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ORIGINAL STUDY

Engagement of Community Midwives in Flood-Affected Areas of Sindh

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Abstract

Background: This article aims to highlight the work and efforts of midwives in the Province of Sindh, especially in the districts of Thatta and Sujawal. These midwives worked tirelessly to identify pregnant women living in camps, to book them and provide antenatal care, laboratory and ultrasound facilities, to make early referrals of high-risk pregnancies, and most importantly conduct safe and clean deliveries.

Methodology: It is a cross-sectional study conducted at the campsites of Thatta and Sujawal from August to December 2022. Three teams were working simultaneously, one at the site, the other running mobile service units, and one at Al Farabi Hospital. Data was collected from each team, compiled, and analyzed using MS Excel version 16.

Results: A total of 1280 new antenatal bookings were made of pregnant women residing in the flood-affected areas of Thatta and Sujawal. 284 deliveries took place during this 5-month period of which 77% were conducted at Al Farabi Hospital.

Conclusion: Certified community midwives are in a unique position to act as first responders during emergency response. With adequate training and professionalization in disaster response, midwives can serve as an army to provide emergency care to women and infants in need during disasters.

Keywords

Engagement, Community, Midwives, Flood, Sindh



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Introduction

Floods are the most common type of natural disaster that have globally affected more than 2 billion people between the periods of 1998 to 2017. They cause massive devastation resulting in loss of life, displacement of people affected, damage to infrastructure, and severe affecting healthcare system¹. Pakistan has a long-standing history of floods and faced massive flooding in 2010 when almost all of Pakistan was affected. However, authorities claim that the devastation caused by this year's flood is worse than that of 2010. Since the monsoon season from mid-June, floods have affected areas of Sindh and Baluchistan the most, where more than 33 million people have been affected and more than 1700 people have lost their lives². According to varying sources, almost 650000 women in flood-affected areas needed maternity and obstetrical services². However, due to damage to healthcare infrastructure and limited healthcare supplies, there was a fear of an increase in maternal mortality and infant mortality rates².

Women are more vulnerable in the same natural disasters as compared to men, particularly in a patriarchal society where male heads are the decision-makers even on matters about women's health³. Further women face more physical and psychological trauma due to decreased access to basic facilities such as clean water and sanitation⁴, as they have to adequately cover themselves with strangers living around⁴⁻⁶, and become victims of gender-based violence^{7, 8}, leading to increased risk of sexually transmitted infections and unwanted pregnancies along with the psychological damage. Moreover, pregnant women have their unique vulnerabilities due to increased healthcare needs, decreased immunity, and limited access to and provision of healthcare facilities^{5, 9}. Labor and delivery in unsafe and unhygienic environments increases the risk of maternal mortality¹⁰. Natural disasters lead to adverse pregnancy outcomes such as miscarriages, preterm birth, low birth weight^{10, 11} postpartum hemorrhage, ruptured uterus, and sepsis.

The government of Pakistan and the United Nations jointly launched a flood response plan in August to collectively and more effectively respond to the crisis². It must be appreciated that the response occurs on a local level where all the skilled people of the community gather together and serve as responders. Community midwives have long been serving in rural areas and can act as first responders for women's healthcare. International efforts to recognize and support this reality have also occurred¹². Midwives can formulate coordinated assistance efforts in disaster healthcare. They can identify assets for providing reproductive and obstetric services such as antepartum care and counseling, contraceptive services, nutrition, lactation, and postpartum counseling. Further, midwives can strive to formulate and identify birth facilities or maternal and child health facilities that can provide emergency obstetric care and newborn care¹³.

This article aims to highlight the work and efforts of midwives in the Province of Sindh, especially in the districts of Thatta and Sujawal. These midwives worked tirelessly to identify pregnant women living in camps, to book them and provide antenatal care, laboratory and ultrasound facilities, to make early referrals of high-risk pregnancies, and most importantly conduct safe and clean deliveries.

Methodology

This was a cross-sectional study conducted from August to December 2022. Pakistan National Forum for Women's Health, PNFWH, created its disaster response team comprising people from all departments such as doctors, midwives, nurses, OT staff, ambulance drivers, IT, and project managers. A temporary health camp was set up at the interface of Thatta and Sujawal to cater to flood-affected people from both districts. This health camp was located adjacent to the existing camps set up by government and NGOs to relocate displaced people affected by flood. Moreover, a temporary labor room facility was set up to provide emergency obstetric care.

A team of midwives surveyed two major camp sites of displaced people where more than a thousand people were residing and midwives booked all patients requiring obstetric care. Furthermore, midwives went to a new field location every day to explore different small campsites that were set up by multiple NGOs to cater to displaced people and booked them at their hospital, Al Farabi in Ketī Bandar. This hospital at Ketī Bandar is a secondary setup where a trained doctor, Operation theatre, and labor room facility are available at all times.

Women who required sexual and reproductive health care were provided with facilities at either the temporary labor room that was set up in the camp area or taken to Al Farabi Hospital in hospital Ambulances. Besides antenatal booking, midwives provided the facilities of laboratory investigations, ultrasound, labor and delivery care, postpartum care, contraception services, SRHR counseling, and lactation counseling. Further, more than 20 sessions were conducted in these flood-affected areas on gender-based violence (GBV) to create awareness of this tabooed and sensitive topic, to identify people at risk of GBV, and to create safe shelter spaces for the victims.

Result

The data in Table 1, represents the work done by our midwives during floods from the period of August to December in Thatta, Sindh. As can be

seen in this table there was a total of 1,280 new antenatal bookings, 50% of which were made by mobile health workers team who visited small camp areas to locate and identify pregnant women who would have otherwise been easily missed.

Of 284 deliveries, more than 75% were conducted at al Farabi Hospital. Family planning clients included women of the reproductive age group who were counseled and/or provided with a family planning method of their choice. Usage of contraceptive pills and condoms was more prevalent in camps and mobile units while women at Al Farabi Hospital preferred long-acting methods of contraception such as intra-uterine copper devices (IUCD). 11921 patients were seen by our doctor and midwives for general complaints like endemic fever due to malaria, dengue, typhoid, skin diseases, eye and ear infections, and sore throat.

Patients were provided with free medications and ointments to cater to their disease. A total of 26 patients were timely referred to tertiary care hospitals for their multidisciplinary management. Multiple sessions were conducted at all sites to raise awareness among women and men alike about sexual and reproductive health and gender-based violence during this flood and otherwise. A total of 872 people participated in these group awareness sessions conducted between August and December 2022 (Table 1).

Table 1: Frequency of services provided at each site: camp, mobile units and Al Farabi Hospital.

SERVICES PROVIDED	AUGUST-DECEMBER 2022			TOTAL
	CAMP	MOBILE UNITS	AL FARABI	
ANTENATAL CARE	248	627	405	1280
DELIVERIES	38	27	219	284
FAMILY PLANNING CLIENTS	210	69	191	470
GENERAL OPD	292	110	11519	11921
RH REFERRALS	20	0	6	26
SRHR & GBV AWARENESS	269	314	289	872

Discussion

The study highlights the work performed in an organized manner by multiple teams specifically community midwives who were working at relief camps and Al Farabi Hospital. Floods have long been affecting the subcontinent due to changes in climate and global warming. A study done previously showed that Pakistan was affected in 2010 by the worst flood in its history where 20.2 million people were affected. Over 1.9 million houses were destroyed and 85% of people were displaced¹⁵. Pakistan has since then been experiencing floods every year, however, our preparation for it has been below standards. Demographics revealed that the number of people affected this year and the number of pregnant females is much more than before.

Hence strategies were required to work effectively and harmoniously in teams to support the communities affected. Studies have shown that women are given poor support during the floods and pregnant women have to give birth in unhygienic and unsafe conditions with the help of family members or dai (traditional birth attendants) and the birthing place is decided by the male members of the family based on the availability of resources instead of woman's health condition¹⁵. In such a scenario, the healthcare camp and makeshift labor room set up just adjacent to the local tents provided a continuous and safe space for women to receive sexual and reproductive healthcare by midwives who could counsel patients in their local language and also provide emergency obstetric care.

Similarly, another study showed that women discontinued breastfeeding after the 2005 earthquake in Pakistan as they felt uncomfortable doing so in front of male members of their family whom they shared shelter with¹⁶. Therefore, the midwives conducted regular awareness sessions on sexual health and reproduction, reinforcing the benefits of breastfeeding, especially in flood areas where the newborn is more prone to infections. Moreover, women were encouraged to breastfeed in health camps if they could not find a safe private space in their camp.

The team at al Farabi Hospital worked tirelessly in providing labor and delivery services to all the admitted patients from the camp site and nearby flood-affected areas. The hospital catered to more than 75% of deliveries conducted during this time. These included both normal vaginal and cesarean deliveries. Further, they counseled patients for contraception as flood disaster is a stressful time and partners crave intimacy, however, pregnancy and childbirth add to the stress.

Multiple studies have revealed that women and girl children are at increased risk of sexual and gender-based violence due to their vulnerable position in these times^{17, 18}. Women are often forced into sex for basic resources such as food and shelter at the hands of extended family members, strangers living in camps, or even stakeholders. The community midwives were trained to conduct regular weekly sessions on awareness of gender-based violence with a survivor-centered response and approach.

Community midwives have long been working in midwife-led obstetric units, however, they demonstrated the leading role midwives can play in disaster response and act as first responders. Hence, professionalization of disaster risk management should be inculcated in community midwives' curricula to better impact the community.

Conclusion

Certified community midwives are well suited to provide many of the health care services that women and infants require including emergency response in natural disasters. It is a unique quality innately present in community midwives that with adequate training can fully prepare them to act as first responders in catastrophic events.

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