

Swat Relief Initiative and its Impact on Mother and Child Health in Swat Pakistan

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Abstract

A qualitative study to explore the perspectives of mothers who received home visits for antenatal and postnatal care and to understand their views on the community health worker program by Swat Relief Initiative (SRI-CHWS).

Introduction: Pakistan has high maternal and infant mortality rates. This is worse in the Northern areas of Pakistan and in places like Swat where extremism and terrorism has traumatized the communities. Swat relief initiative is an NGO operating multiple program targeting welfare of women and children, since six years in Swat. Health workers from SRI- CHW program have been providing basic antenatal, postnatal services including vaccination and family planning.

Aim: To explore the perspectives of mothers who received antenatal and postnatal care, and to explore their views on the SRI-CHW program. It aims to understand the community perception regarding this program and to gauge its effectiveness and provide suggestions for improvements.

Methods: Qualitative methods were employed to conduct the research. Eighteen moderate length interviews were under taken from the recipients of SRI-CHW program. Purposeful sampling was employed and interview guide was used to conduct the interviews. Thematic content analysis of data was performed to obtain the results. An interpretivists approach was used to describe the results.

Results: Four themes were identified as following: Care during delivery, delivery, postnatal care and maternal mortality in the area. Areas such as care before and after the program was noted, advice by the health visitors and dietary advice was explored. Community perceptions regarding choices for delivery and their experiences were explored.

Conclusion: The work of Swat Relief initiative was very well appreciated by the community. It is bringing about a positive change in the lives of women. Therefore, future research is suggested to study this model to advocate its replication in Pakistan and other similar contexts.

Keywords: Swat Relief Initiative; Mother; Child Health; Swat Pakistan

Introduction

The target set for maternal mortality reduction by United Nations is 70% from the present rate [1]. Community health workers (CHWS), lady health workers, and voluntary health workers, are all synonyms of a cadre of health care providers who are selected and trained to work in the communities they belong [2].

The concept has been known since over half a century. In 1920 “The Bare foot doctors” of China [3]. Similar was the village health volunteer program from Thailand [4]. The scope of work and utility of these workers range from providing advocacy from improving mother and child health [5] improving maternal and infant mortality through uptake of antenatal care and postnatal care [6] and safer childbirth practices [7,8]. To name a few initiatives these workers have been utilized in prevention and treatment of Malaria [9], Tuberculosis [10], HIV programs [11]. Polio eradication programs [12] and Ebola [13]. However, advocacy and bringing health care knowledge to the doorsteps of communities remains their main function [14].

Swat is a river valley situated in Khyber Pakhtunkhwa (KPK), Pakistan

It was once a princely state which was later handed over to the Government of Pakistan in 1969. Swat was an internally independent state till 1969 ruled by the Wali. It had “its own ruler, laws, its own system of justice, army, police and administration, budget and taxes [15].

Swat has undergone several disasters including the Taliban insurgency of 2009, large-scale flooding, and recently, a devastating earthquake. In this backdrop Swat Relief Initiative (SRI) a non-government organization was launched by the granddaughter of the Last ruler of Swat in 2010. SRI works in the area to improve the lives of women and children through various initiatives all targeted for community development. The main components of the program include social mobilization, preventive health program, economic development and education. The health program relies mainly upon the community health workers [16].

Methodology

Research question

What are the perspectives of mothers who received antenatal and postnatal care, and how do they view the community health worker program run by Swat relief Initiative (SRI-CHW program)?

This study aims to explore the perspectives of mothers who received antenatal and postnatal care, by the SRI-CHW program and to view their experience of child birth in Swat. It aims to understand the community perception regarding this program, to gauge its effectiveness as a public health intervention, and to provide suggestions for improvements.

Epistemological approach

An interpretivist’s approach was used in this research. The values of the researchers are also negotiated in all phases of research [17]. Bias has been minimized in this research by using open ended questions and pilot testing. Positionality of an “insider” or “outsider” are important concepts in qualitative research [18]. I have been working in Swat and providing services as a volunteer obstetrician and gynecologist Therefore, I view myself as an insider and able to understand and relate to their experiences. This positionality despite the language barrier makes me more of an “insider” who is welcomed by the community rather than a complete stranger. As a clinician being engaged with these communities, I formally reiterated and redefined my role as a researcher. I also reflected upon my position to ensure that this did not affect data collection or interpretation. I recorded each interview and transcribed these word by word.

Methods

Study design

The design is that of a qualitative study. Moderate length interviews using a semi-structured interview guide were used to collect information from the community. These perspectives are important as they come from the Swati women who are beneficiaries of this program. Interviews were conducted for two weeks in September 2018.

Setting

Swat Relief Initiative operates in nine villages of District Swat, Pakistan. Six villages are located in Saidu Sharif Union council and three in Islampur Union council. In Islampur Union council the villages are Sarkari Cham, Kasher Khel, and Katair. In Saidu Sharif Union council these include Chail Shagai, Baligram, Shaheenabad, Akhun Baba, Barkalay and Miangano Cham. Two hundred and fifty households are represented in each village. Interviews have been conducted in community homes to enable participants at ease during the interviews.



Figure : Swat valley in Pakistan.

Purposive sampling was employed. SRI-CHWS were asked to identify twenty women from each village, through random selection in each village by CHWs.

Inclusion criteria

The interviewee should be able to understand and communicate in Urdu as Pashto is the local language. Women who had been visited by the lady health workers in the last six months to receive antenatal and postnatal visits. Each month on the average 170 - 200 pregnant women are visited by the LHWs in all the villages, this accounts to just over a 1000 pregnancies in six months. Purposive sampling was employed. SRI-CHWS were asked to identify twenty women from each village, through random selection in each village by CHWs. The criteria included a basic education level, also women who would hold an opinion and not too shy to answer the questions (due to cultural reasons). Interviews were the primary method used. The researcher conducted and transcribed all interviews. Each Interview lasted approximately 25 - 40 minutes.

Exclusion criteria

Those mothers who declined to provide informed written consent. All vulnerable groups who are mentally handicapped or are uncomfortable due to term pregnancy. Those women who are aged 18 years or less.

Analysis

Thematic content analysis was used. Data was analyzed by first gaining familiarization with the data, generation of initial codes, search for themes, review and definition of themes and then final results (See Appendix I). Thematic analysis offers flexibility and provides rich and detailed account of data for interpretation [19].

Ethical considerations

Written approval from the Swat Relief Initiative administration was obtained. Informed consent was taken from the participants. Confidentiality was maintained through password protection.

Results

An overall look at the participant’s characteristics show a trend of teenage marriage for almost all participants and low level of education. However, all the participants were skilled in various local handicrafts. See table 1.

<p>Antenatal and postnatal care prior to SRI-CHW program</p>	<p>P1: “This program (SRI-CHW) is run by Bibi, it is run on time but the government lady health worker does not do her work sincerely and is kam Chor”. (Translation: Bibi -Founder of SRI; Kam Chor-Slacker).</p> <p>Regarding the GOVT-CHWs all participants commented that these workers do not visit regularly and neither do they provide health information. This was irrespective of their demographic particulars.</p> <p>P10: “No, she does not come and if she does then she does not give us any information” P14: “ from the government program they only come for polio vaccination”</p> <p style="text-align: center;">Home visits by CHWS</p> <p>P17: They give us injections and it is a lot useful. They weigh the babies, when we are pregnant we get tablets (supplements) check our weight, receive education for cleanliness, and hygiene.....When I was pregnant for the first time, she was there to check my weight, blood pressure and advised me on what to eat”..... “When we go to see the doctors in hospitals..... We have to wait a lot..... for the doctor to see us”.</p> <p>P4: “there is a lot of difference....., in my first pregnancy I used to have a lot of pain I used to go to the hospital every month, and I used to feel that my body was always aching, ...I feel in my other pregnancies (SRI-CHW support) I did not have any problem. We never got home injections no blood pressure checkups”.</p> <p>When asked that if they are comfortable with CHW’s coming to their homes, all participants responded that they always welcomed the CHWs. They described cordial and friendly relationships with the CHWs in their area. In fact participants were surprised by this question. In some instances, the CHWs were their relatives or neighbors.</p> <p style="text-align: center;">Financial advice</p> <p>Saving for the event of delivery is important. The SRI-CHWs have advised the pregnant ladies to save a little bit each month so that are able to easily afford delivery expenses.</p> <p style="text-align: center;">For example:</p> <p>P6: “She told us to save money to be used in emergency; anything can happen”.</p> <p style="text-align: center;">Nutrition</p> <p>According to the participants it has brought about a lot of awareness among community members regarding the need for a healthy diet. All participants quoted the benefits of using their own kitchen gardens, consuming flax seed, milkshakes, cooking oil as opposed to ghee and fruits.</p> <p>P17: “We have started oil instead of GHEE (hydrogenated oil), And we have received a lot of dietary training here. We find the program very useful and have changed our habits. We use more vegetables like radish and fruits and have planted vegetables outside our house. This brings about savings”.</p> <p>P1: “Yesshe keeps telling us if one woman eats one Roti (local bread), you should consume more than one. Take milk and juices at home”.</p> <p>P3: “After CHWs there is big change in our diet we use ULSI (Flax seed) and oil.</p>
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<p>Delivery</p>	<p>During the antenatal period, plans for delivery are usually discussed by the CHWs with the pregnant ladies, and sometimes they are escorted to the clinic/hospital. Only a few ladies were delivered by local community midwives. The majority of respondents preferred delivery at the government hospital or private clinics. Some seemed satisfied and some who were slightly more aware and educated, disliked both government and private hospitals.</p> <p style="text-align: center;">Reasons for choosing place of delivery</p> <p>Most important reason to choose a facility was economic feasibility, and not SRI- CHW guidance. Those who chose to deliver with a traditional birth attendant described their ease and comfort level with traditional birth attendant.</p> <p style="text-align: center;">Some of the recorded responses are as follows:</p> <p>P14: "The experience in government hospital was horrific; those who have money for private hospital go there,.... others who cannot afford private care go to government hospital". (Which are practically free).</p> <p style="text-align: center;">Problems encountered</p> <p>One participant who was most educated among the group severely criticized healthcare in the area including the private hospitals.</p> <p>PI: "We are discharged within two hours of delivery.....no one bothers about us in the hospital, and the hospital in Swat is terrible and dirty and our children die of sepsis and land in neonatal intensive care unit as they cut the umbilical cord too early. When we see deliveries on internet and we compare, with what happens to us it is sickening".</p> <p>Others described private hospital care as better than government hospital (teaching hospital), but un-affordable.</p>
<p>Postnatal follow up by CHWS</p>	<p>Postnatal visits by CHWs include postnatal examination, advice and support on breast feeding, vaccination and contraception. All women expressed this support as very useful and described it as a very positive activity.</p> <p>All participants expressed their satisfaction about the postnatal visits by SRI-CHWs and found their visits very useful. They described that their babies were weighed, growth charts of each child was made and were provided vaccination. In addition mothers were taught how manage diarrhea.</p> <p>P2: "Yes it is useful, they weigh our babies, if the babies have weight loss then they show us on growth chart, and advice to give supplements, they tell us how to give NIMKOL (oral rehydration therapy) to our children when they have diarrhea".</p> <p style="text-align: center;">Infant feeding advice</p> <p>All participants talked about the importance of breast feeding and some also described postnatal visits by SRI-CHWs to be very useful as they were well supported during this important phase. Some described exclusive breastfeeding information as useful. Some expressed their satisfaction over the help in technique of breast feeding. Others described benefits of breastfeeding. Examples are given below:</p> <p>P11: "They (CHW) told me to feed the baby for six months at a stretch and then continue for a total of two years".</p> <p>P13: "Yes she (CHW) trained us in breast feeding. I used to previously breastfeed the baby after every four or five hours, but she told me to feed frequently, and that helped my baby".</p> <p>P1: "She (CHW) told us that breast feed is a natural vaccine, safeguards the baby".</p> <p>P2: "We give our own milk to babies (because of that)..... Baby doesn't get diarrheababy doesn't get infection, baby is intelligent... they (CHW) told all this".</p> <p style="text-align: center;">Vaccination</p> <p>All women and children in the program are provided with mandatory vaccination within their homes. In addition all women felt very satisfied and happy over their children being seen by the SRI-CHW on a regular basis and felt happy to see their children's growth charts. One lady described the taboos that men folk had against Polio vaccine. However these misconceptions were cleared by the health workers and social workers of SRI.</p> <p>R14: "When we go to the hospital we waste money, we spend time as well and it takes too long. When my brother had a son, after three girls there was a big celebration and then my brother in law called and said "don't give the baby any injections or polio drops". He said don't let them (CHW's) in the house as they are American agents". Finally we were convinced by the SRI-CHW's regarding the importance of Polio vaccination.</p> <p style="text-align: center;">Family planning</p> <p>SRI-CHWS provide family planning advice. All participants said they were given family planning advice. Most of them knew about family planning methods. However some wanted the SRI-CHWs to provide them contraceptive pills and injections. The most popular method of contraception was injections. Despite this awareness a small minority of participants described an ideal family size being four or five children.</p> <p style="text-align: center;">Example of this is given below:</p> <p style="text-align: center;">P2: I will put injection</p> <p style="text-align: center;">When asked does she know of any other methods</p> <p style="text-align: center;">The reply was as given below</p> <p>P2: Yes intrauterine contraceptive device and injections but I will use injections. They should (CHWs) provide us contraceptives".</p>

Table 1

Discussion

Majority of the participants criticized the inefficient services provided to them by GOVT-CHWs. They mentioned that they only see the government health workers on special occasions. A similar impression has been reported by Bhutta and Memon who have severely criticized the underutilization of the government community health workers. According to their estimate almost 30% of CHWs time is utilized in polio campaigns [20]. This is an underutilization of an important work force which can bring about a major change in the health.

The PDHS (PDHS 2012-13) [21] strongly links lack of transportation, delay in decision making and poverty as the main causes of maternal mortality. All participants expressed no problems in arranging for transport in the time of emergency, saying that it was readily available in Swat. This could be a limitation of the sample as most villages in SRI-CHW program are located close to road networks.

Dietary advice to the community recipients is an intervention targeted to improve the overall dietary habits of the community. Globally, nearly 800,000 neonates die annually due to maternal under nutrition. Small for gestational age, growth stunting and wasting and micronutrient deficiencies account for almost 3.1 million deaths each year. It is estimated that 15% of child mortality under 5 years can be reverted by nutritional improvements alone, some of these interventions include folic acid, Iron, calcium and micronutrient supplementation [22]. SRI-CHWs seem to be successful in implementing their nutritional program which includes messages on balanced food intake, micronutrient supplementation, kitchen gardens and use of flax seed. The decision of place of delivery rests on a number of community factors. These are related to traditional culture, lack of privacy, costs, fear of medicalization, perceptions regarding lack of quality care provided by the facilities and delays in referral [23]. All of the above factors are known to affect the overall outcome of delivery. Support by community health workers is important to address these issues.

All participants were appreciative of the postnatal visits and information provided to them regarding breastfeeding, vaccination and infant growth monitoring. Many participants confessed changes in their neonatal and infant feeding practices. Breast feeding in itself is a huge step in reducing infant mortality and confers enormous benefits to the baby in terms of increased mother child bonding, prevention of infections, improvement in immunity and improved intellectual growth of the growing infant [24]. Low maternal confidence, poor breast feed positioning and latching, infant crying and lack of support are common reasons for abandoning this practice [25]. The role of community health workers in this domain has been shown to produce long lasting benefits upon the health of the communities [26].

All the participants showed relief regarding their children`s immunization by SRI-CHWs. A health Survey data showed that in the past 12 months, a lack of visit by lady health worker was associated with incomplete vaccination of the infants, whereas a visit in the last 12 months was significantly associated with increased vaccination uptake [27]. Lack of provision of contraceptives by SRI-CHWS, was desired by the participants.

According to Din, Mumtaz and Attaullahjan lady health workers have been threatened and assaulted by the Taliban in Swat. Owing to this, communities out of fear did not allow the health workers in their homes. All forms of family planning advice and vaccination activities had to be halted [28]. A prevailing perception that people in Swat are hostile towards community health workers as gauged from review of literature was negated by the research. It was a general observation that all participants were friendly and welcoming towards the researcher and SRI-CHWs.

SRI-CHW program seems to be well received by the participants of this study. It fulfills the intended benefits of creating awareness about danger signs of pregnancy. All participants are being regularly provided with iron supplements and vaccination during their antenatal period. A quantitative study Ahmed, Shah, *et al.* showed significant improvement in the maternal and infant health in Swat District where a number of NGOs, are operating successful programs suited to the population. However, they concluded that the only drawback for these NGOs is that they are short termed and dependent on private funding; this is especially true for organizations not being run by

the local population [29]. If we consider SRI-CHW program from this angle we find that it has been running for over five years in the same villages.

Rigour

In order to ensure methodological accuracy, the following measures were employed. These included member checking, transcription process, debriefing and reflective commentary. Member checking was performed by respondent validation; this was ensured at the end of each interview by broadly repeating the messages given by the interviewee to confirm an accurate interpretation [30]. Dependability and trustworthiness was ensured by keeping the records, audio records of the interviews and weight age was only given to the transcription process and thick descriptions by the participants. However, peer checking by another researcher was not performed as the design did not permit this [30].

Transferability

Transferability of qualitative research has always been a sore point for qualitative researchers. However, rigor of the research process does make it easier to solve the abstract question of transferability of qualitative research. Sample characteristics of this research point to an important fact that except for one participant all women were teenage brides. Almost half of the women were married before the age of sixteen years. All the participants were skilled in local handicrafts and some had even received training from SRI-Vocational training center. The recipients described positive changes in their dietary habits and attitudes towards antenatal and postnatal care.

Recommendations and Conclusion

Public health relevance

This study is the first of its kind in Pakistan, especially in the Khyber Pakhtunkhwa province of Pakistan. A lot of literature has been published and research done on the perspectives of community health workers program [31]. However, none has focused only on the communities exclusively, the few studies which have been quoted have had community perspectives as a minor component and as part of a mixed study design.

Recommendations

NGOs such as SRI that operate in certain remote areas such as Swat, can be strengthened by international donor organizations partnerships. The nutrition program adopted by SRI-CHWs seems to be well received by the recipients; however, its wider impact and compliance can be researched upon further.

For the government

The government needs to have monitoring programs for the activities of the GOVT-CHWs to be able to gain more benefit from the existing system. Hospitals in Swat, both in the Government and private sector, particularly labor rooms and maternity wards, need urgent up-gradation in their facilities and staffing systems. Some of the descriptions actually presented them as unsafe places for delivery. The issue of teenage marriages needs to be studied further and this practice needs to be addressed within the communities.

Appendix I: Code book

Themes/ Categories	Subthemes/Subcategories	Codes
1.0 Care during pregnancy	1.1 Antenatal and postnatal care prior to SRI-CHW program	1.1.1 Antenatal and postnatal care prior to SRI-CHW program, GOVT-CHWs program
	1.2 Home visits by CHW	1.2.1 Home Visits by SRI-CHWS
		1.2.2 Advice by the SRI-CHWs
		1.2.3 Supplements and Medications given by the health workers
		1.2.4 Knowledge of complications of pregnancy
		1.2.5 Relationship with the SRI-CHWs
	1.3 Financial Advice	1.3.1 Who bears the expenses of labor
		1.3.2 Importance of saving for delivery
		1.3.3 Perception on saving for delivery
	1.4 Transport Arrangements	1.4.1 Advice by CHW
		Transport Arrangements
	1.5 Nutrition	1.5.1 Nutrition Advice
		1.5.2 Any Change from the previous practices
		1.5.3 Use of Oil or Fat for cooking
		1.5.4 Use of Micronutrients
2.0 Delivery	2.1 Reasons for choosing the venue for delivery	2.1.1 Venue for delivery
		2.1.2 Reasons for choosing
	2.2 Problems encountered	2.2.1 Problems related to delivery
		2.2.2 Money Spent
		2.2.3 Problems faced
		2.2.4 Comparison of Private versus government facility
		2.2.5 Preferred place of delivery
3.0 Postnatal follow up	3.1 Community perception of postnatal visits	3.1.1 Postnatal visits importance
	3.2 Infant feeding practices	3.2.1 Help in Infant feeding
	3.3 Vaccination perceptions by the community	3.3.1 Perceptions regarding vaccination
	3.4 Understanding of importance of family planning	3.4.1 Ideal family size
		3.4.2 Understanding of birth spacing

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