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# RESEARCH PAPER

# Lived Experiences of Flood Affectees in District Mastung: A Study of Women's Health

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#### **ABSTRACT**

This research study focuses on the health challenges faced by the pregnant women during the floods of 2022 in District Mastung Baluchistan. Basically, it aimed at exploring the pregnancy complication, psychological as well as reproductive health challenges of the pregnant women. This research study focuses on analyzing the coping mechanisms, modern as well as traditional, with the response of the governmental and nongovernmental sector, to pregnant women in the district. This study used qualitative research methodology. Purposive and snowball sampling method was used. In-depth interviews were conducted to get primary data. Themes and codes were developed from the given responses. Findings suggest that pregnant women were adversely affected by the floods of 2022. Based on the findings of this study, it is recommended that primary focus needs to spread awareness regarding healthcare needs of the expecting mothers. Mental health centers along with emergency obstetrics and healthcare centers should be established.

# **KEYWORDS** Lived Experiences, Reproductive Health Of Women, Mastung, Flood Effectees **Introduction**

This study presents an exploration of the health challenges faced by women in district Mastung, Baluchistan. The floods of 2022 highly affected the population of the district, predominantly pregnant women. Floods are defined as the recurring type of natural disaster that occurs when an overflow of water submerges land that is ordinarily dry. In fact, the most frequent and catastrophic natural disasters worldwide are floods. These floods have profound social, economic, and health consequences. Among the entire population, expecting mothers are at high risk of being adversely influenced by floods. The risks not only threaten the well-being of the mother rather have implications for an infant's health. According to the National Institute of Child Health and Human Development, pregnancy is a period in which fetus develops inside a woman's uterus. Normally, the development of children takes about forty weeks or just over nine months. Moreover, the World Health Organization (WHO) defines health as a state of physical, mental as well as social well-being and not simply the absence of disease or infirmity. The floods severely affected all variants of health. To the pregnant women, reproductive health challenges were most concerning. The World Health Organization (WHO) defines reproductive health as a state of thorough physical, mental and social well-being, and not only the absence of disease or infirmity, in every aspect concerning the reproductive system, and to its functions and processes. Psychological health refers to the sum of how individuals think, feel, relate, and exist in their daily lives. Their thoughts, perceptions, emotions, motivations, interpersonal relationships, and behaviors are a product of their experiences and the skills that they have developed to cope with life challenges. Similarly, women also faced pregnancy complication which were distressing. The term pregnancy complications refers to the complications that occur during the time of pregnancy. This entails mother's health, the baby's health, or both. Mostly these complications arise during pregnancy.

#### Literature Review

Several accessible research articles suggest that there is an association between women's health and floods. Natural disasters, particularly floods, have high influence on the health of vulnerable population, including pregnant women. The climate extremes which were manifested through natural hazards such as floods, droughts, cyclones and hurricanes are already being felt by various populations throughout the world (IPCC, 2012). Similarly, Pakistan has also experienced monsoon floods in the mid of year 2022. According to the Pakistan Humanitarian report 1, the floods of 2022, which were caused due to monsoon rains, affected 33 million people in Pakistan (UNICEF, 2022). The tragic floods have displaced over 7.6 million people throughout the country. However, among the differences which determine how the population is affected by coupled with how these population respond to such catastrophic events is gender. Among the millions of severely affected people are at least 650,000 pregnant women and girls, 73,000 of whom were expected to deliver in the following month (HRW, 2022). The health effects of flooding are principally dangerous for females and young adults (Islam et al., 2018). In addition, multiple narratives on gender and climate change in the 'Global South' tend to depict women as defenseless victims or responsible caregivers in the context of disaster, specifically flooding (Denton, 2002; MacGregor, 2010). To precisely explain, Pakistani women already faced various maternal health challenges with one of the highest maternal mortality rates in South Asia. The floods increased maternal health challenges in Sindh and Baluchistan where the domestic violence as well as poor maternal health outcomes remain at an all-time high (Ahmed, et. al., 2015; Dawn, 2023). Climate change, socioeconomic differences, social conflicts and different types of disasters bring additional challenges to health and well-being of women by enhancing the degree of complications and poor outcomes during pregnancy and childbirth. Women are more likely to have low coping capacities (Nelson et al., 2002; Sultana, 2010). Therefore, it is the need of the hour to examine and understand why women are more vulnerable and at a great risk during disasters (Jawed, 2016).

Further, women in rural areas suffer more from several reproductive health problems in a certain time of their life span (Muzaffar, et. al., 2018; Callaghan, 2007). During floods women of the flood prone areas take on extreme workloads to survive their livelihood (Nasreen, 1995). This puts them into weak reproductive health conditions. Further studies reflect that in the flood-prone areas, women are more likely to face issues like lack of access to safe food, nutritious meals, and medical and healthcare (Parkinson, 2003). The United Nations Population Funds's (UNFPA) report shows that several women lack access to the basic healthcare facilities and support for the delivery of their children safely. During floods, none of these facilities are available (Nazeer et al., 2023). Nazeer et al., (2023) found that for the displaced locality, particularly women, it was considered compulsory to live in unhygienic, unsafe assistance camps where it was difficult to find basic human needs such as food and water. The drinking of bacterial water causes number of medical issues. Studies have consistently shown that the care for children and their wellbeing both in normal and disaster times falls largely on women (Fothergill et al., 2004).

Besides, defecation during floods is another key concern. A lack of proper sanitation does exist. This type of challenge exposes women to health-related problems for example urinary tract infections (Sultana, 2010). National Disaster Management Authority (NDMA) reported that as of 27 August 2022 large population of more than 360,000 people have severely affected, counting to 238 people killed and 106 people hurt and injured in Baluchistan. Moreover, the report says that at least 17,500 houses/homes have been destroyed. Women of rural areas were more concerned of their possessions for these meant everything to them. On the other hand, men did not experience the same sense of personal and economic loss as women during the flooding (McBean, 2013). Pregnant women were psychologically affected due to floods. The displacement and loss of property contribute to increase in stress and anxiety among the pregnant women. A study by Farah (2014) highlighted that pregnant women who were experiencing floods reported higher levels of stress, anxiety, and depression. It is more likely that these psychological factors adversely affect both maternal and fetal health, leading to complications such as preterm birth and low birth weight.

#### **Material and Methods**

This research study is based on qualitative research methodology. After reading various articles related to the topic, a careful assessment has been made to develop an indepth interview guide to meet the objectives of this specific research. The questions included in the in-depth interview guide were open-ended and were well structured. The total number of questions were twenty one. The purpose of asking twenty-one questions was to understand the complexities, collect relevant and in-depth data from the research participants. While making the in-depth interview guide, pretesting of the guide was made to check the time limit and relevancy of the question to the topic.

#### **Results and Discussion**

This section focuses on the explanation and comprehensive presentation of the data collected during research process. The data is well presented into thematic categories which entail specific quotations taken from the responses of research participants during in-depth interviews. In the same thematic categories, the interpretation of the responses is also given.

This study gives data taken from a total of eighteen participants. All these participants were pregnant during the floods of 2022. These are residents of the district Mastung, Baluchistan. These participants had diverse educational backgrounds. Some of these participants were illiterate. The responses of these women depict variation and diversity. The findings of this study are given below:

# **Analyses of Themes**

# **Reproductive Health Challenges**

The responses of the participants showed that pregnant women faced several reproductive health challenges during floods of 2022. These issues were diverse in nature. These reproductive health challenges involved poor hygiene conditions, postpartum issues, over bleeding, miscarriage of child, the urinary tract infections, and the premature birth of child. The data shows that many women had miscarriage. This theme shows that there is dire need to address the challenges for pregnant women to make their life easier during floods. This further emphasizes that pregnant women are vulnerable to such disasters.

"I faced reproductive health challenges mainly due to the dirty water standing all around our home. This was due to floods. Our home was completely filled with water. We moved to mountainous areas where shelter camps were available. Even these temporary shelters lacked proper sanitation facilities and clean drinking water was very limited. These conditions resulted in a rise of infections leading to higher levels of discomfort"

# (Participant 04)

"I was pregnant at that time. It was difficult for me to survive in those circumstances. Due to being cut off from the health services, it was challenging for us to reach postnatal care. The unsanitary environment and lack of nutrients resulted in the risk of complications. Because of my weak condition, as well as the recurring infections, from which I suffered resulted into miscarriage"

# (Participant 02)

"I was the women who did all works of entire home. My mother-in-law was in old age but we lost her in early 2024. And my husband has no sisters but he has 5 brothers. I worked all the day. During floods it was my 6 pregnancy month, I loaded many things which lead to over bleeding. My husband took me to Ghous Baksh Raisani hospital. I was in very critical condition. I lost my child"

# (Participant 15)

My third baby boy was born prematurely. It was so hard for us. These worries compounded by the early birth and resulted into medical complications which had prolonged his stay in a neonatal unit. The post-flood emotional and practical experiences of my son's premature birth were very difficult.

#### (Participant 11)

"There were no healthcare clinics available for checkup. Contaminated water led to the spread of diseases like my neighbor and I suffered from urinary tract infection. There was no public transport available and all of us were not able to afford the private because most of the roads were blocked or damaged. It felt that we all are stuck and won't be able to get out of here forever. It was difficult to tell the males all these issues because it is considered as a taboo"

#### (Participant 06)

These responses show that women faced several reproductive health challenges due to floods of 2022 in District Mastung. As, the response of Participant 15 indicates that she already had babies though her work load was high. However, the floods resulted into miscarriage of her baby owing to the over bleeding. Besides, the response of Participant 06 depicts that flooding resulted in contamination of water which they were compelled to use though it was unsanitary and unhealthy. This caused Urinary tract infections. The unavailability of transport facilities and unpredictable hospital staff further increased their reproductive health complications. If the response of participant 02 is carefully observed, this draws attention to the intensity of floods on their reproductive health. Pregnant women were concerned about survival in such situations. Her miscarriage resulted due to an unsanitary environment and nutritional challenges. This shows that the pregnant women, who have weak body, direly need to fulfill their nutrition which has influence on their reproductive health. Floods make this nutritional fulfillment complicated for pregnant women.

# **Pregnancy Complications**

Pregnancy complications were very common for pregnant women in District Mastung. These pregnancy complications were the inability of women to attend regular prenatal check-ups, lack of necessary equipment during and after birth of children, urinary tract infections, fatigue and weakness, delivery on the unhygienic places, preterm delivery necessity, and dependence on *Dais* (Traditional Birth Attendants). This showed that women faced pregnancy complications during the floods of 2022 in the area.

"My husband took me to Saleem Medical Complex, Quetta for regular check-ups during pregnancy. He is very caring. As we live in this (Abaaad) area, the floods completely destroyed the roads which link our village to the main road. It was difficult for me to go for such a long distance on foot. So, I lost my regular checkups. But I took all the medicines she suggested me and Thanks to Almighty, my delivery remained successful"

# (Participant 03)

"I lacked necessary equipment during and after the floods though I had some. But these were insufficient. The roads which linked our village to the main city were destroyed. My husband was unable to go to hospital and market to bring new kits, and medicines"

# (Participant 03)

"The long-standing dirty water gave birth to several diseases. We also used the same water for washing purposes. But we had some fresh water only for drinking purpose. That fresh water was not completely clean. Regular usage of this water caused urinary inflammation problems. Initially I took this issue very lightly, later this disease made my life very difficult, and I forced my husband's brother to take me to hospital. But the hospital staff was absent. We went to Quetta for the treatment"

#### (Participant 07)

"My body was very weak before pregnancy. And when I became pregnant, I thought I could not bear this burden. The floods are coupled with this problem. I had to do all the homework. I felt very weak during this period"

# (Participant 08)

"I faced pregnancy complications. I knew before the delivery that due to such financial loss my family could not bear the expenses of my delivery in hospital. I heard of many cases which were very frightening. The delivery of these cases was done by native Dais on poor hygiene place. I had to experience the same situation. This mental stress continued till my successful delivery. My husband promised me that we will go to hospital for the next time"

#### (Participant 15)

"Yes, I faced pregnancy complications. My early children are born in the second or third week of the eighth month. But, due to these situations, my fourth child was born in the seventh month. Doctors kept him in the mirror (Incubator)"

# (Participant 06)

The responses of pregnant women show that they faced pregnancy complications during floods of 2022. As the response of participant 15 reveals, she became dependent

on *Dais* for her delivery. Though she delivered her prior children in hospital, her husband was unable to bear the hospital expenditures. The complications of financial loss compounded when she had to deliver her child to hygienic places. The response of participant 03 represents that she had to regularly take appointments of lady doctors to avoid any kind of pregnancy complications. However, floods lead to cancellation of appointments. Moreover, several responses demonstrated the pregnancy complications as well as reproductive health challenges resulted in preterm deliveries and many children were kept in incubators.

#### **Nutritional Challenges**

Nutritional challenges become common during disasters. However, the responses presented a thorough analysis that pregnant women and her child face more issues related to nutritional intake. Many women had no access to healthy food which led to nutritional deficiencies, food shortages, lack of access to clean drinking water, inadequate food intake, difficulties in obtaining balanced meals, and dietary changes due to dependence on packed food (given by the government and NGOs).

"There was nothing to eat and there was no clean place to live on. We were hungry and had food shortages for days. This led to several health problems. There was no pure water for drinking and washing. Several diseases and infections infected people including me"

#### (Participant 04)

"My doctor recommended me a good diet to maintain health of my child and mine. The destruction led to cut off. I could not maintain my balanced diet to keep myself healthy"

# (Participant 03)

"We lacked access to healthy food. But different NGOs gave us necessary packed food and necessary equipment in shelters"

# (Participant 11)

Due to the destruction of the infrastructure, the food supply was highly influenced. In such dearth supplies, pregnant women faced several issues. These issues are transformed into nutritional deficiencies. This adversely affected the health of mothers and their children. As the response of participant 11 reflects that there was a shortage of basic food to support the health of mothers. The dependency on unhealthy packed food resulted in dietary changes. Similarly, the response of participant 03 is indicative of unhealthy dietary options.

#### **Mental Health Challenges**

The mental health problems were also recurrent during the floods. The study evinces that there is a correlation between mental health issues and reproductive health challenges. These issues were mainly caused due to floods. The responses of pregnant women showed wide range of mental health issues. These were increased stress and anxiety, concern about the health of the unborn child, fear about pregnancy complications, feelings of hopelessness, increased stress due to uncertainty and displacement, and financial strain.

"A lot of things were bothering me at that time. I witnessed the death of many people included one of my closest friends. I saw the misery and helplessness of my husband and other people when they failed to provide us with shelter, food and medical assistance. It bothered me a lot as my husband was blaming himself for not doing enough but that was not the case. He was doing, what he can under his capacity"

# (Participant 10)

"Fear, anxiety and pain of losing my child and our house. It was all we had there in the village. My husband and I lost all the hope"

#### (Participant 05)

"Yes I suffered from serious problems and traumas which did effect my reproductive health"

#### (Participant 02)

"My whole life was shattered. Being a pregnant woman at that time seemed to be disaster for me. I was depressed when I was witnessing such horrific scenes as we were living under the sky with nothing left even to feed our children"

#### (Participant 15)

"Yes I suffered mental stress. Reason for this was whether my child will be healthy or abnormal. Because of preterm delivery, my friend's child was kept in mirror (Incubator) for 6 months. This increased my stress"

# (Participant 17)

"We were already suffering financial constraints. The flood further increased this strain. I lost my newly constructed home and its beautiful things such as carpets, pillows and its beautiful covers. The stress and discomfort were common during those days. We stayed at tarpaal (shelters) until our home males reconstructed our home (temporary)"

#### (Participant 11)

Mental health issues were common during floods. Hans Selye (1956) study suggests that mental health has an immense influence on the health of the entire human body. Basically, Selye's General Adaptation Syndrome (GAS) model elaborates the effect of chronic stress on human body. It is explained in three stages: alarm, resistance, and exhaustion. Physical ailments, including cardiovascular diseases, gastrointestinal problems, and immune dysfunction can be the result of prolonged stress. This study demonstrates that mental health issues among pregnant women was different. As the response of participant 17 reveals, overthinking regarding the health of her baby in the flooding situation led to mental stress. This resulted in the preterm delivery of her child. In some cases, like the participant 15, being pregnant during such a disastrous situation was no less than disaster. The intensity of her response shows the depth of mental stress she was suffering. She was overburdened whether to feed herself or to feed her children. Moreover, the mental stress also had a serious influence on the reproductive health of these women as the response of participant 02 demonstrates. One of the reasons for this mental stress was also financial constraints which multiply during floods. The response of participant 11 evinces that flood increased her stress. She lost her possessions and

belongings. Though her home construction was new, she had to reside in temporary shelters because her entire home needed reconstruction.

#### **Coping Mechanisms**

Pregnant women used different coping mechanisms to maintain their health, mitigate these reproductive health challenges and reduce mental stress. Women in the District Mastung used different coping mechanisms to deal with the flood related reproductive and psychological challenges.

"Ghous Baksh hospital is near to our home. I accessed the hospital whenever I faced any health issue. My husband works there so I had better access to the health care facilities"

#### (Participant 16)

"Yes, I used some coping mechanisms. This was my fourth delivery. When I was pregnant, I used the medicines which my doctor recommended to me in previous pregnancies. I used these when I faced similar problems which I faced earlier. I also took care of my self during that situation like I didn't lift heavy loads; I ate healthy food and some packed milk to support my health"

# (Participant 18)

"I tried to maintain my basic hygiene with the resources that were available. However, due to unpleasant conditions and unhygienic environment, I was only thinking about my survival. Reproductive health seems a luxury at that point. I tried to maintain confidence and took some traditional healing advice from local elderly women. I tried to stay away from potentially dangerous regions and floodwaters for as long as possible to lower my risk of getting sick and hurt"

#### (Participant 01)

Seeking out temporary health care facilities from NGOs or others recommended by experienced individuals was common. Participant 16 accessed the hospital because the hospital was near her home. However, this access was available to everyone. Her social capital was rich, which made it easy for her to utilize the resources in such complicated situations. Many women used emergency kits for the delivery. Many pregnant women used self-care health practices like the response of participant 18. Moreover, participant 18 also used another mechanism during this situation she stored necessary things required during that period of pregnancy such as necessary medications and supplies (e.g. sanitary products) to aid her health and pregnancy. In addition, women, who were unable to access their doctors for regular check-ups, used medicines recommended by doctors in previous pregnancies. These were some of the coping mechanisms which pregnant women in district Mastung used to resolve the nutritional, reproductive health challenges and pregnancy complications.

# **Traditional Coping Mechanisms**

Traditional coping mechanisms were very common in the far-flung areas of district Mastung. Women in some remote areas used several herbs, paste of different things, traditional medicines prepared by experts. Some of the participants observed these useful during such disasters when healthcare facilities were unavailable. Participants used several coping mechanisms. These are relying on family for emotional

support, engaging in religious or spiritual practices, for example, the use of amulets (taweez). The use of traditional coping mechanisms such as use of Aloe Vera for anti-inflammatory purposes of reproductive health, Black Cumin Seeds (Kalonji) to boost their immunity, Fenugreek Seeds (methi) to promote lactation and improvements in digestive system. Other mechanisms included the use of pomegranate flowers, and other resources including mixture of herbs and shrubs taken from mountains.

"I used tradition practices to control my sufferings. This included the regular recitation of Holy Book. I weared Amulet (tahveez) all the time. For pain, I used paste given to me by my grandmother which she used. I ate that paste especially during last three months of child delivery"

# (Participant 12)

"I used to take hot milk with butter to stay healthy. But it worked little in reducing my pain in a longer run"

# (Participant 01)

"My mother-in-law is very good at the use of traditional medicines for different diseases and complicated situations. She had paste which had several things such as pomegranate flower (Anaar na pull) and Gohe Madran (a flower which grows every summer in mountainous regions of Baluchistan. For the reproductive system's inflammatory purpose, she gave me Aloe Vera. Many other traditional things I used during those times which I do not exactly remember"

# (Participant 14)

"My body was very weak. And I used Black Cumin Seeds (Kalonji) for boosting my body's health (immunity). When my baby was born, I used some Fenugreek Seeds (Methi) so that my breasts can produce more milk (lactation). Methi is also used for improving digestion"

# (Participant 13)

Mastung is a region that lies near the mountains and plains. People have been using traditional methods to cope with medical issues since ancient times. Similarly, the in-depth interviews also reflected the same methods. According to these women, the medicines had a profound influence on their health. Participant 13 response evinces that although her body was weak, she used Black Cumin seeds to boost her immunity. In addition, many women face issues of lactation after the birth of the child. These women used paste of fenugreek seeds to resolve these issues. Similarly, the use of Methi was also beneficial for them owing to its good impact on the human digestive system. Fourteenth participant pointed out that she used a mixture of pomegranate flowers with some other ingredients including an indigenous plant named Gohe Madran for better digestive system. These medicines remained very beneficial for pregnant women in district. In addition, some women also relied on the religious and spiritual practices to support her health and mental stress. As the response of participant 12 shows that she used to recite selected verses of Holy Quran and also delivered religious education to her family members. Such type of coping mechanisms were very common among females of district Mastung. Studies show that it positively influences our subconscious mind which supports our body during complex situations. Some responses reflected the use of amulets (tahveez) to support their good health. Moreover, a woman of Pringabad used to take boiled milk to maintain her health. Thus, pregnant women in district Mastung used these types of traditional methods to maintain their healthy life and support their pregnancy.

# Governmental and Non-Governmental Response (Participant's perception)

The Governmental and Non-Governmental help to these women was moderate. Some of these participants received support from the government and some did not. This basically depended upon the location of their area. The more it was away from District's main city; the lesser support was available. However, some NGO services tried to reach out those peripheries. These could not cover entire remote areas of the district.

"All facilities were missing as there was no one to support us"

#### (Participant 02)

"Yes, government as well as NGOs reached us. They had food, bottles for drinking water and also emergency medicines and injections. Initially, they had no emergency kits for pregnant women. When they came to our camps, we asked them for some delivery kits. They gave me two kits after sometime"

# (Participant 07)

"No, the government just made promises, but we didn't receive any support from them during and after floods. But some local volunteers helped us with some food and clean drinking water"

# (Participant 11)

"Even the basic health facilities were delayed, so there was no way that some kind of health service was helpful"

#### (Participant 09)

"Most of the health services were disrupted, some of the governmental or non-governmental support was there but pace of it was slow. The access to these was limited, there was nothing to eat nor were any supplements available"

# (Participant 04)

"The government provided support to evacuate people from most affected parts of flooded areas like Abaaad. In this (Pringabad) area, some NGOs like Abu-bakar foundation provided necessary healthcare services. In our area, volunteers were active because here the camps were available for affectees"

# (Participant 16)

The responses of research participants show that the health care services were limited to some participants. The government helped women who lived in the city or nearby. However, the NGOs tried to reach out the rural areas or peripheries. The response of participant 02 reveals that she did not receive any help, neither health care service from any NGO or government. Participant 04 response reflects that they received some services, but everyone could not access these. One of the participants, who lived in Pringabad (the area where camps and temporary shelters were provided), evinces that they were helped by government, NGOs as well as volunteers. Many responses showed that initially the service providers had no awareness regarding the needs of pregnant women. These services became available in the mid days of floods. The response of participant 09 reflects the delayed nature of health facilities which made these of low use.

At some places, the government service providers did assessments and promised to help them. However, they did not receive any help. Interestingly, women in district Mastung received help from volunteers (mostly students).

#### Conclusion

The floods of 2022 posed multifaceted health challenges for pregnant women. The fact cannot be denied that pregnant women are most vulnerable among the entire population particularly during disaster events. This specific study highlights the health effects of floods on pregnant women. This includes various aspects which are the increased exposure to waterborne diseases, disruptions in gynecological care, lack of nutritious flood, and heightened psychological stress. Some of these factors mutually heighten the risk of adverse pregnancy complications which entail maternal health complications, low birth weight of infant, and preterm birth. To sum up, floods brought several complications for expecting mothers.

#### Recommendations

Following are some recommendations for improving health of pregnant women during floods.

# Awareness regarding healthcare needs of pregnant women

There is a need to spread awareness at grassroots level beginning with the family. The pregnant women need special care and attention of family members to maintain and sustain life of not only mother, but also life of infant. In normal routine in rural societies, pregnant women still carry heavy weights, do tiresome homework, and cook food in unhealthy and unhygienic environment. The efforts are multiplied during the flood events, they are expected to cook and feed every member of the family despite challenging situations, and they are expected to wash clothes of every member of joint family. Thus, working in such challenging situations result in the health problems and pregnancy complications for pregnant women. There is a dire need to spread basic awareness regarding the health consequences of floods on pregnant women.

# Establishment of emergency obstetrics and emergency healthcare centers

There is a need of establishment of emergency centers which can ensure the accessibility of health care system during emergency situation. Mobile health units should be created so that affectees can be easily accessed during emergency situations. These emergency centers and mobile health units can be beneficial for rural population. Furthermore, there is a need to providing special training for emergency responders and specialized workers in emergency obstetrics to manage reproductive health challenges and pregnancy complications such as over bleeding, preterm labor and postpartum hemorrhage.

#### Mental health support

Mental health support needs to be given to pregnant women during such natural calamities. Stress management is necessary for maintaining healthy pregnancies. Offering counselling and psychological support to pregnant women who experience stress, anxiety, fear or trauma related to these calamities. Moreover, the presence of support group seems very purposeful who can share coping mechanisms to pregnant women or new mothers during emergency situations.

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