The Effect of Postpartum Family Planning Integration within a Community-based MNH Program in Rural Bangladesh (Healthy Fertility Study)

PPFP Technical Meeting
May 27, 2013
### Background: Bangladesh and Sylhet Division

<table>
<thead>
<tr>
<th>Indicators</th>
<th>BGD</th>
<th>Sylhet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmet FP need</td>
<td>17%</td>
<td>26%</td>
</tr>
<tr>
<td>CPR (any method)</td>
<td>56%</td>
<td>31%</td>
</tr>
<tr>
<td>TFR</td>
<td>2.7</td>
<td>3.7</td>
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<tr>
<td>Birth intervals</td>
<td></td>
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<tr>
<td>&lt;24 months</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td>&lt;36 months</td>
<td>37%</td>
<td>57%</td>
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</tbody>
</table>

Data source: Bangladesh Demographic and Health survey 2007
Evolution of MNCH Packages

Designed a community-based maternal and newborn care intervention package and evaluated the effectiveness of the package using a cluster randomized design.

A home care package which involved CHW antenatal and postnatal home visits and management of sick newborn reduced NMR by 34% (Baqui et al., Lancet, 2008)

Newborn care

Postpartum FP counseling and contraceptive distribution
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
Intervention Delivery Strategy

Service Delivery
Home visits by CHWs

Counsel in antepartum and postpartum periods

- Messages on LAM and transition, return to fertility, optimum birth spacing, and contraceptive methods

Pregnancy surveillance and contraceptives dispensing

- Household visits every two months to identify new MWRA and pregnant women
- • Pills, condoms, and injectables
  • Refer for other methods

Community mobilization: Conduct meetings with women, husbands, mothers, mothers-in-law and community leaders including religious leaders to raise awareness about PPFP messages

LAM Ambassadors: Local champions providing peer support, counseling and advocacy for LAM
## Selected Baseline Characteristics of Participant Women by Study Arm

<table>
<thead>
<tr>
<th></th>
<th>Intervention (n=2247)</th>
<th>Comparison (n=2257)</th>
<th>P-value</th>
</tr>
</thead>
</table>
| **Women’s age**
  \(1\)                         | 26.5 (24.9-28.1)       | 26.6 (25.7-27.5)   | 0.753   |
| **Women’s education**
  (in years of schooling)\(1\) | 4.5 (4.0-5.0)          | 4.1 (3.4-4.8)      | 0.026   |
| **Husbands’ education** \(1\)  | 4.1 (3.2-5.0)          | 4.0 (3.0-5.0)      | 0.783   |
| **Parity** \(1\)               | 2.2 (2.0-2.3)          | 2.2 (1.9-2.5)      | 0.653   |
| **Religion**                    |                        |                     |         |
| Muslim                          | 2135 (95.0)            | 2080 (92.2)         |         |
| Hindu/other                     | 112 (5.0)              | 177 (7.8)           | 0.270   |
| **Ever contraceptive use**      |                        |                     |         |
| before the index pregnancy      | 18.0%                  | 21.1%               | 0.022   |

\(1\) Data are means (95% confidence intervals)
Contraceptive Use Rate at 3, 6, 12, 18, 24 and 30 Months Postpartum by Study Arm

<table>
<thead>
<tr>
<th>Time</th>
<th>Intervention arm</th>
<th>Comparison arm</th>
</tr>
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<tbody>
<tr>
<td>3 months</td>
<td>36%</td>
<td>34%</td>
</tr>
<tr>
<td>6 months</td>
<td>37%</td>
<td>35%</td>
</tr>
<tr>
<td>12 months</td>
<td>42%</td>
<td>27%</td>
</tr>
<tr>
<td>18 months</td>
<td>47%</td>
<td>18%</td>
</tr>
<tr>
<td>24 months</td>
<td>46%</td>
<td>11%</td>
</tr>
<tr>
<td>30 months</td>
<td>44%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Contraceptive Use Rate at 3, 6, 12, 18, 24 and 30 Months Postpartum by Study Arm

- Statistically significant improvement in the contraceptive use rate in the intervention area during the high risk period of first 24 months after delivery
  -- 18% ever user before the index pregnancy to 46% at 24 months postpartum
  -- 21% ever user before the index pregnancy to 35% at 24 months postpartum

- High number of new users and a trend towards increased early adoption
The Probability of Becoming Pregnant by Postpartum 30 Months by Study Arm

The difference is statistically significant (P < 0.001)
Effect of Integration on MNH Care: Selected Newborn Care practices by Study Arm

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<thead>
<tr>
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<th>Comparison (%)</th>
</tr>
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<tbody>
<tr>
<td>Drying and wrapping of newborn within 10 minutes of delivery</td>
<td>50.4</td>
<td>44.1</td>
</tr>
<tr>
<td>Initiation of Breastfeeding within 30 minutes</td>
<td>56.6</td>
<td>46.8</td>
</tr>
</tbody>
</table>
Duration of Exclusive Breastfeeding by Study Arm

Duration of exclusive breastfeeding by study arm

- **Analysis time**
  - 0.00
  - 0.25
  - 0.50
  - 0.75
  - 1.00

- **Study Arm**
  - Intervention
  - Control

- **Graph**
  - X-axis: Analysis time
  - Y-axis: Proportion
  - Two lines: Intervention (blue) and Control (red)
Challenges

- One in every five women’s husband stays abroad
- Women’s mobility is limited
- Misconceptions about return to fertility
Lessons Learned

HFS demonstrates:

1. Feasibility of integration of PPFP within a community-based MNH program.

2. Effectiveness of the model in increasing modern method use.

3. No notable negative effect on the delivery of MNH services.

4. The promotion of LAM had a positive effect on duration of exclusive breastfeeding.
THANK YOU