Building on Uganda’s Progress in Reducing Anemia: From Evidence to Action

Presentation by: Sarah Ngalombi (MOH/Uganda)
Presentation Outline


• Background and Rationale for the Anemia Landscape Analysis

• Methods

• Key Findings of the Analysis

• National Anemia Stakeholder’s Meeting

• Progress, Lessons learnt and Next steps
Women’s anemia rates have been about half the rate of children, and have fluctuated relatively more over the 10 year period.
Background to the Anemia Landscape Analysis

• Uganda is among the 50 SUN countries dedicated to reducing child undernutrition
  ✓Major focus on anemia in children under 2 years and women of reproductive age (15-49 years).

• Maternal and child anemia reduced in 2011 but no evidence on attributable factors readily available

• SPRING supported MoH conduct a secondary analysis of the UDHS to better understand changes in anemia prevalence
Rationale for the Analysis

• Assess the plausibility of key anemia prevention and control programs that may have contributed to the decline among women and children.

• Stimulate cross-program and multi-sectoral discussion around anemia programing.

• Develop consensus about which programs may have been the largest contributors.
Methods

- **UDHS DATABASE:** 3 Household surveys 2001, 2006 and 2011 conducted by the Uganda Bureau of Statistics (UBOS)

- **SAMPLE:** stratified, two-stage cluster
  - 2000/01: 7,885 households
  - 2006: 8,807 households
  - 2011: 10,086 households

- **REPRESENTATIVENESS:** Provides estimates of population and health indicators:
  - Nationwide,
  - By rural and urban areas
  - By regions (definitions change over time)
### Sample Analyzed

<table>
<thead>
<tr>
<th>UDHS Population</th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women 15-49 years</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not pregnant at the time of survey</td>
<td>7988</td>
<td>3505</td>
<td>3208</td>
</tr>
<tr>
<td>Had at least one birth at the time of the survey</td>
<td>7609</td>
<td>3320</td>
<td>2918</td>
</tr>
<tr>
<td><strong>Children 6-59 months</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children 6-23 months</td>
<td>2122</td>
<td>2367</td>
<td>2218</td>
</tr>
<tr>
<td>Children 24-59 months</td>
<td>3561</td>
<td>4415</td>
<td>4340</td>
</tr>
</tbody>
</table>
Key Findings (1)

Changes in the Prevalence of Childhood Anemia by Region

The largest gains were in Western—where rates were already the lowest—and in Northern Region.

Note: ppt = percentage points
Differences in anemia prevalence by educational level narrowed. The uneducated had the largest reductions.

Note: ppt = percentage points
Changes in the Prevalence of Childhood Anemia by Household Wealth Quintile

- **Poorest**: 80% in 2006, 62% in 2011 (-18 ppt)
- **Poorer**: 75% in 2006, 53% in 2011 (-22 ppt)
- **Middle**: 73% in 2006, 52% in 2011 (-21 ppt)
- **Richer**: 74% in 2006, 42% in 2011 (-32 ppt)
- ** Richest**: 82% in 2006, 38% in 2011 (-44 ppt)

**Note:** ppt = percentage points

**Differences in the anemia prevalence rates by household wealth grew. The two richest quintiles’ rates fell to about 40%, others remained above 50%**
Childhood Anemia by age group

**Children 6-23 months**

- 2001: 85%
- 2006: 87%
- 2011: 63%

**Children 24-59 months**

- 2001: 63%
- 2006: 65%
- 2011: 42%

**6-23 month olds:** 24 PPT reduction, 28% decrease.

**24-59 month olds:** 23 PPT reduction, 35% decrease.

Note: ppt = percentage points
Changes in the Use of Bednets by All 6-23m Olds
(Includes bednet owners and non-owners)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>10%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Eastern</td>
<td>35%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Northern</td>
<td>16%</td>
<td>17%</td>
<td>11%</td>
</tr>
<tr>
<td>Western</td>
<td>4%</td>
<td>17%</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>66%</td>
<td>68%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Changes in the Use of Bednets by All 24-59m Olds
(Includes bednet owners and non-owners)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>9%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Eastern</td>
<td>31%</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Northern</td>
<td>12%</td>
<td>17%</td>
<td>10%</td>
</tr>
<tr>
<td>Western</td>
<td>3%</td>
<td>17%</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>63%</td>
<td>60%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Proportion of non-pregnant women who owned a bed net and slept under it the previous night, 2001-2011. (Right) Among women who owned a bed net, percentage who slept under it, 2001-2011.
Changes in Coverage of Childhood Anemia-Prevention Programs

6-23 month olds

24-59 month olds
Changes in Program Participation by 6-59m olds: Number per Child

Includes: vitamin A supplementation, deworming and bednets.

In 2001, deworming was not tracked, so the maximum number of programs was 2.
Changes in proportion of children who Continued Breastfeeding at 1 and 2 years

At 1 Year
- 2006: 93%
- 2011: 88%

At 2 Years
- 2006: 52%
- 2011: 44%
Proportion of Women Receiving Various Anemia-Related Interventions during Pregnancy, 2001-2011

* Deworming not asked in 2001
IFAFalter Point Schematic

Had at least one ANC visit? → Yes

No: Falter Point 1

IF A tablets received or purchased? → Yes

No: Falter Point 2

IF A tablets taken? → Yes

No: Falter Point 3

Took ≥ 180 tablets? → Yes: SUCCESS

No: Falter Point 4
Significance of Each Falter Point in Uganda

- **Falter Pt 1:** Did not have ≥ 1 ANC visit
  - 4% of Women

- **Falter Pt 2:** Did not receive IFA
  - 22% of Women

- **Falter Pt 3:** Received but did not take IFA
  - 7% of Women

- **Falter Pt 4:** Did not take ≥ 180 IFA
  - 65% of Women

- Did not falter: Took ≥ 180 IFA
  - 1% of Women
UDHS limitations

• Three cross-sectional surveys, not panel data

• Data from different years are data on different individuals

• Not an analysis of causality, rather looks at correlations that are hypothesized to be causes, but can at most only be regarded as plausible explanations
National Anemia Stakeholders meeting (1)

- A Ministry of Health lead National Anemia Stakeholder’s Meeting held on Oct 2-3, 2013
- To develop consensus on the status of the current programs and their delivery systems.
- To initiate development of an action plan on “key intervention” areas based on available evidence and local knowledge and experiences.
- Over 100 stakeholders from national, regional and district levels participated.
National Anemia Stakeholders meeting (2)

• Outputs of the meeting:
  1. Draft multi-sectoral Anemia Action Plan
  2. Recommendation to revitalize the National Anemia Working Group (NAWG).
  3. The chair and secretariat of the working group appointed by the meeting.
  4. High level commitment to the anemia work in the Ministry of Health.
Progress past National Anemia Stakeholders Meeting (1)

5. The National Anemia Action Plan finalized; contains key thematic areas of:
   • Policy Reviews and Development
   • Child Health (Neonatal Care with a focus on Delayed Cord Clamping, CDP and Complementary feeding)
   • Maternal Health—Goal Focused ANC, Malaria
   • Micronutrients—MNPs, Bio-fortification and Industrial Food Fortification
Progress past National Anemia Stakeholders Meeting (3)

• A multi-sectoral National Anemia Working Group constituted with members from:
  • Government ministries—MoH, MAAIF, OPM MGLSD, MoES,
  • Development partners—WHO, WFP, UNICEF and USAID—SPRING, FANTA, HarvestPlus and Jhpiego
  • Research Institutions—NARO, RCQHC, Makerere University College of Health Sciences, Tutors nursing school Mulago
  • Hospitals—Mulago, Nsambya & Kampala International Kampala Hospitals
Progress past National Anemia Stakeholders Meeting (3)

• Monthly meetings chaired by Commissioner Community Health Services

• Commitment from sector top level management officials and partners to support anemia initiatives

• Tracking sheet developed and endorsed for monitoring the progress of the Anemia Action Plan implementation.

• Research on IFA compliance and introduction of MNP
Lessons Learnt

1. Evidence stimulated a national interest and action towards multi-sectoral interventions to address anemia.

2. High level commitment by Government and development partners to support anemia initiatives.

3. Tracking tool has been owned by members and that ensures joint monitoring of the anemia action plan.

4. Readily available platform to share best practices of on-going high impact anemia interventions.
Next steps

1. Use tracking sheet to monitor and report on the progress on the anemia action plan implementation

2. Sharing evidence based practices at district, facility and community levels.

3. Initiate a similar anemia working group at district level to plan, implement and monitor key high impact interventions that address anemia.
Thank You!

Team members:

Sarah Ngalombi; Alex Mokori; Nancy Adero; Manisha Tharaney; Jolene Wun; Jack Fiedler; Deepali Godha (Consultant); Margaret Kyenkya; and Dr. Madraa Elizabeth
FOR GOD AND MY COUNTRY