Sierra Leone: Pilot testing a 6 months contact point for Vitamin A Supplementation
Background

- HKI has provided technical and financial support to the Ministry of Health and Sanitation (MoHS) for
  - Vitamin A Supplementation (VAS) to support child survival
- Mass VAS every 6 months has had high ~90% coverage since 2004
- Routine VAS coverage 6-59 months is low ~31% (2011)
- HKI and MoHS piloted an integrated infant and mother contact point when the infant is 6 months of age
- Preliminary results attained high coverage of routine VAS integrated with Infant and Young Child Feeding (IYCF), Family Planning (FP) and Growth Monitoring and Promotion (GMP) in the Western Area (WA)
- HKI will support MoHS scale up this 6 month contact point in 6 (of 14) health districts
Child Survival Trends

Semi-annual VAS is recommended when:

U5MR is high: defined as ≥50/1000 live births
Pilot Study Design

• Selection of sites:
  – 12 PHUs in WA
  – CHCs, CHPs, MCHPs
  – PHUs grouped by staff type and workload

• Sample size:
  – 400/study group
  – 3 study groups = 1,200 infants

• Interventions:
  – Full Group: New CH card, VAS, IYCF, GMP, FP
  – Mini Group: New CH card VAS, IYCF, GMP
  – Control Group: New CH card, current practices

• Enrollment age: Infants from 0-3 weeks
• Followed until at least 9 months of age
Training and CH Card Revision

- New Child Health Cards: Revision
- Training of PHU staff with DHMT & HKI on pilot project
Family Planning and IYCF Integration

- 1 dedicated MS-SL staff in the 4 Full package PHUs for FP counselling and provision
- Training for FP counseling and provision for 4 PHU staff: 2 MCHAs and 2 SECHNs in full package PHUs
- IYCF integrated in U5 service provision
- Participation of carers in CF preparation
Data Collection Monitoring & Analysis

- April 2011-Feb 2013

- Data entered in ledgers and computer data base
- 1 HKI staff assigned to each group on rotation
- DHMT-WA twice monthly supervision of 2 PHUs
- MoHS- nutrition monthly supervision

- Data analysis:
  - SPSS for percents and Chi Test
  - Weights/age for Z Scores
Pilot Study Indicators

- **Main Indicator**: Age at 1st RVAS (% of infants receiving RVAS at 6 months)

- **Other Indicators at 6<7 months**:
  - % of infants weighed
  - % of carers given IYCF counseling
  - % of carers participating in CF preparation
  - % of mothers given FP counseling
  - % of mothers accessing FP commodities
  - % of infants fully immunized

Mean Z score of weights at 9 months (and 12 months) compared to enrollment/birth z score
Data collection schedule

<table>
<thead>
<tr>
<th></th>
<th>Full</th>
<th>Mini</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Calaba Town CHC</td>
<td>Scan Drive MCHP</td>
<td>Blessed Mokaba &amp; Kroobay CHC</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Hastings CHC</td>
<td>Hill Station MCHP</td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td>Approved Schl CHP</td>
<td>St. Joseph’s CHC</td>
<td>Slim CHP</td>
</tr>
<tr>
<td>Friday</td>
<td>John Thorpe MCHP</td>
<td>Wesleyan CHC</td>
<td>Iscon CHC</td>
</tr>
<tr>
<td>U5/mth</td>
<td>3341</td>
<td>1202</td>
<td>1628</td>
</tr>
<tr>
<td>Ratio: U5/HW</td>
<td>108</td>
<td>129</td>
<td>115</td>
</tr>
</tbody>
</table>
Preliminary Results
RVAS at 6 months

Significantly higher coverage between both F and M versus C (p<0.05)
% mothers receiving FP counselling when their infants reach 6<7 months

Significant difference in FP counselling between F, M and C (p<0.0001)
% mothers accessing FP commodities when their infants reach 6<7 months

Significant difference between F versus both M and C (p<0.0001)
% mothers receiving IYCF Counselling at 6 <7 months

Significant difference between both F and M versus C (p<0.0001)
% mothers participating CF demonstration

6<7 months

Significant difference between both F and M versus C (p<0.0001)
% of mothers practicing EBF

Significant difference between F versus both M and C in EBF (p<0.0001)
% infants fully immunised at 6<7 months

- Polio 3
- Penta 3
- PCV 3

- Full
- Mini
- Control
Mean-weight-for-age at birth

% of Children (n = 670)

Weight-for-Age z-scores

- WHO standards
- Sierra Leone

(20) 3.0% (1.1-7.6 95% CI) <-2SD
(20) 3.0% (0.6-22.2 95% CI) <-3 SD
Mean weight-for-age at birth by groups

[Graph showing weight-for-age z-scores ± SD with clusters labeled 1, 2, and 3, and sample sizes n=197, n=234, n=239, respectively.]

NS
Mean-weight-for-age at 6 months

(118) 12.2% (5.7-25.4 95% CI) <-2SD
(78) 8.3% (0.6-22.2 95% CI) <-3 SD
Mean weight-for-age at 6 months by group

Significant difference in mean weights between both F and M versus C (p<0.0001)
Mean weight-for-age at 9 months

(48) 5.0% (1.3-17.5  95% CI) < -2SD
(9) 0.9% (0.1-6.0  95% CI) < -3 SD
Mean-weight-for-age at 9 months

Significant difference between F versus C (p<0.0001)
Conclusions

- Integration of FP and IYCF into routine U5 services was associated with significantly higher coverage of:
  - RVAS 6<7 months (F vs. C) (p<0.05)
  - Mothers participating in IYCF counselling (F&M vs. C) (p<0.0001)
  - Mothers practicing EBF (F vs. M & C) (p<0.0001)
  - Mothers participating in CF demonstrations (F&M vs. C) (p<0.0001)
  - Mothers counselled on FP (F vs. M & C) (p<0.0001)
  - Mothers accessing FP commodities (F vs. M & C) (p<0.0001)
When U5MR falls rapidly the population grows rapidly! Increase of 1 million from 2004-12: 20%.
Implications of falling U5 mortality

- School aged population increase
- Education/schools/teachers/books needs increase
- Food requirements increase
- Employment needs increase

- FP counseling and provision is needed to enable adults to regulate their family size
Lessons Learnt from Pilot

• Stock monitoring for VAS, FP, CH Cards & immunization doses
• Uninterrupted supply of services and commodities through strong collaboration with DHMT-WA
• Extensive training of PHU staff on new CH cards and other components of the 6 month contact point
• Hands on training and supportive supervision visits at PHU level by MoHS National, DHMT WA and HKI
• IYCF counselling and demonstrations by CHVs with supportive supervision and incentives
• Effective FP service provision by a dedicated MSSL Nursing Aid
Scaling Up in 6 districts

Estimated geographic coverage: ~ 60%, time Frame: 18 months
Project Activities

- Macro and micro-planning meetings with coordination partners: PLAN, UNICEF, MoHS
- Stakeholders and advocacy meetings for scale up
- Training: 6 District Health Management Teams (DHMT)
- Training: Health Workers by DHMT
- IEC/BCC for VAS, IYCF and FP
- Monitoring and supervision by the MoHS and HKI
- Independent monitoring by HKI
- Baseline, Mid and End Term Evaluation by HKI
Alone we can do so little; together we can do so much’
Helen Keller

H.E the President, Dr. Ernest Bai Koroma, administering VAS at the November 2010 MCHW