Post-Mortem Lessons: A Community-Based Model for Averting Maternal Mortality and Newborn Death in Ethiopia

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Outline

• Introduction and background
• Purpose of the Model
• Definitions of Concepts
• Methodology
• Theoretical Foundations
• Findings and recommendations
• The Model
Introduction and background

- The death review/audit was done retrospectively
- Maternal and neonatal death rates were high in Ethiopia and the rates are not part of this presentation.
- Ethiopia has one of the world’s highest rates of maternal deaths and disabilities in the world. Women have a one-in-52 chance of dying from childbirth-related causes each year. Every year, more than 257,000 children under the age of five die and 120,000 die in the neonatal period. More than 60 percent of infant and 40 percent of under-five deaths in Ethiopia are neonatal deaths. (USAID 2014:.
- More women were found to be delivering at home and those with complications ended up losing their lives
- This led to an increase in maternal and neonatal mortality rates
- Therefore a need for developing community based model for averting maternal and neonatal care was highlighted hence this model was developed.
- Using Walker and Avant method, concept analysis of 'community-based care' was conducted before programme development.
- The six aspects of activity by Dickoff, James and Wiedenbach formed the basis for development and description of the model
The Purpose of the Model

• Increase women’s access to skilled care during pregnancy, childbirth and post-partum within their communities to prevent the unjustified maternal mortality and newborn death in Ethiopia.
Definitions of concepts

The identified concepts were classified according to the practice theory by Dickoff, James and Wiedenbach and defined using rules as described by Rossouw, 2000/01 and Copi & Cohen, 1994:

1. **Context** - Home-based or community-based maternal & newborn care
2. **Agent** - The community-based skilled birth attendant and others
3. **Recipient** - the mother and the newborn baby
4. **Dynamic** - The environment conducive to avert maternal mortality and newborn death
5. **Procedure** - The guiding technique or protocol of the activity to address the convenience, affordability and effectiveness of maternal and newborn care
Methodology

• **Design**: - The research design for developing a community-based model for averting maternal mortality and newborn death was developed through three phases in accordance with the objectives of the study namely:

  1. **Phase 1.** Explore and describe maternal and newborn care in Ethiopia (empirical study).
  2. **Phase 2.** Concept analysis of community-based maternal and newborn care.
  3. **Phase 3.** Develop a community-based model for averting maternal mortality and newborn death in Ethiopia.

• **Sample**: -

• **Method of data collection**: -
Theoretical Foundations of the study

• This study has used two theoretical frameworks:
  1. The "Three phases of Delay Model" (Thaddeus & Maine 1994:1091-1110) to shape the causes of maternal mortality and newborn death.
  2. The survey list drawn up by Dickoff et al (1968:415-435) to shape model development; and,
Findings and recommendations

• Impediment in receiving prompt, adequate and appropriate care were common problems encountered even after reaching an appropriate medical facility.

• For any attempt to attain a significant reduction in maternal mortality and newborn death, the health care system in Ethiopia must assume its tasks to institute critical changes in both the structure and process of health care delivery services.
CONTEXT: In what context is the activity performed?

- “Community-Based” Vs. “Facility-Based”
- "Only facility based deliver" – Gov. policy
- An effective maternal and newborn health service provision context is needed to facilitate the transition
- This should not just only focus on HF context but give due emphasis to homes/community (traditional) context.

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AGENCY: Who or what performs the activity?

- Three interlinked set-up of agents are identified
- Based on the physical location where MNC is provided
- Not necessary refer to the level of care, skill and/or intensity of service delivery.
- agents at home/community are the most important or crucial agent
RECIPIENT: who and what it is the recipient of the activity?

- The recipients are pregnant women and neonates in Ethiopia as they receive care before, during and after delivery from several members of the community mentioned.

- Clinical health workers (Doctors, midwives, nurses, etc)
- Non-clinical health workers
- Community Midwife and health extension workers;
- Traditional Birth Attendants;
- Family members (Relatives);
- Neighbours
- Local taxi/cart drivers
- Ambulance drivers
- Community members (shouldering/caring)
DYNAMICS – what is the energy source for the activity?

- The model ensures:
  - Almost all maternal and newborn health care returns to the community
  - With referral to the clinic or hospitals only when necessary
- Thus, consideration of a number of dynamics and power bases is important for the community-based maternal and newborn care model.
PROCEDURE: What is the guiding procedure, technique or protocol of the activity?

• The guiding procedure, technique, or protocol of the activity involves several interlinked steps.

• The procedure should encourage community participation and involvement in the prevention of maternal mortality and newborn death and ensure protection and safety of pregnant women during the delivery period.
### Inputs for interventions

<table>
<thead>
<tr>
<th></th>
<th>Traditional MNC approach</th>
<th>Health Facility (Modern) MNC approach</th>
<th>Home/Community MNC approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convenience</strong></td>
<td>- Convenient</td>
<td>- Inconvenient</td>
<td>- Convenient</td>
</tr>
<tr>
<td></td>
<td>- In the Community</td>
<td>- In Hospital/clinic</td>
<td>- In the Community + referral</td>
</tr>
<tr>
<td><strong>Affordability</strong></td>
<td>- Affordable</td>
<td>- Expensive</td>
<td>- Affordable</td>
</tr>
<tr>
<td></td>
<td>- In cash or in kind</td>
<td>- High-fee</td>
<td>- Understands the finest features</td>
</tr>
<tr>
<td><strong>Effectiveness</strong></td>
<td>- Not Effective</td>
<td>- Effective for the few who can afford it</td>
<td>- Effective</td>
</tr>
<tr>
<td></td>
<td>- Traditional wisdom</td>
<td>- Specialist &amp; scientific</td>
<td>- Good quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Prevention of risk</td>
</tr>
</tbody>
</table>
TERMINUS: What is the endpoint of the activity?

- Prevention of maternal mortality and newborn death in Ethiopia
- Involves making the maternal and newborn care services:
  1. Convenient both culturally and accessibility - at home and referral if needed;
  2. Affordable and understand the finest features of payment for the pregnant women; and,
  3. Effective, good quality and it also prevent risks
Schematic Presentation: Overview of the Model
The nature of the structure and the process description of the model

- Vast network of health infrastructure
- But it is yet to be exploited for improving rural women's access to clean and safe delivery and postpartum care (MoH 2015a:4-29; MoH 2015b:14-20).
- Lack of usage of delivery care in the country is related not only to accessibility but also acceptability of the services.
- The vast majority of women with home deliveries saw institutional delivery as "unnecessary" and a "non-customary practice".
- Therefore, instituting an innovative, culturally sensitive, and practically amenable strategy, deployment of a community midwife or skilled birth attendant in alignment of the health extension worker, for instance, might be the best remedy, in this case.
process description...Continued

• Requires access to care provided by community midwife, families and communities including the traditional birth attendant; and, by clinical services, if needed.

• Saving lives depends on high coverage and quality of home/community service-delivery, with functional linkages between levels of care in the health system and between service-delivery packages.

• The care provided at each time and place contributes to the effectiveness of all the linked packages.

• The presented CBMNC model is entrusted to address the three delays and other root-causes of Ethiopian mothers and newborn deaths.
EVALUATION (CRITICAL REFLECTIONS) OF THE MODEL

• The study was supervised by two senior experts in model development as well as quantitative and qualitative research;
• the model was presented locally to five senior members of maternal & child health (MCH) directorates at ministry of health (MoH) and other invited research experts, making the evaluation of the model meaningful and comprehensive.
• The model was also evaluated on the basis of predetermined criteria of theory generation as described by Chinn & Kramer:
  1. How clear is the model?
  2. How simple is the model?
  3. How general is the model?
  4. How accessible is this model?
  5. How important is the model?
  6. Does the model display the researcher's original contribution