskheli Village – Rural area)

Participants also shared that due to unavailability of certain services and equipment in health facilities like oxygen and C-section operation facility, they had to travel to Sehwan Government Hospital situated at a distance of 48 Kilometers from Johi. Some said they also travelled to Nawabshah city to a private health care facility, which is situated at a distance of 102 Kilometers. Participants had further shared that even though the BHU Kamal provided the ambulance, they still had to pay PKR 7per kilometer for the journey.

"We do not have the oxygen and C-section operation facility available at BHU, therefore, we have to travel to far flung areas to avail this facility. It costs us a lot when we travel far for such treatments as we also bear the cost of our food etc."

(Women community; Bachal Khashkheli Village – Rural area)

One of the participants also shared that she regularly goes to DHQ for fetal heart rate monitoring and check-up. She further informed that a lady doctor treated her at DHQ. Similarly, one of the pregnant women shared that she frequently goes for check-ups, as she is both concerned and excited at the same time, about her fetus.

"We do not go to any doctor. We always try home based remedies, as per the advice of our mothers- in- law"

(Women community; Allah Bachayo Village – Rural area)

In addition, male participants had discussed that it is important to have health care facilities located nearby. They mentioned that there are CMW houses around but availability of health facilities with essential medical facilities is crucial. They suggested if equipped health facilities would be available at possible short distances then they won't be having major challenges to get there and hence their traveling time and cost would also be curtailed significantly.

'It is definite that if we have a nearby health facility then we would be having no problems in reaching and our time and cost of travel would also be managed easily' (Interview with Community men -Bashir Ahmed Soomro – Case Type: complications after delivery)

Most of the men reported to choose public health facilities for the delivery because of availability of the proper medical facilities and medical support and to manage any complication. However, some of them did choose to have delivery assisted by CMW for their women because they belief that Caesarian section can be avoided by the CMWs. In this context, the individuals in their interviews had claimed that mostly their experiences went well in BHU Kamal Khan for their antenatal and postnatal care. Similarly, the same notion was shared by the participants of the urban side as according to them THQ Johi was one among the suitable options to acquire reliable and effective medical treatment and consultation.

"We have lot of facilities in BHU Kamal Khan. I take my wife there. The attitude of doctors is nice, and they mostly cooperate with us"

(Interview with Community men - Zafar Bahoto New Colony Ward 8 UC Johi 2 – Case Type: complications during pregnancy and labor)

"BHU Kamal Khan will be the suitable option for people of rural side to avail of medical facilities and those who belong to Urban side they have the reasonable option available of THQ Juhi necessary and required medical facilities are available to them there"

(Interview with Community men - Nazir Rodnani Village Panah Rodnani UC Kamal Khan – Case Type: complication after delivery)

Women shared that they were comfortable in having delivered in a health facility like BHU or THQ. Women said that the availability of proper medical facilities and medical support during delivery and especially for unforeseen situation were the main reasons to opt for the facility-based delivery. Women shared satisfaction over the services availed from BHU and THQ health facilities. They were also satisfied about how the nurses of the hospital take care of the newborn. According to them THQ Johi was the best option to acquire reliable, effective medical treatment and consultation.

Further, most of the respondents reported that they would avail the same health services in the next pregnancies as well. Participants who availed health services from facilities also said that they would recommend facility care to other community members. Women shared their opinion to persuade other women to avail antenatal and postnatal care. As the discussion further proceeded with participants, they also shared about postnatal scenarios in their individual interviews.

"We constantly feel a mental distress after the pregnancy. It feels like that we lose concentration and cannot focus on the affairs of our daily life with attention and alertness" (FGD with Community women- Bachal Khaskheli village- Rural area)

"Mostly excessive vaginal bleeding has been the constant problem that I go through after the delivery, and it also causes weakness at times"

(FGD with Community Women- Meeran Shah Village-Rural area)

Health care providers (HCPs) shared that the government's staff is conducting awareness sessions on MCH at Health facilities by Medical Officers and in the field through LHWs and male social mobilizers. The social mobilizers arrange Community Support Group Meetings on MNCH and take feedback, suggestions and complaints from the community about MCH services. The Community members are usually satisfied about the services offered by health facilities. HCPs had a view that health facility staff has improved practices of pregnancy and birth care for women. HCPs also indicated the shortage of medical staff in primary health facilities.

Quality of care is important to choose the place of delivery

Men and women preferred different health care sources for many reasons. Men favored public health facilities to avail antenatal and intrapartum care, the reason being free of cost treatment, round the clock availability of doctors and ambulance facility. Moreover, most of the men had also said that medicines are available at public health facility. However, men said that women prefer to avail the services from CMW because women want to avoid a caesarean operation for delivery when going to a private hospital.

'We mostly avail government medical facilities. Because then we don't have to bear heavy expenses to get treatment from there. Further, there is rarely a time when we cannot find a doctor there'

'(Interview with Community men - Farman Khosa Mohalla UC Johi 2 - Case Type: normal pregnancy)

Most of the women shared they chose to go to health care providers based on personal experiences. If they were satisfied and comfortable with a particular health care provider, they continued to go to the same provider.

Similarly, the women also shared that if they avoided going to a particular health care facility, it was primarily because of bad experiences of other women living in their vicinities, if someone had suffered due to further complications in their case at the facility. Thus, women were very cautious, and avoided using such facilities.

"We avail services at the same health care facility where we find improvement. If we are comfortable with a particular health care facility, we visit the same health care provider"

(Women community; Shahmeer Khan Village – Rural area)

The participants from both men and women FGDs named several health care professionals and health care facilities in their respective areas, from where they had availed the health care services, in particular antenatal, postnatal and delivery services.

"Yes, there are doctors around where pregnant women usually go for their deliveries. In case of referral to advance level health care facility, we move to Dadu or Sehwan city like for scissors operation which is not rendered by the BHU"

(Men community; Village Sahib Khan Solangi UC, Kamal Khan – Rural area)

Only one of the participants from the urban side mentioned that she was only comfortable for delivery in a private health care facility. She avoided CMW and any government health care facility because she felt that there was no privacy at a government health care facility. The shorter distance to HCP, availability of resources and commuting were also the main reasons in the decision-making process for the women during their delivery time.

"There is no privacy at a government health care facility for delivery. Therefore, I always avail private health care facility for my delivery"

(Women community; Ward 1– Urban area)

Decision-making in emergency situations in pregnancy and during labour depends on the head of household

Men said that mostly mothers-in-law and husbands themselves accompany the women at time of delivery. Some men shared that women prefer accompaniment by the CMW and mothers in law during labor. But in case of complications, women immediately inform their families and then they try to reach the nearest available health care facility. Mostly women recognized anemia and bleeding as serious complication in pregnancy.

HCPs also reflected on the norms about pregnancy and delivery in the communities. They said that women pass the news about their pregnancy usually to their mothers–in–law or their own mothers. Similarly, decision-makers regarding health care utilization are husbands and mothers-in-law. Health care providers also stated that pregnant women usually visit the health facilities after they experience any medical complain, complication, or danger sign such as heavy bleeding or headache. They said women visit the health facility after taking the consent of their husbands. HCPs shared that the delay in decisions, usually made by the husband or any other family members are the cause of maternal mortality.

'Sometimes registered patients did not show up for delivery at the health facility. When we inquired, they responded that their husbands or other family members changed the plan because of transportation issues especially in late night'

(Interview with Female Doctor- BHU Allahyarni - UC Peer Mashaikh)

CMWs and LHWs are working door to door, and they provide contact details of hospitals to the community women and refer them to health facilities in emergency conditions. In addition, HCPs mentioned that

health facilities provide ambulance service to the community women during emergencies/complications. After birth at home, most women have postpartum hemorrhage and other complications.

We give first aid treatment to these women and in serious conditions we refer them to the District Head Quarter (DHQ) hospital Dadu for further treatment.

(Interview with female Doctor- THQ Johi)

HCPs also responded that at the time of emergency, there are quite long delays as usually women present at the health facilities do not take decisions and they depend upon their husbands.

Health care providers responded that giving birth at home is a wrong decision. Health care providers commented that home deliveries are associated with a higher risk of maternal death and facility-based deliveries can avert the maternal mortalities. HCPs expressed that lack of transport and financial constraints are one of the causes of birth at home. HCPs responded, in these families, women are dominated by males and cannot take decisions against the will of husbands. IN an emergency, husbands or family members decide about maternal care seeking. Additionally, many pregnant women and their family members including mothers-in-law do not recognize danger signs during pregnancy and labor complications. If a danger sign occurs, women tend to consult with their mothers-in-law, own mothers, with the elder woman of the village or a Traditional Birth Attendant (TBA). Women who consult with Community Health Workers (CHWs) or LHWs are better guided. Many of pregnant women choose to deliver at home assisted by TBA or CMW, but due to lack of medical facilities, the chances of risks are higher as compared to births at hospitals.

'Health care providers inform pregnant women about their low HB level like 7 or 8. But still women don't take proper antenatal care. Women prefer home delivery and suffer from PPH and cannot be managed at home." (Interview with Female Doctor- THQ Johi - UC Johi town - 1).

HCPs stated that they have referred many home delivered cases with serious conditions to secondary/tertiary care hospitals.

"I take the case of normal vaginal delivery only, in case of blood deficiency or the breech position of baby, I refer them to Hospital."

(Interview with CMW- Ward 5 -UC Johi -2).

"The bleeding issue has always caused severe and serious health concerns. Mostly when we give birth we suffer from anemia"

(Women community; Meeran Shah Village – Rural area)

Availing services during complications require at least a Taluka Hospital

HCPs had mentioned some complications as excessive bleeding, puerperium, puerperal sepsis and eclampsia, weakness, anemia, lower abdominal pain, breastfeeding issues, postpartum headaches and depression. They said BHU and THQ are facilitating normal vaginal deliveries while cesarean section cases are referred to either THQ or DHQ hospitals. HCPs further said that primary health centers are providing basic health services in a great way in rural and urban areas during emergency care

When it came to discussing the emergency cases most of the participants had different opinions and experiences on availing the health care facilities. The participants from the rural communities said that they had to move to THQ Johi if any complications occurred. They revealed that due to the non-availability of EmONC facilities at BHU Kamal Khan, they had to go to THQ Johi. The participants from the urban communities highlighted that sufficient facilities were available in THQ Johi, also for emergency cases. Other facilities, which were mentioned are the private Nawabshah Health Care Facility, Sehwan and Dadu DHQ. According to a few participants, they went there as they could afford the costs of the private hospitals of Nawabshah. Participants revealed that due to the non-availability of an oxygen facility in a BHU, they had to look out for other options. Men and women groups had shared the same information.

"We also opt for THQ Johi because there are no C-section delivery facilities available at BHU Kamal Khan. We also avail the services from private hospitals of Nawabshah, DHQ Dadu and Sehwan Government Hospitals if complications occur" (Women community; Shahmeer KhanVillage – Rural area)

"We go to Johi THQ if complications occur. Mostly they have all the necessary facilities available" (Women community; Meeran Shah Village – Rural area)

The participants of both study sites had categorically commented that in case of emergency they won't be trying any home remedies. Instead, they will go to a CMW or a qualified doctor. Male respondents were aware about the importance of emergency care services by qualified and diligent professionals. However, they highlighted that first level health facilities (BHU) do not offer cesarean section, requiring them to transport the patient to another facility. They faced financial issues for arranging transportation and medicines in these situations. They also discussed the awareness and guidance that the healthcare workers from Aga Khan provided. However, they want concerned authorities to resolve their local issues in accessing health services.

"There are the volunteers of Aga Khan. Some services are provided by them. But there should be more facilities and presence of more NGOs and institutions as well so, our problems can be resolved".

(Interview with Community men - Farman Khosa Mohalla UC Johi 2 – Case Type normal pregnancy and labor)

Further, most of the respondents shared that proper follow-up with the doctors is necessary to ensure the wellbeing of pregnant women.

'Indeed, if the regular checkups with doctors are followed then the health and wellbeing of mother and child would remain stable' (Interview with Community men - G Hussain IDI UC peer Mashaik - Case Type: Normal

pregnancy and labor at the health facility)

"We inform our family members. They take us to the hospital to provide us the health care facility. In case of any health complications, we prefer to visit a doctor"

(Women community; Ward 1 – Urban area)

In general, women were aware about the importance of seeking care from a health professional. However, poverty, transportation, unavailability of caesarean operation facility at nearby health facilities and cost of medicines were the issues, which were raised by women. Women mentioned the availability of Agha Khan workers. They said they were always given the necessary support, guidance, and transportation from AKU but still they needed support from the national and provincial Government and other institutions for improved access so their transport issues can be resolved soon and at a wider scale.

"There are the volunteers of Agha Khan. They assist us and help us when we need. But we need the availability of other institutions as well so many among them can be facilitated in more appropriate manner"

(Interview with women – Case type – normal delivery - Jam Chandio UC Kamal Khan-Rural)

Health Care providers perception about barriers of facility based deliveries

Health Care Providers (HCPs) mentioned transport and financial crisis as major barriers to seeking care from the health facilities. In addition, HCPs responded that men's role is very important in making decisions. HCPs pointed out that transportation is a major barrier in reaching the health facilities. Only some people can manage and bear the expenses of their travel. According to the HCPs male dominance, financial barriers, distance to health facilities and transportation are major issues for uptake of MCH services especially facility-based deliveries. HCPs acknowledged the activities carried out by AKU team including creating awareness, conducting regular sessions in the communities on MNCH, identifying the pregnant women in both rural and urban areas and referring them to the health facilities. HCPs were also aware of Community Health Committees (CHCs) who are providing support to women to avail maternal health care services especially ANC, facility-based delivery and PNC visits. In opinion of the HCPs specific Baloch communities are the most marginalized group and faces above mentioned barriers. There is no doubt that mostly Baloch families have been living in remote areas and they also do not prefer ANC, PNC visits, and facility-based births. They also lack education and awareness, and their men favor home-based deliveries to be assisted by TBAs or an elder experienced women from the vicinity. HCPs stated that LHWs and CMWs are creating awareness on MNCH in rural and urban areas and motivate them for health facility-based deliveries.

In order to combat poverty and malnutrition, the HCPs mentioned the newly launched social safety net program 'Ehsaas' by the government of Pakistan. It is providing support to the registered pregnant women and stunted children providing nutritional food and conditional cash transfers available for lactating mothers and their children under two years, in collaboration with World Food Program.

Chapter 4: Discussion

The study findings have brought about diverse, and at times contradictory results. The discussion section would like to highlight some of the issues and elaborates also on possibilities for further exploration.

Empowerment and self-reliance of women and communities

Women access a health facility by themselves to confirm if they are pregnant. Once pregnancy is confirmed, they inform their husband and mother-in-law. Most women perceive both their husband and mother-in-law as very supportive during pregnancy and delivery, and mostly rely on them in decision-making about antenatal care visits and where to go for the delivery. Other studies have also stated the prominent and overly influencing role of mothers-in-law in decision making related to reproductive health [13, 14]. However, during a complication, the decision-making appears to be dominated by the husband, mother-in law or family members. Decisions are mostly delayed, as they are unable to properly estimate the severity of the situation and lack the knowledge to decide. A study on inter-familial relationships on birth preparedness and complication readiness in Pakistan found that almost 60% of the respondents considered their husband to be at the top of the power hierarchy in the family [18]. This is further perpetuated by poverty and lack of means of transport. Studies show that the ability to pay, wealth status of a households and geographical distances are significantly linked to the choice of institutional delivery [19, 20].

For referrals and for the money for referrals, the feudal landlords play an important role. Getting their permission and support may take time, which further delays the referral and dealing with complications timely. It appears that feudal lords, their relation to the community members, their social attitude and understanding, are vital for women to access timely and good quality care. Informing the feudal Lords and making arrangements in advance could be a good way to speed up availability of funds and support at the time of delivery. Furthermore, the locally established Community Health funds support timely transport and make money available without involving the feudal Lord, thus making a community more selfdetermined, empowered and self-reliant. Interestingly, no one of the respondents mentions the access to these funds. Whether or not these funds are known to the community and how they are used may be important to explore, in order to sensitize the local communities and women, that there are already existing financial support mechanisms in place and how they function. This finding is in accordance with other studies which concluded that interventions targeting not only demand creation but establishing funds mechanisms would result in reducing health inequalities [21,22]. One study examined the impact of a demand-side financing strategy on increasing the use of maternal health services among low-income women in the urban centre of one of the Punjab's least developed districts: the study discovered that institutional delivery increased by 22 percentage points among voucher recipients and there was a significant decline in the differential in institutional delivery between the fifth and first quintiles [23, 24].

Husbands knowledge and practices differ

From the interviews it was evident, that husbands had a good knowledge about the importance to deliver in an institution. However, the practice was also guided by the level of affordability, availability of transport. Interestingly, once women choose a home delivery with the help of a CMW, this is readily accepted by the family and husbands. Husbands do not seem to dominate this decision, as it is convenient to have the local CMW doing the delivery either in her home practice located in the community or in the home of the women. Delivering with the local CMW also means, that the woman can go home quickly and no transport costs arise. A study carried out in Punjab has shown evidence that husband and mother-in law, if having an option were more inclined towards a home delivery [25].

Usually, the men do not accompany to women to the health facilities specifically for ANC and PNC visits hence they are less aware of possible complications and due actions to take up in such situations. In case of an arising emergency, however, despite husbands knowledge about availability of emergency maternal health services, husbands do not take a timely decision for referral. Sensitizing husbands and family members more and better about the danger signs during delivery and prolonged labor may help to avoid the delays for referral during complications. Furthermore encouraging men to accompany their wives at least once to an ANC visit and allowing them to be present during the examination and counselling the couple for the delivery should be considered to make men more aware about danger signs. This could encourage timely health seeking behavior as well as timely preparedness for birth planning (including transport and financial resources).

The role of CMW and LHWs in safe motherhood programming

Community based health workers, such as the LHW and the CMW own the trust of the community people and are the first point of contact for the pregnant women. Both accompany the woman to a better equipped health facility of delivery, particularly in case the CMW cannot deal with the delivery case. Respondents as reliable and trustworthy health workers, who establish this personal connection to family members, have mentioned particularly the LHWs. Other studies also found that community-based health workers had an important role in empowering community women and mobilising them through interactions such as support groups. According to the study, hospital-based maternal health care services combined with community-based approaches such as home visits by health professionals enhanced access to preventative and basic care services. By strengthening family members' connections with the existing health care system, community health professionals may promote decision making toward health facility-based delivery [26,27]. Though coverage of services and reach to the most needy women could be challenging but may be effective in tackling health inequities [28].

CMWs have also gained trust because they can only conduct NVDs. Community members perceive that the likelihood to have a CS is much less with a CMW, than when accessing the THQ or a secondary hospital. On the one hand, this is due to the CMW lack of skills, training and infrastructure to perform a CS; but also due to the fact that CMWs accompany a referral to another health provider and thus may have influence on whether or not a CS is conducted. The CS rate has exploded in Pakistan over the past years from 12% in 2012 to 22% in 2018 [29]. Another study from Amjad et al. reports a percentage of 18% of CS in 2018, relating the high rate not only to medical necessities, but also to the referral of doctors and the economic interest of health providers when conducting CSs [30]. Others studies have reported that a CS drives people even more into poverty and catastrophic expenditure [31]. Therefore women prefer to go to the CMW as first point of contact, to "avoid" a referral to a secondary or tertiary health facility and a possible CS.

The study findings indicate how established the CMW concept is in the community, even though the CMW is working "freelance", without supervision, solely attached to the community structure and not attached to the primary health care structure. Her education and skill set, acquired over an 18 months long training, seems sufficient to conduct NVDs in a good quality manner, which raises her profile and trust in the community. While the education, the skills and the impact of the CMW on maternal health in the community has been debatable in the past, the study shows that there may be evidence that this CMW concept works. It requires further research to determine the success factors and challenges for CMWs, and their role in safe motherhood programming in Pakistan.

Chapter 5: Conclusion and recommendations

Briefly, the study findings indicated some major gaps which are related to social norms, decision-making power, lack of awareness about complications during delivery, economic hardships and underdeveloped infrastructure of communities. Since involvement of men in the decision-making is crucial, awareness raising should be carried out at large scale across the communities so, pregnant women, elder women in the family and men are able to understand the importance of ANC, PNC and facility-based deliveries and can respond to occurrence of danger signs in time. CMW and LHWs play an important role in this, as they are trusted health workers who have personal connections to the families. Inclusion of men in the maternal health service provision is another area, which is yet not sufficiently tapped upon. Sensitization in the community for men by LHWs, male social mobilisers or peer counselling among men, as well as a conducive mechanism from the health system side to welcome and allow men during the maternal care period are pivotal to change behavior and encourage timely decision-making. Husbands should attend the counselling by the doctor during ANC or PNC visits so, they are in better position to take the decision in emergency or understand the delegation of decision-making power to the pregnant women to avoid delays.

Furthermore, the role and impact of CMWs on maternal mortality in Pakistan requires further exploration. Particularly in most vulnerable and remote communities, the training of more local CMWs may be crucial to reduce maternal mortality and morbidity in these hard to reach areas, where the coverage of the health care system is scarce and transport very difficult.

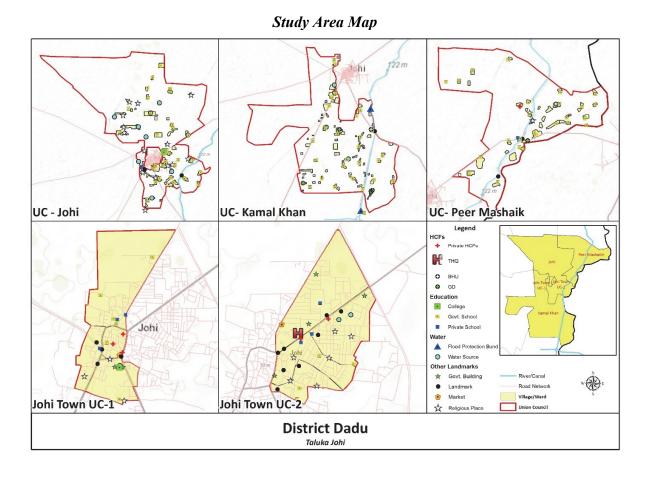
Community funds pool seemed to be effective strategy at community level to overcome the issue of financial hardship at the time of need and supporting in transport and referral to the health facilities. Government health facilities have a mandate to form Community Health Committees. These committees are responsible to resolve health related challenges in the community and at the health facility level. If the families of pregnant women are connected to these CHCs, most of the issues and delays in health seeking can be addressed, including the access to transportation and covering travel costs.

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Annex1 Study Area



Training of Implementing Research





Activities at field Site



FGDs with men:



Annex 2: Community maps and horse and cart activity

Prior to initiating the formal proceedings, the moderator gathered all the participants at a convenient location to welcome them and gave an introduction, comprehensively covering all relevant aspects of the research. After getting the required written consent by the participants for the focus group discussion (FGD), the participants were divided in to two to three groups for the mapping activity. In order to encourage equal participation small groups were formed. The average number of participations in women FGDs was 11 (ranging from 8-13) and in men FGDs the average was nine persons.

In a first step, the moderator asked all the participants to talk and share information about their respective localities and facilities in their village and draw them on a map.



Figure 1: Women's mapping activity in Meeran Solangi Village

The group members drew the maps according to their shared knowledge and understanding. The moderator further facilitated the discussions by posing questions in order to obtain the maximum relevant details. The participants shared details of all the vicinities they came across in their areas. It appeared that they were well informed and seemed to have a decent understanding of their village and nearby localities. They mentioned every location during the mapping activity that they were aware of, also, highlighting the

schools situated nearby. They also identified the lakes, health care facilities, training centers, shops, hotels, mosques, tombs, agricultural lands and other functional and non-functional facilities in their village and vicinity.

Participants who could read and write drew the maps. Those participants who could not read or write were requested to use symbols and pictorials, ensuring equal participation of all in drawing of the maps. The process of conducting this activity was similar in both groups i.e. women and men FGDs.



Figure 2: Women's mapping activity in Meeran Shah Village including the surrounding villages and areas

The participants seemed well aware of the local ethnic groups in these villages. They knew exactly which community was larger in both the urban as well as rural areas. The participants shared the names of these ethnic communities dwelling in these villages, identifying those in vast majority such as the Rind community, Solange, Loond and Khaskheli community. During the FGDs with men, some other ethnic rural communities were also mentioned as Brohi and Channa and the Jogi and Baaghri community in urban areas. The Khaskheli community appeared the largest community in the rural areas, living in a number of villages. They also shared that sadly the Baaghri community suffered immensely, being deprived of the very basic facilities due to the unfortunate cast system.

" The Khaskheli community have homes and are in vast majority, dwelling here since years. Their native language is Sindhi"

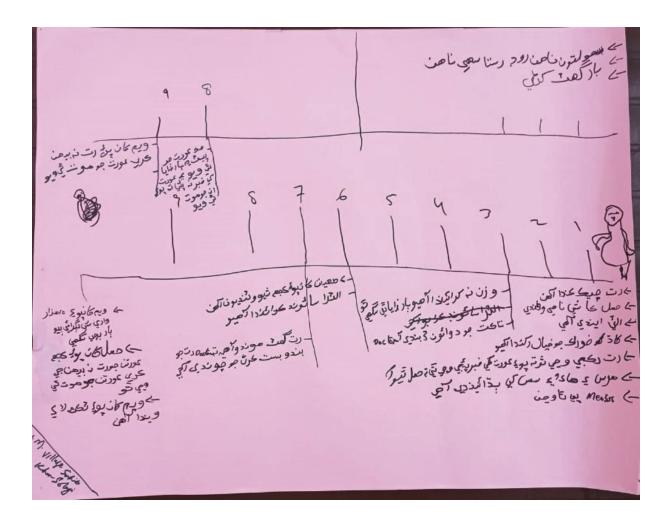
(Women community; Meeran Shah Village – Rural area)

" Jogi and Baaghri communities are the two predominant communities living in our areas. Jogi community is highly influential; Baaghri community subjugated due to their cast, ethnicity"

(Women community; 5F Ward 1, Babar Mohalla UC1, Johi city – Urban area)

Outcome of Pregnancy pathway exercise

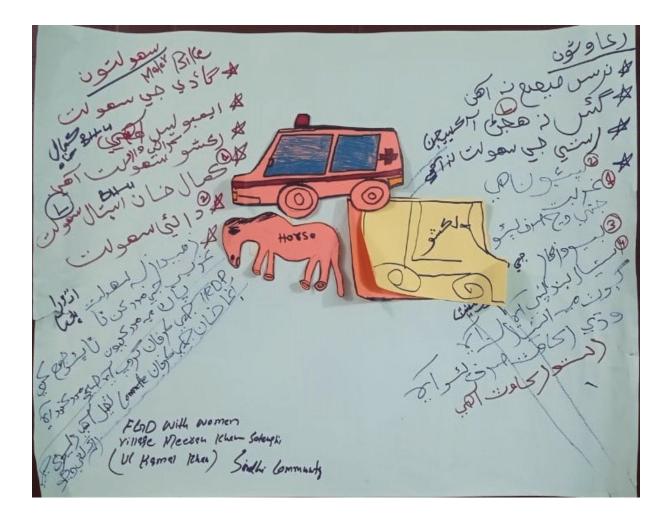
مسمس سان ملاع عندي الحب على من التي بذائي بن عمل واري مائي كي تنظين كي بذائيندي الحي . كي بذائيندي الحي . محوزن نه كعلاي الحي . محوزن نه كعلاي الحي . محرز الحر كون الحن و يجعو . محرف الحن و يجعو . محرف الحن و يبدا الحيون عمل واري كي . مرد كعذي الحي . مع مرد كعذي الحي . مع مرد كعذي الحي . مع مرد كان الحيو . مع مرد . مع مجمع جسوري نق على على كرا ليدا الحيون على بنت مكرتها ليدا العن جا حترى كديكاريون تا، محلك 2 حصن ويندا الحيون جم بوندي الحي بنت الحي حوان م لكندا الحيون . محلك 2 حصن ويندا الحيون من مع بريوندي الحي تا لين . تا تا لين . تا تا لين . تا تا تا تا . تا تا تا تا تا . تا تا تا . تا تا تا . تا تا تا . تا تا تا . تا تا تا تا . تا تا تا . تا تا تا . تا تا تا . ESO with women



Horse and cart activity:

While conducting the horse and cart activity, participants were given a free hand to give recommendations as per their own understanding. Since they could fully understand the gravity of their problems, weaknesses, and obstacles, this activity helped to identify common barriers which pregnant women had to face most of the time.

Participants seemed confident enough, and at the same time really desperate to share their recommendations to overcome the prevailing obstacles like damaged roads and poverty in order to improve the situation of affordable travel to health facilities. Being the residents, they knew exactly which health care facility they will benefit from. Their recommendations mattered most, as they were the ones going through and experiencing any such problems and issues.



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