IMPROVING IYCF through Strengthening the Capacity of Traditional Birth Attendants and Community Volunteers in Bangladesh

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Population 142 million
41% Stunted
36% Underweight
16% Wasted

In Study Area
20% Four Anti Natal Care
85% Home Delivery
62.6% TBAs/CVs Assist Deliveries
Objectives of the Study

Compare two methods for capacity building of existing TBAs/CVs to:

- increase delayed cord clamping
- increase rates of early initiation of breastfeeding
- reduce prelacteal feeding
- increase exclusive breastfeeding
**Study Design**

**Design:** Cluster randomized control trial

**Study Groups:**
- Control
- TBA Training Only (N=36 TBAs)
- TBA Training + Supervision (N=36 TBAs, 6 Supervisors)

**TBA Training:** Five days training following WHO and Unicef IYCF training modules

**Supervisors:** Same training as above
- weekly visits in the community
- community meetings
- beneficiaries visits

**Duration:** 6 months intervention
9 unions randomly selected out of 26 in “Panchagor” district

3 unions randomly assigned to each of the 3 study groups
Pre and post cross sectional assessment in all three study groups

Eligible mothers of <5 mo infants
  $N = 1182$ for pre assessment
  $N = 1148$ for post assessment

Data collection team masked to group assignment
Socio-economic status found significant difference at baseline:

- Mother education
- Children number
- Child sex

at endline:

- Mother education
- Household head occupation
- Household monthly income
- Religion

Difference adjusted for in analysis
Delayed Cord Clamping

Delayed Cord Clamping $\geq 2$ m

- Control: 100, 100, 99
- Only Training: 100, 99, 100
- Training+Supervision: 100, 99, 100

Baseline | Endline
---|---

Delayed Cord Clamping $\geq 3$ min

- Control: 89, 90, 91
- Only Training: 93, 93, 93
- Training+Supervision: 93, 93, 93

Baseline | Endline
Early Initiation of Breastfeeding

< 1 h after Birth

Baseline: 29, 38, 35
Endline: 35, 60, 68

Early Initiation of Breastfeeding ≤ 1 h after Birth

Baseline: 84, 81, 84
Endline: 88, 96, 96
Reducing Pre-lacteal Feeding

No Pre-lacteal Feeding

- Control
- Only Training
- Training+Supervision

Baseline:
- Control: 39
- Only Training: 53
- Training+Supervision: 48

Endline:
- Control: 48
- Only Training: 80
- Training+Supervision: 88
EBF 24 h Prior to Interview between Groups

Control | Only Training | Training+Supervision

Baseline: 61, 63, 62
Endline: 67, 76, 83
<table>
<thead>
<tr>
<th>KNOWLEDGE OUTCOME</th>
<th>Pre-Training % (N)</th>
<th>Post-Training % (N)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delayed cord clamping</strong></td>
<td></td>
<td></td>
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<tr>
<td>TBA knew cord should be clamped 2-3 min after delivery</td>
<td>75 (53)</td>
<td>96 (68)</td>
<td>0.001</td>
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<tr>
<td><strong>Early initiation of BF</strong></td>
<td></td>
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<tr>
<td>TBA knew breastfeeding should be initiated within 1 h of birth</td>
<td>72 (51)</td>
<td>92 (65)</td>
<td>0.01</td>
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<tr>
<td><strong>Pre-lacteal feeding</strong></td>
<td></td>
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<tr>
<td>TBA knew foods other than breast milk should not be given to the infant within 3 d of birth</td>
<td>88 (59)</td>
<td>85 (57)</td>
<td>0.79</td>
</tr>
<tr>
<td><strong>Exclusive BF</strong></td>
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<td></td>
<td></td>
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<tr>
<td>TBA knew infant should be exclusively breastfed until 6 mo of age</td>
<td>86 (61)</td>
<td>94 (67)</td>
<td>0.18</td>
</tr>
</tbody>
</table>
Discussion and Recommendations

- The interventions did not affect the proportion of mothers who reported DCC, which was already high.

- TBA training improved rates of EIBF and avoidance of prelacteal feeding in this setting; differences in EBF were not significant in adjusted analyses.

- TBA training may improve TBA knowledge of recommendations related to the optimal timing of cord clamping and BF initiation.

- TBA supervision did not provide any additional benefits in this context.
Acknowledgement

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- Dr. Rukhsana Haider
- Bineti Vitta
- Jan Peerson, UC Davis
- Dr. Rumana Islam
- Mr. Shamol Chandra Biswash
- Mr. BD Mittra
Thank You
1. Characteristics were compared between groups using chi-squared tests, adjusting for cluster.
2. Prevalence's of outcomes were compared within groups from baseline to endline and between groups for unadjusted analyses using mixed logistic regression models, adjusting for cluster.
3. Covariates were selected by identifying variables associated with the outcome at a significance level of using mixed logistic regression models, accounting for cluster.
4. Prevalence of outcomes were compared within groups from baseline to endline and between groups while adjusting for potential covariates using mixed logistic regression models, adjusting for cluster.