Integrated Community Case Management (iCCM)

**Issue**

Even though Ethiopia has achieved MDG 4 target, nearly 205,000 children are dying every year before they reach their fifth birthday. Every day, 560 children are dying mostly from preventable or treatable diseases. The remarkable reduction in under-five mortality is not evenly distributed within the various age categories, where the New-born Mortality Rate (NMR) is estimated at 37/1,000 LBs a rate that has been stagnant over the past five to ten years and which currently accounts for 43 per cent of the under-5 deaths.

**FAST FACTS**

**UN IGME, 2013 Report**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under Five Mortality Rate</td>
<td>68 per 1,000 Live births</td>
</tr>
<tr>
<td>Neonatal Mortality Rate</td>
<td>29 per 1,000 Live births</td>
</tr>
<tr>
<td># of under five deaths</td>
<td>205,000</td>
</tr>
<tr>
<td># of Neonatal Deaths</td>
<td>88,000</td>
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<tr>
<td>Maternal Mortality Rate</td>
<td>676 per 100,000 Live Births</td>
</tr>
</tbody>
</table>

**WHO/CHERG 2010**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Pneumonia</th>
<th>Diarrhoea</th>
<th>Malaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>New-born</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New-born</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIE ( #)</td>
<td>66,883 (33 per cent)</td>
<td>36,482 (18 per cent)</td>
<td>26,348 (13 per cent)</td>
</tr>
<tr>
<td>ILL ( #)</td>
<td>298,051</td>
<td>3,496,778 (27 per cent)</td>
<td>38,853,087 (3 Episodes/Child/Year)</td>
</tr>
</tbody>
</table>

Ethiopia is the second largest country in Africa, which is predominantly rural (84 per cent of population) and with a total population of 85 million, out of 13 million is contributed by the under-five population. Approximately 80 per cent of the three million babies born at home in each year.

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1. The UN Inter-agency Group for Child Mortality Estimation Report, 2013
2. EDHS 2011
3. UN Inter-agency Group for Child Mortality Estimation Report, 2013
5. The UN Inter-agency Group for Child Mortality Estimation Report, 2013
Ethiopia has achieved the MDG4 target by reducing child deaths by 67 per cent, from 204 per 1000 live births in 1990 to 68 per 1000 live births in 2012, three years before the schedule. Despite this significant gain, nearly 205,000 children are still dying every year before they reach their fifth birthday and 560 children are dying every day, mostly from preventable or treatable diseases.

The major causes of new-born death include sepsis, asphyxia and problems related to preterm/low birth weight. Moreover, the 2010 estimates by WHO/CHERG indicated that diarrhoea and pneumonia have continued to cause significant proportion of the under five deaths (35 per cent).

Though Ethiopia is witnessing nearly 4 million of pneumonia (27 per cent) and 39 million episodes (3 episode per child year) of diarrhoea in under five children every year, care seeking, for childhood pneumonia and diarrhoea, were found to be low; only 27 and 31 per cent of children under five with symptoms of Acute Respiratory Infection (ARI) and diarrhoea, respectively sought treatment from a health facility or appropriate provider. Among those children that sought treatment, only seven per cent of ARI received antibiotics and 31 per cent of those with diarrhoea received a rehydration solution from an ORS sachet or a recommended home fluid. Moreover, children in urban settings are more likely to receive treatment from a health facility or appropriate health provider for symptoms of ARI (46.9 versus 25 per cent) and diarrhoea (53.5 versus 28.8 per cent) than their rural counterparts.

**NATIONAL STRATEGIES**

The Government of Ethiopia has committed to further reduce the under-five mortality rate below 20 per 1,000 Live births by the year 2035. Towards this end, the country is implementing the Health Extension Programme (HEP) Strategy, which has a set of preventive, promotive and curative intervention packages being delivered at community level and through the Health Extension Workers. Five Health posts are clustered around one health centre with both technical and supervisory support to make the primary Health care units (PHCU).

Following the policy breakthrough of community level treatment of pneumonia in January 2010 and by using the platform of the HEP, the integrated Community Case Management (iCCM) strategy was launched. Since then, it is being implemented at national scale, with the geographic coverage of 86.4 per cent; all the regions, except Somali, Afar and Gambella, are fully covered and iCCM is now scaled up to the Developing regional States (DRS regions).

By using the iCCM platform, the Community Based New-born Care (CBNC) initiative was launched in March 2013, following the national policy breakthrough of allowing Health Extension Workers (HEWs) to treat new-born sepsis. The programme is supporting seven zones in four agrarian regions: Amhara (East Gojam), Tigray (Eastern zone of Tigray), Southern Nations Nationalities and Peoples’ Region (SNNPR) (Gurage, Sidama, and Wolaita) and Oromia (North Shoa and East Shoa).

**MAJOR ACHIEVEMENTS**

- Close to 29,911 (88 per cent) HEWs received competency based training on iCCM
- Essential job aids, medicines and supplies have been distributed to more than 14,500 Health posts. Accordingly, 4,500 health posts in Amhara,
Oromia, SNNPR, Tigray, BG, Gambella, Afar and Somali regions are providing iCCM services.

- ICCM is being implemented at national scale with the geographic coverage of 86.4 per cent and full coverage of all regions, except Gambella, Afar and Somali regions which are being partially covered.
- 4,671 (100 per cent) supervisors have been equipped with supervisory skill and 3,346 HW trained in Integrated Management of New-born and Childhood Illness (IMNCI) to strengthen the referral linkage.
- About 97 per cent of trained HEWs were supervised and given clinical mentoring.
- Nearly 90 per cent of HEWs and HPs have all the essential ICCM drugs and supplies.
- Since the start of iCCM; about 4.6 million* 0-59 months old children received lifesaving care through ICCM as estimation made based on JSI/L10K cross sectional multistage cluster survey conducted in three regions of Amhara, Tigray and SNNPR.
- Care seeking at health post level shows an upward trend: it has tripled between Ethiopian Fiscal Year (EFY) 2003 and 2005, for ARI from 5 per cent to 14 per cent, fever 4 per cent to 15 per cent and diarrhoea 7 per cent to 20 per cent, indicating that quality services available in close proximity are being used.
- Improved IMNCI in health centres is strengthening the linkage with the health posts and ultimately the health extension programme.
- CBNC programme has been launched both at National and regional level.
- 332 Training facilitators from all level (National, regional and zonal levels) have been equipped with the training facilitation skills for CBNC. The National facilitators provided ToT to the regional and the later to the zonal level.
- Essential commodities for CBNC are under distribution to the regions to start the roll out training to the HEWs.

**EVIDENCES FROM STUDIES**

**ICCM snap shots in Jimma and West Hararghe Zones (Nathan Miller et. al, 2013)**

HEWs in intervention areas provided correct treatment and/or referral for 64 per cent (95 per cent confidence interval, CI: 57-71) of children with pneumonia, diarrhoea, malaria, malnutrition, or measles. The proportions of children correctly treated for pneumonia, diarrhoea, and malnutrition were 72 per cent (95 per cent CI: 56-84), 79 per cent (95 per cent CI: 72-85), and 59 per cent (95 per cent CI: 40-76), respectively. Only 34 per cent (95 per cent CI: 22-50) of children with severe illness were correctly treated and/or referred. Intervention health posts saw an average of 16 (95per cent CI: 13.2-18.8) sick children in the previous month. Intervention areas had significantly higher levels of supervision and availability of commodities than comparison areas. Implementation of ICCM in Jimma and West Hararghe zones was strong and HEWs are generally providing high quality care. However, for greater impact on child mortality, management of severe illness and utilization of HEW services must be improved.
Improving utilization and quality of care

In December 2012, JSI/L10K (among ICCM implementing partners since 2010) conducted a cross-sectional, multi stage cluster survey in Amhara, Tigray and SNNPR regions to assess ICCM implementation and performance in their area of intervention. The study randomly selected households and interviewed 780 mothers with children in the 0-59 month age group who have/had ARI or fever or diarrhoea symptoms in the last two weeks. They also conducted abstraction cases from 60 health posts in the study areas. The study was triangulated with similar studies conducted by JSI/L10K two years before and another study of a smaller scale conducted by John’s Hopkins University (JHU) during the same period. Most of the results were found consistent when compared with the two previous studies. The results showed, in particular that:

1. Access: 98 per cent of the kebeles (sub-districts), have either health post or health centre and HEWs are available in all (100 per cent) kebeles 95 per cent of respondents have heard about HEWs and 87 per cent were contacted by HEW at home in the last six months. Seventy six per cent of respondents reported that HEWs home visit is their source of information.

2. Household knowledge: 64 per cent, 55 per cent and 81 per cent of respondents knew that diarrhoea; cough and fever are treated at the health post level respectively.

3. Care seeking: Compared to a survey done in 2010, there is a positive improvement in care seeking at the health post level. The average number of cases seen in the third quarter of 2012 (Jul-Sep) of one health post were doubled from 17 in the same period of 2011 to 35. Care seeking for ARI, fever and diarrhoea at health post level has tripled between 2010 and 2012, (ARI 4.5 per cent to 14 per cent; fever 4 per cent to 15 per cent and diarrhoea 7 per cent to 20 per cent) while at the health centre level there is slight decrease indicating transfer of cases to health posts. Data abstracted from 60 health posts showed an upward trend while there was slight decrease observed from January to March 2012 probably due to the HEWs’ engagement in the task of HDA orientation and training. The care seeking trend for sick young infants is also improving, albeit still very low.

4. Treatment of diarrhoea with ORS and antimalarial for fever has doubled (28 per cent to 63 per cent from 4 per cent to 10 per cent respectively) while antibiotic for pneumonia has remained at 27 per cent since 2010.

UNICEF’S SUPPORT

- UNICEF has been instrumental in the policy dialogue, to bring about the major policy breakthroughs both for ICCM and CBNC.
- UNICEF has been supporting the overall Health Extension programme, starting from the inception at the beginning and through the implementation, Monitoring and Evaluation of the programme.
- UNICEF is providing technical support to the government and implementing partners in resource mobilization, coordination of efforts, development of standards and training guidelines.
- UNICEF is financially supporting the Government and Implementing Partners in the implementation of ICCM and CBNC; including monitoring and evaluation.

PARTNERSHIP

- Partnership has been fostered with Federal Ministry of Health (FMoH), which is the government ministry responsible for coordinating the implementation of all maternal, new-born and child-health programmes in Ethiopia.
• Partnership has been established with ELMA, without which it was impossible to launch and initiate the implementation of CBNC in the country.
• Partnership has also been strengthened with bilateral donors such as USAID and DFTAD formerly known as CIDA
• Partnership has also been strengthened with INGO implementing partners such as JSI/L10K, SCI and IFHP which are implementing both iCCM and CBNC and INGOS such as AMREF, IRC and MERLIN, which are implementing ICCM. The INGOS are all working closely with the local regional governments.

SUCCESS FACTORS

• Government leadership and commitment
• Skill based training, which was followed up with supervision and clinical mentoring
• Improved supply chain management by the PFSA and RHBs to ensure availability of essential commodities and drugs
• Community mobilization through HDAs and other channels
• PHCU strengthening and IMNCI
• Strong coordination and financial support from development partners
• Partnership with Implementing partners (INGOs) with an extensive experience of community based child health initiatives.

WAY FORWARD

• Consolidate the ICCM programme in the four big regions of Amhara, Tigray, Oromia and SNNPR focusing on quality improvement, utilization, supervision and supply chain management
• Complete ICCM role out in the developing regions hand in hand with HEP improvement
• Scale up of community based new-born care including new-born sepsis management.