Impact of Promotion of Lactational Amenorrhea Method within a Community-Based Maternal and Neonatal Health Program in Rural Bangladesh

Salahuddin Ahmed¹ & ², Catharine McKaig², Jaime Mungia², Saifuddin Ahmed¹, Amnesty LeFevre¹, Peter Winch¹, Ahmed Al-Kabir³, and Abdullah Baqui¹

¹Johns Hopkins School of Public Health; ² Jhpiego; ³Shimantik
## Study Context

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Sylhet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median duration for any breastfeeding</td>
<td>28 months</td>
</tr>
<tr>
<td>Median duration for exclusive breastfeeding</td>
<td>2.3 months</td>
</tr>
<tr>
<td>Unmet FP need</td>
<td>26%</td>
</tr>
<tr>
<td>CPR (any method)</td>
<td>31%</td>
</tr>
<tr>
<td>TFR</td>
<td>3.7</td>
</tr>
<tr>
<td>Birth intervals</td>
<td></td>
</tr>
<tr>
<td>&lt;24 months</td>
<td>26%</td>
</tr>
<tr>
<td>&lt;36 months</td>
<td>57%</td>
</tr>
</tbody>
</table>

*Source: BDHS 2007*
Study Objectives

1. To develop and test an integrated Postpartum Family Planning, Maternal and Neonatal Health (PPFP/MNH) service delivery approach

2. To assess the impact of the intervention package on contraceptive knowledge and practices including LAM during the extended postpartum period
Study Design

Study sites: eight unions in two sub-districts in Sylhet district, Bangladesh

Non-Random Allocation

Intervention unions: four
Enrolled women: 2247

Comparison unions: four
Enrolled women: 2257

Enrollment of women during <8 months of pregnancy

Intervention clusters:
MNH plus FP during ANC and Postpartum visit

Comparison clusters:
MNH ONLY during ANC and Postpartum visit

Follow the cohort through pregnancy to 36 months postpartum
1. Capacity strengthening:
   - Training
   - Orientation

2. Community-based advocacy and behaviour change communication approach:
   - Household level through Community Health Workers (CHW)
   - Community level through Community Mobilizers
   - Facility level through Service Providers
## CHW Counselling Topics and Timing

<table>
<thead>
<tr>
<th>Messages</th>
<th>FP integrated with MNH program</th>
<th>Additional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>During pregnancy</td>
<td>Day 6 postpartum</td>
</tr>
<tr>
<td>ANC</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Newborn Care, EBF</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Return to fertility</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LAM and transition, EBF</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>HTSP</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>FP methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit to facility</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Results
Starts in a Low Performance Area

Ever Used Contraceptive Method

- **Intervention**: 18.0%
- **Control**: 21.1%

Percent
Contraceptive Use Rate at 3, 6, 12, and 18 Months Postpartum by Study Arm

- **Intervention**
  - 3 months: 36%
  - 6 months: 37%
  - 12 months: 42%
  - 18 months: 47%

- **Comparison**
  - 3 months: 11%
  - 6 months: 18%
  - 12 months: 27%
  - 18 months: 34%
Contraceptive Use Rate at 3, 6, 12, and 18 Months Postpartum by Study Arm

- Statistically significant improvement in the contraceptive use rate in the intervention area over time
  -- 36% at 3 months to 47% at 18 months postpartum
  -- 10% to 31% increase the comparison arm over the same period of 3-18 months postpartum

- High number of new users and a trend towards increased early adoption
Contraceptive method mix among intervention area users’
Contraceptive method mix among intervention area users’

- Overall high adoption of LAM → 23% at 3 months and 12% at 6 months
- Shift in method preference from LAM to pills, condoms, and injectables
Contraceptive method mix among intervention area users’

- Slight increases in injectables and long-acting methods
  - Rise in sterilization from 1.9% to 3.1% in intervention area
- Oral contraceptives are the preferred contraceptive at 12 and 18 months
Contraceptive Method Mix Among Control Area Users’
Duration of LAM use
Duration of exclusive breastfeeding by study arm

Duration of exclusive breastfeeding by study arm

- Analysis time
- Intervention
- Control
Exclusive breastfeeding by LAM use status and study arm arm

*P < 0.001
Lessons Learned and Future Programming Implications

- Promotion of LAM had a positive effect on optimal breastfeeding practices: duration of exclusive breastfeeding 25% higher at 6 months
- LAM is a feasible and acceptable method of contraception for the first 6 months postpartum and LAM has an important role in contraceptive mix at 3 and 6 months postpartum
- Significant increase in the probability of contraceptive adoption through 18 months postpartum period in the intervention arm
- It is feasible to integrate PPFP into existing contacts with mothers but includes the addition of 2 visits and 5 messages
- Responsibility of programs to take advantage of opportunities for integration
Funded by USAID
THANK YOU