

## PREGNANCY DURING A NATURAL DISASTER: LIFE DURING AN EMERGENCY?

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**Category**: Opinion

As I sit down to pen this article in the season of the Flu that has brought LIFE to a standstill – I introspect and wonder if India is equipped and has the capacity to handle a massive natural disaster or a calamity in nature. The results are not in the least to say convincing.

Giving birth is a lifetime event, that swirls within a whirlpool of emotions. A mother is about to give birth and is by nature on a roller coaster of emotions – hormonal. She is anxious about her baby, its normality, the course of labor, mode of delivery and the likes. So what if a pregnant mother finds herself in the middle of a natural disaster (an earthquake, a cyclone) in labor or near term? Are we as a country with a unique heritage and grit equipped to handle this emergency in an emergency?

About 150 000 women in the countries hardest hit by the Tsunami—namely, Indonesia, Thailand, Sri Lanka, India and the Maldives—would have been pregnant at the time of the disaster, with 50 000 in the third trimester. In India alone, 8300 women in the Tsunami region were estimated to have been pregnant, about 1380 of whom would have been in the last three months of pregnancy.<sup>1</sup>

Labor is a perilous process - disaster or no disaster. It's a nightmare of the worst kind - if the baby is



ready but the mother is not !!

Being pregnant and finding one self in the middle of a disaster can have a lot of psychological effects: "Disruption of life during pregnancy"- It challenges a women's ability to cope with uncertainty. Maintaining her nutritional status and a healthy lifestyle may not be sustainable during the period of a natural disaster. Moreover the process of leaving behind one's home, belongings and sometimes family can be devastating. A woman is expelled out of her comfort zone or safe space.

Displacement in a disaster can be described as an emotion in itself - people are away from family and have lost power and connectivity.

If one were to scroll across literature and case studies it in evident that giving birth during a natural disaster can be challenging for all involved, but not impossible. A women got to do what she's got to do - even without all the monitoring. For the most part ( giving birth ) can be done without all the fauciness.<sup>2</sup>

Here s an account of an incident: During Hurricane Irma, Florida resident David Knight had no other choice than to deliver his own daughter.

"It was too windy for an ambulance to reach them, so an emergency dispatcher told Knight to gather a paper clip, string or shoelace, and clean towels. The paper clip was in case the baby was born inside the amniotic sac and he needed to pop the sac. The string or shoelace was to tie off the umbilical cord and the towels to wrap the baby."<sup>3</sup>

Interestingly this is how his daughter – the pregnant lady -who found herself in this very physiological dilemma categorically described her feelings:

"I thought we were gonna die. I really did. I mean the building just didn't seem like it was gonna hold up .. Then..the emergency system started going off in the building saying too that everyone had to evacuate.. and I'm meanwhile starting to kind of have cramps .Actually I knew was if water gonna come through , we re gonna die, can't swim .. I'm gonna die"

During the massive earthquake of Haiti, health care professionals deemed that the pregnant were not in the least prepared and described their nutritional status as inadequate.



The impact of a flood disaster on 47 pregnant women in Poland showed that 55.3 percent of study participants experienced miscarriage, fetal death or other adverse outcomes, along with other physical and mental complications that were associated with stress.<sup>4</sup>

Prenatal maternal stress has also been associated with an increased risk for preterm birth and adverse mental health outcomes in child development.<sup>5</sup>

Stress can lead to preterm labor and what can be more stressful than a storm!!!

Guilt and feeling for one's family during a disaster can also take a toll on the pregnant mother's health .

This is how an antenatal described her feelings during the HAITI earthquake:

"I was feeling just incredibly guilty like I was taking a meal away from somebody but... I knew that I needed to feed my baby... it was a very just humbling experience because...my dad's almost 70 and my mom is 65 and my husband sitting and watching me eat...this meal, and I knew that they were hungry too, and I just remember...feeling this huge amount of guilt...like I was taking food from them."

Another pregnant mother revealed:

"It would have been a lot easier to deal with the storm I think mentally if I had not been pregnant."

Post-partum depression can be a storm within a storm:

Prepas et al said: People rarely think about the psychological impact that disasters can have on people, including that mothers are at risk of postpartum depression."

If you are a health care professional do ask yourself these questions:

What are hospitals in our communities doing to prepare labor and delivery units for events such as fires, floods, and loss of electricity? Does anyone have a video of a Labor and delivery drill for an emergency? How are our health departments preparing for disasters that render hospitals unsafe or inaccessible for childbearing women? Do we teach disaster preparedness in routine prenatal class?



Natural disasters are unprecedented, uncertain and unpredictable. Preparedness for the untoward is what could get us through. Here are a few suggested approaches:

- 1. Health care professionals should move towards complete usage of Electronic medical records.
- 2. We need to empower pregnant women with means to cope with stress in pregnancy.
- 3. In the face of a natural calamity -Triage can be useful. Triage the pregnant into those likely to safely give birth without medical intervention and those women who will need I V access and an OR at hand.
- 4. Creating a Disaster Relief Team with experts in health care. They would need to be well trained in various conditions that need expertise like placenta previa, preterm labour.
- 5. Emergency disaster management kits: Should be prepared and provided at designated places or places that shelter pregnant women in disasters. These could include essentials like towels, lifesaving drugs, antiseptics, clean surgical blades, a bulb syringe to suction the baby's airway, scissors to cut the umbilical cord and blankets etc.
- 6. Patient Information Leaflets: on childbirth education and prenatal breastfeeding education, along with infant CPR classes, are essential to preparedness, and gives step-by-step instructions for supporting a woman to give birth at home or a minimal resource setting, including how to handle the most common complications.
- 7. Emergency obstetric drills should be conducted at regular intervals in likely disaster relief centres -to increase preparedness for an emergency.

Here are some precautions to take if you are pregnant and live in a disaster (flood / earthquake) prone area :

- 1. If you stay in flood prone areas, and your <u>due date</u> is near, make sure you have an evacuation plan, or you could consider moving to another location. Some mums find that moving to a relative's house or a guest house is a good option. This way you are safe and don't have to <u>commute</u> for long hours in the rain.
- 2. If you anticipate a <u>water shortage</u> then it may be wise to get a drum or big bucket to store water for a few days. Make sure all these containers are always securely covered. Uncovered stagnant water is a breeding ground for disease-causing insects such as <u>mosquitoes</u>. Stock up on bottled water if needed.
- 3. Stay up to date on news about the weather. Traffic updates on the radio will let you know which roads are blocked because of water logging. Pay attention for any flood alerts issued by the government, so that you can evacuate in time if needed.
- 4. Lamaze and deep breathing is a reliable defense against labor pains.
- 5. Be aware of the signs of preterm labor.
- 6. Health care providers who help birthing women in labor should know how to detect and manage post partum hemorrhage a leading cause of maternal mortality.



There are many amongst us who are heroes – the silver lining in the dark cloud of a disaster. Medical and paramedical personnel and even everyday people who have heroically and diligently managed and delivered women in labor, in the eye of the storm.

In the words of Albert Einstein "Time is relative and the most powerful force that can help transcend calamities and is quintessential – is Love and Compassion.

"Don't wait for the storms of your life to pass . Learn to dance in the rain instead."-STEVE RIZZO

## REFERENCES:

- 1.Impact of the Tsunami on reproductive health: J R Soc Med. 2005 Sep; 98(9): 400-403.
- 2. J Obstet Gynecol Neonatal Nurs. 2010 Jul; 39(4): 489-497.
- 3. Giving birth is perilous enough without a hurricane By Michael Nedelman, CNN report November 17, 2017
- 4. Neuberg , Pawlosek, Lopuszanski & Neuberg . 1998
- 5. Beydoun & Saftlas, 2008

## **About the Author:**

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