Improving IYCF Practices among deprived and integration to CMAM Programme

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Ministry of Health and Population/GoN

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Status of Child Mortality and Nutrition
NEPAL IS ON TRACK TO REACH MDG4: REDUCING CHILD MORTALITY
Status of Undernutrition of Children in Nepal
Status of Undernutrition in U5 Nepal

Source: NDHS 2011
Regional Inequity: Stunting by Sub-region

Percent of children under age 5 who are too short for their age (based on WHO standards)

Nepal 41%

Far-western terai 32%
Mid-western terai 44%
Western terai 40%
Central terai 41%
Eastern terai 31%
Far-western hill 58%
Mid-western hill 52%
Western mountain 60%
Western hill 36%
Central hill 31%
Central mountain 46%
Eastern mountain 46%
Eastern hill 46%

Regional Inequity: Stunting by Sub-region

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Eastern mountain 46%
Eastern hill 46%
Trend in stunting prevalence by wealth index

14% reduction overall

65% reduction in richest quintile!

12% increase in poorest quintile!

Status of wasting (by eco-regions)

Source: NDHS 2011
Infant and Young Child Feeding Practices in Nepal
Status of Breastfeeding

• 45% of newborns are breastfed within the first hour of life, and 85% within the first day.

• 28% of newborns given food or liquid other than breast milk (prelacteal feed), although this is not recommended.

• 98% of infants are ever breastfed.

(NDHS 2011)
Exclusive Breastfeeding by Age

Percent of children exclusively breastfed, NDHS 2011

Age in months

- 0-1: 88%
- 2-3: 74%
- 4-5: 53%
- 0-5: 70%
IYCF Practices

Percent of children 6-23 months, NDHS 2011

Breastfed
- Not fed with IYCF practices: 75
- Fed with 3 IYCF practices: 25

All 6-23 months
- Not fed with IYCF practices: 76
- Fed with 3 IYCF practices: 24
Status of Micronutrient Deficiencies among Children in Nepal
# Status of Micronutrients Deficiency in Nepal

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Achievement</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron Deficiency Anemia among &lt;5 years</td>
<td>78</td>
<td>-</td>
</tr>
<tr>
<td>Iron Deficiency Anemia among &lt;2 years</td>
<td>82</td>
<td>-</td>
</tr>
<tr>
<td>HH consumption of adequate iodized Salt</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>VA coverage among 6-59 months</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>% of low birth weight (or small) babies</td>
<td>-</td>
<td>43</td>
</tr>
</tbody>
</table>
Anemia Situation in Children age 6-59 Months

Source: NDHS 2011
Anemia Prevalence in Children
Percent of children age 6-59 months with anemia – NDHS 2011

Age in months: 6-8, 9-11, 12-17, 18-23, 24-35, 36-47, 48-59, Total

Prevalence:
- 6-8: 78%
- 9-11: 74%
- 12-17: 72%
- 18-23: 57%
- 24-35: 44%
- 36-47: 38%
- 48-59: 25%
- Total: 46%
Ways adopted to address inequity and reach to deprived

- Improve dietary intake and care and feeding practices up to grass root level through scaling-up IYCF counseling.
- Frontline workers such as CHWs, female volunteers and mobilization of mother’s group to improve IYCF.
- **CMAM linked with IYCF promotion.**
- Also, multiple micronutrient powders distribution linked with IYCF promotion
- Improvement in IYC and maternal nutrition through multi-sectoral nutrition plan
Overview of CMAM integrated with IYCF
Situation of malnutrition in 2007/08

- GAM rate nationally was 11% in 2001, 13% in 2006 and 11% in 2011 – stagnant trend
- Global Acute malnutrition was in critical threshold - 13% nationwide and <15% in mid and far western regions
- **SAM rate around 3% nationwide**
- Droughts in hills and mountains especially in mid and far-western regions
- Severe food insecurity in 45 districts (Out of total 75 districts of Nepal)
- Disease epidemics – diarrhea/cholera

Source: DHS 2006
Situation of Emergencies in Mid and Far-western Regions in 2007/08 (2)

- Impact of the ten-year lasting armed conflict with high migration, displacement – disruption of basic social services
- Concentrated epidemic of HIV and AIDS
- Floods in terai regions
## Severity of Nutrition Crisis (WHO Benchmarks)

<table>
<thead>
<tr>
<th>Severity</th>
<th>Prevalence of Global Acute Malnutrition (GAM)</th>
<th>Action required</th>
<th>Status of Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable</td>
<td>&lt; 5%</td>
<td><strong>Emergency Threshold</strong></td>
<td>No any district fall in this box</td>
</tr>
<tr>
<td>Poor</td>
<td>5 – 9%</td>
<td>No need for population interventions</td>
<td>Approx. 25 districts fall in this status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Attention to malnourished individuals through regular community services[</td>
<td>• Even in the poor nutrition situation, attention should be given to the acutely malnourished children</td>
</tr>
<tr>
<td>Critical</td>
<td>10 – 14% or 5-9% with aggravating factors*</td>
<td>No general rations, but supplementary feeding targeted to individuals identified as</td>
<td>Most of the districts (more than 40) fall in critical threshold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Malnutrition among vulnerable groups</td>
<td>• Nepal has 11% GAM and 2.6% SAM. Therefore, national wide, acute malnutrition crosses the critical threshold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Therapeutic feeding for severely acute malnourished individuals</td>
<td></td>
</tr>
<tr>
<td>Serious</td>
<td>&gt; = 15% or 10-14% with aggravating factors*</td>
<td>General rations (unless situation is limited to vulnerable groups); plus</td>
<td>Many districts (10) especially mid and far western hills and mountainous, some districts of central and western Terai fall in the serious situation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Supplementary feeding for all members of vulnerable groups.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Therapeutic feeding for severely acutely malnourished individuals</td>
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</tbody>
</table>

* The aggravating factors include: general food ration below the mean energy requirement, epidemic of measles of whooping cough (pertussis), high incidence of respiratory or diarrheal diseases, epidemic of HIV and AIDS, prevalence of malaria, natural disasters such as floods, earthquakes, droughts, heavy snow/hail falling, climate change and destroying humankinds or foods or livelihood, High prevalence of pre-existing malnutrition, e.g., stunting, Tsunami etc.; complex humanitarian situation such as arm conflict, Household food insecurity, Crude mortality rate greater than 1/10,000/day. Under-five under mortality rate greater than 2/10,000/day etc.

Source: WHO, Management of Malnutrition in Major Emergencies, 2000
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2007</td>
<td>Feasibility Study</td>
</tr>
<tr>
<td>October 2007</td>
<td>Orientation workshop with potential partners</td>
</tr>
<tr>
<td>March 2008</td>
<td>Child Health Sub-committee meeting on protocol &amp; implementation framework</td>
</tr>
<tr>
<td>June 2008</td>
<td>Approval of Emergency Nutrition Policy, including CMAM piloting</td>
</tr>
<tr>
<td>2008</td>
<td>CMAM baseline survey in five districts</td>
</tr>
<tr>
<td>January 2009</td>
<td>National Pilot Planning Meeting</td>
</tr>
<tr>
<td>February 2009</td>
<td>Master TOT training – technical part</td>
</tr>
<tr>
<td>March 2009</td>
<td>Started district implementation in three districts</td>
</tr>
<tr>
<td>Sept. 2010</td>
<td>Implemented in next two districts</td>
</tr>
<tr>
<td>2010/2011</td>
<td>CMAM is Recommended for national scale up from SUN initiative and health sector nutrition evidence review</td>
</tr>
<tr>
<td>July-Dec. 2011</td>
<td>CMAM pilot evaluation</td>
</tr>
</tbody>
</table>
The Objective of CMAM pilot

• To evaluate the feasibility of the CMAM approach in districts with different agro-ecological characteristics.

• To recommend on potential approach for scaling-up CMAM program including monitoring and evaluation framework.
## Wasting Rate in Remote Pilot Districts

<table>
<thead>
<tr>
<th>District</th>
<th>Mugu</th>
<th>Kanchanpur</th>
<th>Bardiya</th>
<th>Achham</th>
<th>Jajarkot</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAM</td>
<td>26.6 %</td>
<td>17 %</td>
<td>16.2 %</td>
<td>18.0 %</td>
<td>10.5 %</td>
</tr>
<tr>
<td>SAM</td>
<td>7.1 %</td>
<td>3.3 %</td>
<td>2.8 %</td>
<td>3.6 %</td>
<td>2.4 %</td>
</tr>
</tbody>
</table>
CMAM Components Included

1. Community outreach/social mobilization/screening
2. Out-patient treatment (OTPs)
3. In-patient treatment (SCs)
4. IYCF, Care, Health and WASH Counselling
5. Strengthen and improve WASH facilities in OTPs/SCs

Hygiene promotion
## CMAM Performance in Five Districts (as of Nov. 2011)

<table>
<thead>
<tr>
<th>Districts/OTP started dates</th>
<th>SAM as per baseline</th>
<th>Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Discharge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deaths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Under treatment</td>
</tr>
<tr>
<td>Bardiya/May 2009</td>
<td>2.8</td>
<td>3149</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achham/Jan 2010</td>
<td>3.6</td>
<td>2132</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mugu/July 2009</td>
<td>7.1</td>
<td>1225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kanchanpur/Sep 2010</td>
<td>3.3</td>
<td>2867</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jajarkot/Sep 2010</td>
<td>2.4</td>
<td>776</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>10149</td>
<td>9187</td>
</tr>
<tr>
<td>Per cent</td>
<td>90.52</td>
<td>89.94</td>
</tr>
<tr>
<td>SPHERE Standard</td>
<td>&gt;75%</td>
<td>&lt;10%</td>
</tr>
</tbody>
</table>
Rationale for Including IYCF into CMAM

• Infection and inappropriate infant and young child feeding practices.
• For appropriate IYCF, community and family resilience is essential to prevent under nutrition
• Only treatment of SAM is not enough. Therefore, preventive measures should be integrated with CMAM programme
• For the prevention of under nutrition, IYCF and care is the most appropriate action with CMAM for complete package
• Health workers and FCHVs are essential to make resilience community/families for IYCF
Practicalities of Integrating IYCF into CMAM
Key Components of IYCF in CMAM

• Capacity building of health workers and FCHVs

• Community based assessment through MUAC by FCHVs and community health workers

• Promotion, protection and support of Breast feeding and Infant and Young Child Feeding (IYCF)

• Management of moderate malnutrition (MAM) through counseling services for behavior change on IYCF, care, health seeking, WASH and ECD

• Management of severe acute malnutrition (SAM) through RUTF and essential medications and behavior change communication through counseling to continue enhanced nutrition status

• Community based monitoring and reporting
Training/Capacity Building

- Developed cascade type training curriculum and monitoring checklists integrating IYCF into CMAM
- Orientation to district and VDC level multi-stakeholders
- Training to district, community health workers and FCHVs.
- Orientation to mother groups on CMAM including IYCF
- Organized integrated monitoring training of CMAM and IYCF
Community based Assessment through MUAC

- Community based nutrition assessment of 6-59 months children through MUAC is done through FCHVs during mothers group meeting and discuss about the nutrition status of children.
- Children SAM or MAM with medical complications are referred nearest OTPs/stabilization center for nutrition rehabilitation through RUTF and essential medications.
- IYCF counseling services to improve their nutrition status.
Promotion, Protection and Support for IYCF

- FCHVs and community health workers acted as Key counselors for promotion, protection and support for IYCF.
- Mode of message dissemination is mother group’s monthly meeting, PHC/ORC, OTPs and MUAC assessment
- Promotion, protection and support for IYCF counseling is ongoing in OTP, SCs, communities and PHC/ORCs
- Local available diversified foods are promoted by FCHVs and community health workers such as; Khichadi and porridge of blended flour for complementary feeding.
- Focusing to early initiation and exclusive breast feeding and on time and appropriate complementary feeding
Major messages on IYCF are discussed during CMAM training:

- Importance of Breastfeeding for Infant, Mother, Family and Community
- Recommended breastfeeding practices
- Recommended complementary feeding practices based on the available food varieties/diversifications
- Good and Poor Attachment for breast feeding
- Listening and learning counselling skills
- IYCF Assessment with mother
- Common breastfeeding difficulties
- Insufficient breastmilk
- Care of children and women for successful breast feeding and infant and young child feeding
Outcomes of IYCF integrating in CMAM

• The case load of SAM has been reduced dramatically.
• IYCF integration into CMAM has supported to maintain enhanced nutrition status of SAM children
• MAM children have improved their nutrition status and supported for reduction of wasting
• Families and communities have improved their behaviors dramatically which is shown through the CMAM impact evaluation
• IYCF incorporated into CMAM training and tools
• Government has top priority to scale up IYCF and it has been already included into CMAM
• Currently conducted formative evaluation has also recommended to strengthen IYCF into CMAM
Challenges

- Improve quality of counseling
- Regular and adequate monitoring.
- Enough preparedness for IYCF in Emergency
- Coordination mechanism still need to be strengthened
Recommendations

• Develop comprehensive IMAM package with IYCF and WASH practices.
• Incorporate key IYCF and CMAM messages in education curricula.
• Strengthen coordination among the duty bearers
• Strengthen support services (clean and safe water, and nutrition for women, support on BF)
• Develop integrated communication package for IMAM.
• Capacitate and mobilize community support group for IYCF and CMAM lead by FCHVs.
Thank You