Examining the delivery of essential nutrition interventions through Health and ICDS in Odisha and Madhya Pradesh

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### Essential Nutrition Interventions (ENIs) Along the Continuum of Care

#### THROUGHOUT ALL PERIODS:
- Behavior change communication related to adequate hygiene and sanitation
- Iodized salt consumption

#### PRE-PREGNANCY AND PREGNANCY
- Iron and folic acid (IFA) supplementation and deworming for adolescent girls and women of reproductive age.
- Calcium supplementation during pregnancy for low calcium.
- Adequate food and nutrient intake during pregnancy, including nutritional supplements

#### NEWBORN
- Delayed cord clamping
- Counseling and support at birth on early initiation of breastfeeding (BF) and feeding colostrum.
- Special care for feeding of low birthweight infants.
- IFA supplementation of postpartum mothers for 100 days

#### 1-6 MONTHS
- Counseling and support for exclusive BF (including work place and maternity leave policies)
- Nutritional support to BF mothers

#### 6-24 MONTHS
- Counseling and support for age-appropriate complementary feeding with BF
- Counseling for adequate feeding for children during and after illness
- Nutritional support for young children

#### BIRTH TO 5 YEARS:
- Routine immunization
- Screening and therapeutic feeding and care of all SAM children
- Sick child care (using IMCI or other protocols)

#### 6 MONTHS TO 5 YEARS:
- Vitamin A supplementation and deworming
- IFA supplementation
- Diarrhea management with ORS & zinc
Study objectives

• Examine service delivery of a set of essential nutrition interventions in Odisha (OD) and Madhya Pradesh (MP)

• Assess how convergence is operationalized between the Health and ICDS sectors to deliver interventions

• Identify factors that enable or hinder effective service delivery and intersectoral convergent actions
### Study focus: linking ENIs to delivery strategies within Health/NRHM and ICDS

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<tr>
<th>Period</th>
<th>Types of interventions</th>
<th>Delivery points</th>
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</table>
| Pregnancy | - Nutrition and care counseling  
- Nutritional (energy, protein, and micronutrient) supplementation | - Antenatal care service, including at Village Health and Nutrition Days (VHNDs)  
- Take home rations (THR) through SNP |
| | - Counseling for breastfeeding  
- Nutritional support | - Home visits  
- VHNDs  
- THR through SNP |
| | - Counseling for complementary feeding  
- Nutritional support | - Home visits  
- VHNDs  
- THR through SNP |
| | - Vitamin A supplementation  
- IFA supplementation | - Routine contacts and campaigns  
- Home visits  
- VHNDs |
| | - Immunization | - Routine contacts and campaigns |
Data collection methods

Household and frontline worker (FLW) surveys, 2014:

- Odisha (3 districts)
  - 1187 mothers with <2y-o
  - 299 AWWs
  - 289 ASHAs
  - 171 ANMs

- Madhya Pradesh (3 districts)
  - 1136 mothers with <2y-o
  - 295 AWWs
  - 269 ASHAs
  - 153 ANMs

Semi-structured interviews, 2013:

- OD (3 districts)
  - 133 district and block officials, FLWs
  - 13 at the state-level

- MP (1 district subsample)
  - 11 district and block officials
Health/NRHM and ICDS frontline workers

Accredited Social Health Activist (ASHA) | Auxiliary Nurse Midwife (ANM) | Anganwadi Worker (AWW)
# Pregnancy care

## Service use

- Received 4 or more ANC visits: **74%** (OD), **67%** (MP)
- Received at least once:
  - Weighing: **83%** (OD), **90%** (MP)
  - Blood pressure: **63%** (OD), **76%** (MP)
  - IFA tablets: **82%** (OD), **83%** (MP)
  - Nutrition advice: **75%** (OD), **82%** (MP)
- Received THRs (mean duration): **5.4 months** (OD), **5.7 months** (MP)

## Service delivery

- **Service quality**
  - Availability of equipment/materials (ANMs): *BP machine 96%* (OD), *100%* (MP); *IFA tablets 96%* (OD), *100%* (MP)
- **Roles and interactions**
  - ANC: ANM primarily responsible; AWW and ASHA support; all plan and implement service together
  - Nutrition counseling: ANM, AWW, and ASHA all identify themselves as primarily responsible
  - THR: AWW responsible with AWH support; ASHA and ANM sometimes present during distribution
## 0-6 months

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<th>Service use</th>
<th>Service delivery</th>
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| • Received advice/support to initiate BF after delivery: **75%** (OD), **72%** (MP) | **Service quality:**  
  - Knowledge of EBF (all FLWs): >**90%** (OD, MP)  
    - No water <6 mos: 89% ANM, 83% ASHA, 99% AWW (OD)  
    - No water <6 mos: 79% ANM, 99% AWW, 71% ASHA (MP) |
| • Received BF information:  
  - At home visits: **32%** (OD), **17%** (MP)  
  - At VHNDs: **48%** (OD), **67%** (MP) | **Roles and interactions:**  
  - **BF counseling:** ANM, AWW, and ASHA all identify themselves as primarily responsible; most report coordinating together in planning and implementation |
## 6-24 months

### Service use

| Service | Received full immunization (children 12-14 mos): 83% (OD); 34% (MP) | Received vitamin A (at least one dose): 98% (OD); 82% (MP) | Received IFA tablets (6-24 mos): 
  - At home: 2.5% (OD); 3.4% (MP)  
  - At AWC/SC/PHC: 0.16% (OD); 0.35% (MP) | Received CF information:  
  - At home visits: 24% (OD), 7.3% (MP)  
  - At VHND: 50% (OD), 65% (MP) | Received THR (mean duration): 1 month (OD), 1 month (MP) |

### Service delivery

| Service quality:  
  - Availability of equipment/materials (ANMs): vitamin A 92% (OD), 100% (MP)  
  - Knowledge of CF (all FLWs): initiation >90% (OD, MP); timing of feeding eggs <20% (OD,MP). |

| Roles and interactions:  
  - Immunization and vitamin A: ANM primarily responsible; AWW and ASHA support; all plan and implement service together.  
  - IFA supplementation and CF counseling: ANM, AWW, and ASHA identify themselves as primarily responsible; most coordinate together  
  - THR: AWW responsible with AWH support |
## Factors influencing convergent actions

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<th>Facilitators</th>
<th>Barriers</th>
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<td><strong>Administrative levels</strong></td>
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<tr>
<td>• Leadership</td>
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<td>• Shared objectives</td>
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<td>• Good communication</td>
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<td>• Routinized joint coordination meetings</td>
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<tr>
<td><strong>Implementation level</strong></td>
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<tr>
<td>• Clear understanding of work roles and responsibilities</td>
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<td>• Good interpersonal relationship among frontline workers</td>
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<td>• Recognized need for co-dependence</td>
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**Facilitators**

“Suppose I provide immunization, fill up the cards and check the tally, it will be a difficult task for me alone. So, if AWW or ASHA help me in filling up the cards, then it will be easy on my part to provide injections to all the beneficiaries present there.” – OD ANM

**Barriers**

“**Administrative levels**

• Heavy workload and priorities
• Scheduling conflicts or poor communication/misinformation related to joint meetings impede participation

“It is not possible for ICDS staff to participate in Health sector meetings because this meeting falls on Saturday... and the ICDS staff have their own sector meetings or some other scheduled work to attend to.” – OD lady supervisor

• Lack of joint action plans and review meetings

**Implementation level**

• Heavy workload
• Inadequate staffing
• Different remuneration systems create poor coordination environment
Service delivery gaps & collaboration needs

- Gaps in provision of IYCF counseling services
  - Almost 80% FLWs made home visits (focus on immunization), but only about 30% provided IYCF information during visits
  - Unclear understanding of roles among FLWs
  - No indicator to monitor and supervise home visits or counseling services

- Gaps in provision of pediatric IFA supplementation
  - Unclear understanding of roles among FLWs
  - Lack of monitoring indicator in the MIS system
  - Potential supply issues

- Need for clear roles, responsibilities and collaboration in nutrition counseling and SAM referrals and follow-up.
Policy implications

• Strengthen service delivery: Overall package of services for young children (0-24 months) need to be reinforced.

• Strengthen capacity: Nutrition and health education/ counseling services require close coordination between Health and ICDS.
  – Harmonize messaging through a common curriculum and/or joint training

• Strengthen accountability: Incorporate monitoring indicators to track and supervise nutrition counseling and health education services.

• Build learning mechanisms: Periodically examine service usage and delivery to identify solutions to improve service delivery.
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