Major Cause of Stillbirths and Neonatal Deaths and Preventive Measures: Feedback from Pregnant Women and Mothers of Young Children in Rural Bangladesh

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Background

- Stillbirth and neonatal death in Bangladesh is still very high (230 cases/day and 62,000 every year).
- The Child Health and Mortality Prevention Surveillance (CHAMPS) program is implementing postmortem minimally invasive tissue sampling (MITS) procedures to identify the etiology of <5 child deaths and stillbirths in Baliakandi sub district, Bangladesh.
- The expert panel of the program analyzed pathological and multiple organ tissue sample reports from first 82 stillbirths and early neonatal deaths.
- The panel also determined “Intrauterine hypoxia” as the major cause of these deaths. The recommended preventive measure to reduce high risk pregnancies is quality antenatal care (ANC) in timely manner or as per schedule.
- Communities need to be informed about these findings with evidence-based recommendations for preventive measure to improve use of ANC.

Objectives

- To diffuse the major cause of stillbirths and neonatal death findings among the pregnant women, their family members and mothers of young children of the study area.
- To explain the evidence-based recommendations to prevent stillbirth and neonatal deaths to community participants.

Implementation area:

Geographical and demographic information 2021

- Geographical coordinates: 23° 43' 0" North, 89° 43' 0" East
- Baliakandi, a rural sub-district of Rajbari, Dhaka division
- 7 administrative unions; 261 villages; 2,36,440 residents
- 56,384 Households; Under five deaths 1,589
- 4,430 live births; 92 stillbirths
- Predominantly Muslim communities; agricultural livelihoods

Implementation period

From March to December 2021

Implementation process

Identifying the pregnant women

- Demographic Surveillance System and Pregnancy Surveillance System in the program provided:
  - List of pregnant women by trimester
  - Maps of the residing villages to locate those households

Location of pregnant women’s households

DAY 1: session preparation

- Step – 1: Identify potential pregnant women from the given Pregnancy Surveillance System list
- Step – 2: Household visit to locate the pregnant women DSS provided village maps
- Step – 3: Invite pregnant women to ensure family permission to attend. Discussed with:
  - in-laws family members when at husband’s house. We also invited female members of the family.
  - parents when residing at maternal home
    - Offered transport support to ensure presence of pregnant women living distant from meeting venue
- Step – 4: Fix suitable and common meeting venue or courtyard adjacent to a pregnant women who are at early or later stage (both of the stages women usually have some mobility restriction)

DAY 2: Facilitation of the session

A female team member facilitated each session (usually the same person who invited participants)

- The session delivered a set of previously developed communication messages on:
  - The major cause of stillbirth and neonatal deaths in this area (intrauterine hypoxia)
  - Prevention strategies of those deaths focusing antenatal care (ANC) linking with risk perceptions
  - The objectives and benefits of ANC by a qualified physician at different stages/trimester of pregnancy
  - The ‘danger signs’ before, during and immediate after delivery; steps need to be taken if these signs are noticed
  - Contact to CHAMPS physicians for health advice during pregnancy complications and child sickness
- At the end of the session the facilitator asked the participants for their thoughts and questions
- The facilitator responded with their questions and also noted for document.

Results

- In total 160 pregnant women at different trimesters, 244 family members, 126 mothers of young children and 137 neighboring women participated in the courtyard sessions.
- The majority of the participants (~65%), informed that they learned something important which are new to them:
  - ‘Intrauterine hypoxia’, as the major cause of stillbirths and neonatal deaths in Baliakandi
  - The explanation of cause of deaths and preventive measures
- Explanations of the preventive measures helped them to understand the importance of receiving quality ANC services that focused on:
  - ensuring WHO recommended at least four ANC visits
  - emphasizing regular monitoring of specific pathological tests and other health conditions: BP, RBS, malnutrition, mother’s weight, growth of fetus.
- During feedback the participants articulated the common barriers to receive quality ANC:
  - family conflict, lack of family members support
  - financial incapability, delayed decision making and
  - preference of taking alternative remedy during pregnancy complications, such as homeopathy or traditional healing
- Pregnant women stated that following the recommended preventive measures is challenging due to lack of quality of ANC services.

Conclusions

- The evidence-based etiology of stillbirth and neonatal death information and prevention messages could be integrated in health education programs at the local and regional level.
- The messages can also be widely disseminated to all pregnant women in the CHAMPS catchment area including improving quality ANC services.

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