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

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Presentation Outline

• Anemia Situation in Uganda
• Rationale for the Anemia Landscape Analysis
• Methods
• Findings of the Study
• National Stakeholder Meeting
• Next Steps
Anemia in Uganda

- Major public health issue for many years
- Earliest national survey in 2001:
  - 71% of children <5 years
  - 37% of women of reproductive age
- 2002- National Anemia Policy
Women’s anemia rates have been about half the rate of children, and have fluctuated relatively more over the 10 year period.
Rationale for the Analysis

• To assess the plausibility of key anemia prevention and control programs that may have contributed to the decline among women and children
• To stimulate cross-program and multi-sectoral discussion around anemia programming
• To develop consensus about which programs may have been the largest contributors
Data: Uganda Demographic and Health Surveys

- **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>
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<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</td>
<td>7609</td>
<td>3320</td>
<td>2918</td>
</tr>
<tr>
<td>the survey</td>
<td></td>
<td></td>
<td></td>
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<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>
The largest gains were in Western—where rates were already the lowest—and in Northern Region.

Note: ppt = percentage points
Changes in the Prevalence of Childhood Anemia by Mothers' Educational Attainment

![Bar chart showing changes in anemia prevalence by educational level.](chart)

**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

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

Note: ppt = percentage points
Age Differences in Childhood Anemia

6-23month olds: 24 PPT reduction, 28% decrease.
24-59 month olds: 23 PPT reduction, 35% decrease.

Note: ppt = percentage points
WRA with any anemia, by location

Urban

26
28
21

Rural

38
43
23

2001
2006
2011
Change in Prevalence by Wealth Quintiles Among Women 15-49 years, (2001-2011)
Why Analyze Program Participation and Behavior Changes?

1. To understand how they changed (One of UNAP’s objectives is to increase nutrition services delivery)

2. To explore the role they may have played in reducing anemia

3. To identify opportunities for:
   - Further improving the coverage of these services
   - Promoting cross-program referrals/coordination in the delivery of other programs (provider side)
   - Promoting the use of more services to more comprehensively address the many causes of anemia (consumer side)
Changes in the Use of Bednets by All 6-23m Olds
(Includes bednet owners and non-owners)

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

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.
Increasing Coverage of Childhood Anemia-Prevention Programs

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vit. A</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Deworming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bednets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6-23 month olds

24-59 month olds
Program Participation/Behaviors 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.

6-23 month olds

24-59 month olds
Continued Breastfeeding of Children at 1 and 2 Years of Age

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

At 2 Years
- 2006: 52%
- 2011: 44%
ANC Coverage (at least one visit), 2011
UDHS

- West Nile
- Karamoja
- Northwestern
- Western
- Eastern
- East Central
- Central 1
- Central 2
- Kampala

Legend:
- < 65%
- 65-75%
- 75-85%
- 85-95%
- > 95%
Proportion of Women Receiving Various Anemia-Related Interventions during Pregnancy, 2001-2011

* Deworming not asked in 2001
IFA Coverage According to 2011 UDHS

- West Nile
- Western
- North
- Karamoja
- Eastern
- East Central
- Central 1
- Central 2
- Kampala

Color Legend:
- Red: < 65%
- Orange: 65-75%
- Yellow: 75-85%
- Green: 85-95%
- Green: > 95%
IFA Falter Point Schematic

1. Had at least one ANC visit?
   - Yes
   - No: Falter Point 1

2. IFA tablets received or purchased?
   - Yes
   - No: Falter Point 2

3. IFA tablets taken?
   - Yes
   - No: Falter Point 3

4. 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
Falter Pt 2: Did not receive IFA
Falter Pt 3: Received but did not take IFA
Falter Pt 4: Did not take ≥ 180 IFA
Did not falter: Took ≥ 180 IFA

Percent of Women

- Falter Pt 1: 4%
- Falter Pt 2: 22%
- Falter Pt 3: 7%
- Falter Pt 4: 65%
- Did not falter: 1%
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 can only be regarded as plausible explanations
Dissemination of Findings

• National Stakeholder Meeting Oct 2-3, Uganda
• To develop consensus on the status of the current programs and their delivery systems
• To begin development of an action plan on “key intervention” areas based on available evidence and local knowledge and experiences
• 90 stakeholders from national and sub-national levels
Multi Sectoral Action Plan Developed

<table>
<thead>
<tr>
<th>FOCUSED ANC PACKAGE</th>
<th>PRIORITIES</th>
<th>RESPONSIBLE PLAYERS</th>
<th>INDICATORS</th>
<th>TIMEFRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and Policy Environment</td>
<td>Disseminate existing policy and other documents at district level</td>
<td>MOH RH division</td>
<td># of districts that have received the updated policy</td>
<td>2013</td>
</tr>
<tr>
<td>Access (logistics, capacity of workforce etc.)</td>
<td>Strengthen district advocacy for forecasting anemia supplies</td>
<td>MOH at national and district level</td>
<td># of advocacy meetings at the district to discuss forecasting and distribution of IFA supplies</td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td>Train districts and health facilities to quantify supplies based on service statistics and guidelines</td>
<td>MOH and NMS, SPRING</td>
<td># of districts doing quantifications based on service statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Propose to supplier to provide IFA in blister packs of 30 tablets</td>
<td></td>
<td>Availability of blister packs</td>
<td></td>
</tr>
<tr>
<td>Quality of Services</td>
<td>Scale up use of village registers for mapping pregnant women</td>
<td>DHO and VHTs</td>
<td># of districts using pregnancy registers</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Use DHS data for decision-making in low performing districts</td>
<td>MOH at national</td>
<td># of districts using FANC data for decision-making</td>
<td>ongoing</td>
</tr>
</tbody>
</table>

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27
Thank You!