H2H tracing of Routine Immunization defaulters: Experiences from Tanzania & Uganda

PROJECT OBSERVATIONS AND OUTPUTS

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American Red Cross Measles/Health Delegate
Outline of the Presentation

1. Background and rationale of H2H projects
2. Drivers of Under/un-Immunization in TZ and UG
3. Expectations of the routine immunization strengthening projects
4. Routine EPI Strengthening Project goals/objectives
5. Routine Immunization Strengthening Project outputs
6. Routine Immunization Strengthening Project outcomes
7. Discussion of Project outputs/outcomes
8. Lessons learnt and recommendations
House-to-House Strategy: Leveraging SIAs experience into Routine Immunization

- From SIAs, ARC has learnt that:
  - H2H canvassing reaches populations that are missed by traditional mass media, even in urban areas.
  - Data from 16 African countries showed that higher coverage are reached wherever H2H strategy was used.
  - Cost per beneficiary averages $0.32 but can vary, being about $0.16 in cities compared to $0.57 in rural areas.

- Testing H2H Strategy in tracing RI defaulters:
  - Prevention: Baby tracking in Kilindi district of Tanzania
  - Correction: Defaulters tracing in 3 Dar es Salaam districts & 4 selected cities in Uganda
WHO/UNICEF estimates of MCV1 un-immunized children in 2012, AFRO

Data Driven Selection of targeted Project countries
Analysis of Drivers for Under/un-Immunization

A. Immunization Services Delivery System
   - Availability of Safe and potent Vaccines
   - Good Cold Chain maintenance and coverage
   - Good EPI Services Delivery plans that are effectively implemented
   - Immunization services monitoring (for monitoring of un-vaccinated)

B. Health and System-wide barriers
   - Adequate HR
   - Fairly functions Financing mechanism for EPI/Primary Health Care
   - Districts and sub-district management systems (in decentralized context)
   - High IMR/TFR (see Malthusian Theory)

C. Community demand barriers (Priority for H2H Canvassing)
   - Low knowledge/education levels
   - Limited Community engagement processes
   - Competing priorities
   - Information clutter
   - Lack of a reminder system among others
Routine EPI strengthening Project Areas

- Selection criteria of Project Districts
  - DTP-HepB+Hib/MCV1 coverage stratified by number of unimmunized children (using 2011/2012 WHO/UNICEF estimates)
  - Failed to achieve 95% coverage in the most recent measles follow up (or MR catch up) campaign
  - Recently trained Volunteers in Immunization
  - Large urban Populations/Historical large measles outbreaks (± viral seeding)
### Routine EPI strengthening Project Areas Cont..

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Selected Districts</th>
<th>Project Population estimate</th>
<th>2013 Estimated Annual Birth Cohort in Project areas</th>
<th>0-59 months old children targeted for Polio SIAs (2011)</th>
<th>Routine MCV1 Coverage (%) for 2012</th>
<th>Year/Measles SIAs Coverage (%) (using IM Data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>4 (including Greater Kampala)</td>
<td>4,702,170</td>
<td>235,110</td>
<td>876,315</td>
<td>75</td>
<td>2012/84</td>
</tr>
<tr>
<td>Tanzania</td>
<td>All 3 districts of Dar es Salaam</td>
<td>3,368,363</td>
<td>168,419</td>
<td>639,989</td>
<td>98</td>
<td>2011/88</td>
</tr>
<tr>
<td></td>
<td>Kilindi (Baby tracking)</td>
<td>186,946</td>
<td>9,348</td>
<td>35,520</td>
<td>126</td>
<td>2011/90.6</td>
</tr>
<tr>
<td>Ghana</td>
<td>Seven (7) Municipalitie s of GAR</td>
<td>3,442,090</td>
<td>172,105</td>
<td>619,577</td>
<td>78</td>
<td>2013/92.8</td>
</tr>
<tr>
<td>Total</td>
<td>15 Districts</td>
<td>11,699,569</td>
<td>584,982</td>
<td>2,171,401</td>
<td></td>
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</tr>
</tbody>
</table>
A. Experience in Immunization strengthening
   - Routine Immunization (2 decades)
   - Measles/OPV SIAs 1999-2012

B. Organizational Capacity and structures
   - Symbol of neutrality, hope and assistance
   - Network of volunteers that live and work with their communities
   - Significant number of Volunteers that have been trained in Health
   - Emergency and rapid response systems
   - Transport fleet

C. Innovations
   - House-to-house canvassing for immunization
   - Planning/Providing for missed children, even in the second year of life
Routine EPI Strengthening Project Goal

- Same in All 3 Project Countries
  House to house Social Mobilisation support for routine immunisation strengthening in selected districts with high numbers of unimmunized children
Routine EPI Strengthening Project objectives

Specific Objectives (in one year)

1. Train Volunteers as community resource persons in routine immunization
   a) 5,781 Volunteers in Uganda
   b) 1,780 Volunteers in Tanzania
   c) 980 Volunteers in Ghana

2. Conduct house-to-house visits to 95% of Households in selected districts to trace defaulters and remind/support them to update their infant immunization series
   Quarterly in Kampala and Dar BUT Monthly in Kilindi and GAR

3. Conduct active community search for measles-like illnesses with a view to early outbreaks detection

4. Reduce immunization dropout rates to less than 5%
Interventions for Routine EPI strengthening

1. Skills enhancement of Community resource persons
   - 5,777 Volunteers in Uganda
   - 1,542 Volunteers in Tanzania
   - 986 Volunteers in Ghana

2. Advocacy meetings on under-immunization
   - Project introduction meetings with selected district leaders
   - With priority community information gatekeepers (cultural and religious leaders)

3. House to house Defaulters tracing visits
   - Registering all the <5yrs popn in the households
   - Screen for routine immunization defaulters by antigen provided in the infant series
   - Share information on benefits of immunization (using 5 key messages)
   - Provide RI reminders to those children found defaulting
Routine Immunization Strengthening Project outputs
## RI Project outputs (1)

<table>
<thead>
<tr>
<th>Country</th>
<th>2014 Annual Birth Cohort in project districts</th>
<th>Red Cross Volunteers Trained &amp; deployed (Actual/Plan)</th>
<th>Defaulters tracing rounds conducted</th>
<th>Defaulters tracing rounds paid for</th>
<th>PROCUREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>242,634</td>
<td>5,777/5,781</td>
<td>4</td>
<td>3</td>
<td>6,000 x 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>6,000</td>
</tr>
<tr>
<td><strong>Tanzania (Dar)</strong></td>
<td>173,808</td>
<td>1,542/1,570</td>
<td>3</td>
<td>3</td>
<td>1,700</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,700</td>
</tr>
<tr>
<td><strong>Kilindi</strong></td>
<td>9,647</td>
<td>208/210</td>
<td>8</td>
<td>8</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>220</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>206</td>
</tr>
<tr>
<td><strong>Ghana</strong></td>
<td>177,612</td>
<td>986/980</td>
<td>1</td>
<td>1</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>603,701</td>
<td>8,513/8541</td>
<td></td>
<td>8,920</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000 + 3220</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8,906</td>
<td></td>
</tr>
</tbody>
</table>

![American Red Cross Logo](image)
# URCS RI Project outputs (2)

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>Estimated H/Holds</th>
<th>Households Visited</th>
<th>Immunization traced</th>
<th>Defaulters</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAMPALA</td>
<td>298,976</td>
<td>177,725</td>
<td>186,667</td>
<td>NR</td>
</tr>
<tr>
<td>ARUA</td>
<td>151,851</td>
<td>103,459</td>
<td>131,038</td>
<td>NR</td>
</tr>
<tr>
<td>LIRA</td>
<td>70,719</td>
<td>49,294</td>
<td>62,166</td>
<td>NR</td>
</tr>
<tr>
<td>Total</td>
<td>736,716</td>
<td>439,391</td>
<td>549,406</td>
<td>NR</td>
</tr>
</tbody>
</table>

Source: URCS Quarterly Project Reports
## TRCS RI Project outputs (3)

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>Estimated H/Holds</th>
<th>Households Visited</th>
<th>Immunization Defaulters traced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ilala</td>
<td>143,335</td>
<td>127,012</td>
<td>96,808</td>
</tr>
<tr>
<td>Kinondoni</td>
<td>244,289</td>
<td>157,001</td>
<td>168,552</td>
</tr>
<tr>
<td>Temeke</td>
<td>173,770</td>
<td>133,955</td>
<td>105,683</td>
</tr>
<tr>
<td>Kilindi</td>
<td>31,158</td>
<td>NA</td>
<td>28,674</td>
</tr>
<tr>
<td>Total</td>
<td>592,552</td>
<td>417,968</td>
<td>399,717</td>
</tr>
</tbody>
</table>

Source: TRCS Project Reports
Routine Immunization Strengthening Project Outcomes: Only URCS Project has outcomes data
URCS RI Project Outcomes (1)

Reported Infant Contacts in all 4 RI Project districts of Uganda; Jul 12-Jun 14

Source: HMIS Data
URCS RI Project Outcomes (2)

Reported Infant Contacts in 4 project Districts of Uganda, Jul 2012 - Jun 2014

Source: HMIS Data
Reported MCV1 Immunizations in all 4 RI project districts in Uganda; Jul 2012-Jun 2014

Source: HMIS Data
## URCS RIS Project outcomes (4)

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>BCG Coverage (%)</th>
<th>DTP-HepB+Hib 1 Coverage (%)</th>
<th>DTP-HepB+Hib 3 Coverage (%)</th>
<th>BCG-MCV1 dropout Rate (%)</th>
<th>Annual Coverage MCV1 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAMPALA</td>
<td>115</td>
<td>103</td>
<td>115</td>
<td>101</td>
<td>100</td>
</tr>
<tr>
<td>WAKISO</td>
<td>83</td>
<td>86</td>
<td>100</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>ARUA</td>
<td>39</td>
<td>102</td>
<td>41</td>
<td>117</td>
<td>35</td>
</tr>
<tr>
<td>LIRA</td>
<td>109</td>
<td>94</td>
<td>110</td>
<td>103</td>
<td>101</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>94</td>
<td>91</td>
<td>106</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: HMIS Data
Discussion of Project outputs/outcomes

1. **Recruitment of volunteers** was largely good. However, there was over-selection of volunteers in Kampala.

2. **Training of volunteers was done in all project branches.** Also learnt that re-orientations were done before each round to fill in for volunteer dropouts. However, the training:
   a. Did not provide training/reference materials to trainees
   b. Had no standard trainer to trainee ratios
   c. Did not follow a standard training agenda to assure standardized delivery
   d. There were no pre and post training tests to assure that the volunteers would deliver on their tasks
   e. Missed the opportunity to engage national EPI staff in training and design of the information management system for the projects
   f. Duration of volunteers training varied from 4 hours to 8 hours.
3. Suspension of project funding in Uganda (October 2013), was not effectively communicated to all project implementing branches. In turn, the branches deployed volunteers in the January round of FHDs but could not pay for the days worked.

4. In Uganda, defaulters tracing registers were developed and printed twice with revisions in between. Noted that the revisions:
   
a) Were not a technical improvement as the revised tool missed reasons for immunization failure, a core project deliverable
   
b) Interrupted the quality of data as volunteers did not have training on use of the revised tools
   
c) Made loses in continuity of variables being collected
   
d) No instructions on completing the defaulters tracing registers were provided
   
e) Eliminated the summary forms that was essential to collation and analysis of defaulters tracing data
   
f) Caused doubling of production costs for the registers
5. H2H Defaulters registration Data analyses

- Can quickly provide community estimates of Routine immunization performance indicators:
- Shows that 31% of children found, had defaulted on their infant immunization series
- Identified major reasons for immunization defaulters as:
  - Vaccine stock outs
  - Lack of Money to pay for child health cards
  - Fear of vaccinating sick children (both parents and vaccinators)
  - Fear of Vaccine reactions
  - Several family issues (Separation off children from mother, husbands refusal and lack of time in a busy urban lifestyle being the most cited reasons)
- Indicates that 89% of Immunization defaulters traced during H2H visits were corrected.
6. H2H canvassing in all four rounds implemented in the UGA project was associated with increases in total number of immunization contacts. This calls for coordinated planning of Red Cross social mobilization activities with service delivery provision. Alignment of H2H canvassing days with FHDs in Uganda is one such good example.

7. The majority of immunization contacts in the H2H canvassing days were MCV1, BCG, and 1st dose of DTP containing vaccine. This made H2H strategy:

- A good initiative for correction of missed immunizations after months of vaccine stock outs in Uganda.
- An alternative initiative for raising population immunity against measles given the significant associated increases in MCV1 coverage.
- An innovation in EPI programming that targets correction of missed opportunities.
Lessons learnt from RI social mobilization projects
1. Improving the immunization defaulters tracing guidelines
   - Develop a field guide to provide reference material for the volunteers while conducting H2H canvassing
   - Standardize instructions on management of households where child’s mother/caretaker is absent

2. Improving the quality of volunteer training in EPI
   - Increase duration of volunteer training from 1 to 2 days
   - Team leaders/volunteer coaches should get extra and more detailed training on communication for EPI
   - Volunteer training content should be standardized and include pre and post training assessment of trainees before deployment
   - Trainer to trainee ratio should also be limited to at least 1:20
3. Improving the quality of H2H canvassing
   - Equip the volunteers with mobile phone-based technologies for real-time transmission of data collected
   - Include phone contacts on H2H registration formats

4. Improving the coverage of H2H canvassing
   - Increase the duration of H2H canvassing days
   - Provide minimum daily target of H/holds per volunteer
5. Improving the information management system for H2H canvassing
   - Train coaches in collation and summary reporting of H2H registration data
   - Provide instructions for completing the H2H registration on the back cover or 2nd page of the tool

6. Dissemination and use of H2H canvassing data and its analyses
   - Red Cross branches to provide quarterly reports to the District Health Authorities
   - Create linkages and cross-tabulations with HMIS
Lessons Learnt/Recommendations (4)

7. Eliminating service delivery barriers to EPI services utilization
   - Root-cause analysis and implementation of strategies for elimination of vaccine or EPI supplies stock outs
   - Training vaccinators in EPI communication
   - Establish a behavioral surveillance mechanism for detection of cruel/rude vaccinators
   - Eliminate charges for immunization services/supplies
   - Re-establish and monitor functionality of EPI outreaches
Thank You

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