

PMA Ethiopia Experience with mobile phone survey for MNH research

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PMA Ethiopia Overview

- PMA Ethiopia (now E-PMA) is a survey platform that grew out of PMA2020 and the **PMA Maternal and Newborn Health (PMA MNH) pilot**
- PMA Ethiopia included three survey activities:
 1. Annual cross-sectional survey of women age 15-49
 2. Ongoing longitudinal data collection of currently pregnant women, revisited at 6-weeks, 6-months, and 1-year postpartum
 3. Health facility data collection
- All are collected via face-to-face interview, following test case of phone follow-up collected as PMA MNH pilot

PMA MNH Pilot

- Conducted in Southern Nations Nationalities and Peoples (SNNP) region in 2016-2017
- PMA MNH identified all currently or recently postpartum women (<6 weeks postpartum)
- Conducted follow-up at 7-days, 6-weeks, and 6-months
 1. Monitor the use of proven, effective and cost-effective interventions
 2. Assess the validity of maternal recall of pregnancy, delivery, and neonatal care information over a six-month period;
 3. Evaluate the quality of maternal, newborn child health (MNCH) data and validate the information in the Family Folders,
 4. **Evaluate the feasibility of conducting follow-up interviews on maternal, newborn health care over mobile phones instead of face-to-face.**

PMA MNH Pilot

- Conducted in Southern Nations Nationalities and Peoples (SNNP) region in 2016-2017
- PMA MNH identified all currently women who were 6+ months pregnant in 44 Enumeration Areas. **329 women enrolled**
- Conducted follow-up at 7-days, 6-weeks, and 6-months
 1. Monitor the use of proven, effective and cost-effective interventions
 2. Assess the validity of maternal recall of pregnancy, delivery, and neonatal care information over a six-month period;
 3. Evaluate the quality of maternal, newborn child health (MNCH) data and validate the information in the Family Folders,
 4. **Evaluate the feasibility of conducting follow-up interviews on maternal, newborn health care over mobile phones instead of face-to-face**

Methods

- All women were screened for phone access
- Women with access to a mobile phone were randomized to receive the 6-month survey over the phone or the face-to-face interview
 - 76% of women had access to a mobile phone
 - Informed at the time of enrollment
- Conducted ITT analysis comparing across all three groups across 5 indicators
 - 19 women were “cross-over” – followed-up face-to-face rather than over phone. Most were in rural areas
 - PNC, exclusive breastfeeding, any infant illness, vaccine card, mCPR
- Focus group discussions with REs following data collection

Results

- Significant differences in the socio-economic characteristics of women with and without a phone
 - Women without phones were younger, poorer, less educated, lived in rural areas
 - No SES differences between randomized arms
 - Response rates lower amongst phone follow-up
- No significant differences across 4 indicators (PNC, breastfeeding, illness, mCPR) after weighting
- Significantly higher percentage of phone interviews reported a vaccine card

Qualitative Results

- Most women did not own phone outright but relied on husbands/partners
 - Presented both ethical and logistical challenges
- Could not guarantee privacy or protect against interruption
- In rural areas, there are limited charging stations. Interviews were frequently truncated because of charging issues
- Hard to gauge social cues. Many reported that respondents wanted to get off of the phone quickly. REs said data quality likely to be higher amongst face-to-face interviews, especially for difficult or challenging questions

Discussion

- Response rates were lowest among phone follow-up and lowest amongst rural women
 - Cost savings will generally be found among women who are already relatively easy to reach. Women in rural and remote areas will be the least likely to be able to complete the interview over the phone.
- Selection bias is significant
- Any surveys that rely on observation (vaccine cards, presence or absence of commodities, housing materials etc) should anticipate social desirability bias
- Not appropriate for difficult or sensitive questions or long surveys

Thank you!

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