Integrated SBCC Programs: Key Challenges and Promising Strategies

New horizons in data collection for integrated SBCC Programs. Experience from Ghana and Malawi.

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Overview of presentation

- Traditional data collection and new applications and approaches
- What is IVR and does it work? What is the cost?
- Ghana and Malawi--the experiment: Can we use a new approach to collect data?
- What did we learn?

**Acknowledgements:** Eunice Sefa, Aulive Msoma, Gretchen Thompson, Rachel Lenzi, Kelly L’Engle, and our partners Voto Mobile and HNI. USAID-Ghana and USAID-Malawi deserve special thanks for their support.
Traditional data collection approaches

- Household surveys. (Going door-to-door)
- Focus Groups, Sentential surveys, LQAS
- Participatory engagement and interviews
New technology gives us new horizons

- Rise of mobile phones
- Access increases
- Cell air time cheaper
- Local organizations and companies embrace new technology. Voto Mobile, HNI and others
Why don’t we try something different

- **Traditional data collection**
  - Costly and lengthy
  - Logistically challenging
  - Data quality
  - Equipment dependent (tablets and computers)
  - Data interpretation in a few months

- **Interactive Voice Response**
  - It’s NOT SMS
  - Random Digit Dialing
  - Humans—Not required to execute the survey
  - Automated and self implementing.
  - Results in real time
Experimenting in Ghana and Malawi

- **Communicate for Health (Ghana)**
  - 5 year $18 Million Integrated SBCC program
  - Single integrated communication platform for Malaria, FP, Nutrition, SRH, WASH, and MNCH

- **Heath Communication for Life (Malawi)**
  - 5 year $24.7 Million Integrated SBCC program
  - Single integrated communication platform for Malaria, FP, HIV, SRH, WASH, MNCH, Nutrition, Food Safety, Aflatoxins, and the human cost of mis-use of government resources.
Why did we conduct mobile phone-based data collection in Ghana and Malawi?

- Projects not resourced to conduct face-to-face household data collection
- Decision reached to try a new approach to data collection using mobile phones
- Why not! Experimentation!
Ghana Mobile Phone Environment

- Ghana is an early and high-adopter of mobile phone health services
- Eight in ten households own a mobile phone
- Mobile phone penetration in Ghana compares favorably to other African countries
- Ghana has one of the most vibrant mobile phone markets in Africa
Malawi Mobile Phone Environment

- Malawi is trying to be the adopter of mobile phone health services
- 4 in 10 households has access own a mobile phone
- Mobile phone penetration is growing at 30-40% rate per year and more mobile phone providers are expanding services and reach
- Malawi is lagging behind others but it is growing
Objectives of Mobile Phone Surveys

Longitudinal Data Collection

- Assess exposure to health communication messages among Life Stage audiences
- Assess trends in behavioral determinants and health behaviors
- Evaluate impact of GoodLife (Ghana) and Moyo ndi Mpamba (Malawi) campaigns and message exposure on interpersonal communication, information seeking, gender norms, and behaviors

Ongoing Process Evaluation

- Assess benefits and limitations of mobile phone M&E
Methods

- Mobile phone interactive voice response (IVR) and Random Digit Dial (RDD) used
- Conducted a national cross sectional and longitudinal survey with national audiences in Ghana and Malawi
Interactive Voice Response (IVR)

- Survey questions were read in a pre-recorded voice and in a choice of different languages, to respondents.
- Participants answered questions through key pad presses on their mobile phones.
- A question could be repeated by pressing “0” and respondents could call back at their convenience to complete the interview.
- All respondents 18 years and above were asked a standard set of demographic, media exposure and use questions (National Sample).
The tale of two National level IRV surveys

Ghana
- Quotas set to ensure even demographic distribution of audiences in Ghana
- 1,036,784 call made
- Achieved 13,016 for the National Sample

Malawi
- Quotas set to ensure even distribution across sex and heads of households and non heads.
- Calls made 900,000+
- Target sample size of 2000
- Used RDD with to get a random sample of mobile phone users
- To measure audiences knowledge, attitudes and practices on food safety/aflatoxins and perceptions of mis-use of government resources
Fielding the Survey in Ghana

- Baseline survey conducted from 17 February to 15 March 2017
- Calls were made between 8am-8pm; No dialing during heavy call volume times in Ghana

National sample
- Respondents were asked a minimum of 16 questions and a maximum of 19 questions (Average time for completion = 7.18 minutes)
## Results: Response Rates

<table>
<thead>
<tr>
<th>AAPOR Response Rates*</th>
<th>National Sample (n=13,016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Rate 4 (completed interviews, out of estimated eligible respondents)</td>
<td>31.3</td>
</tr>
<tr>
<td>Cooperation Rate 2/4 (completed interviews, out of known eligible respondents)</td>
<td>81.3</td>
</tr>
<tr>
<td>Refusal Rate 2 (respondents who refused or terminated interview, out of estimated eligible respondents)</td>
<td>7.2</td>
</tr>
<tr>
<td>Contact Rate 2 (an eligible respondent was reached)</td>
<td>38.5</td>
</tr>
</tbody>
</table>

*American Association of Public Opinion Research guidelines were followed for calculating response rates*
Can we gather data that is comparable to other surveys?

<table>
<thead>
<tr>
<th>Indicator/Question</th>
<th>C4H 2017 (18+ years)</th>
<th>Ghana DHS 2014 (15-49 years)</th>
<th>Difference between C4H and GSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Exposure to health messages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria prevention</td>
<td>9,691</td>
<td>72.6</td>
<td>11,835</td>
</tr>
<tr>
<td>Slept under an insecticide-treated net (ITN) last night</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children under 5</td>
<td>4,577</td>
<td>54.3</td>
<td>5,801</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>178</td>
<td>39.0</td>
<td>654</td>
</tr>
<tr>
<td>Household members</td>
<td>9,527</td>
<td>34.0</td>
<td>40,337</td>
</tr>
</tbody>
</table>
Cost of Survey

Total Budget for C4H's study: USD 54,000

Cost per completed baseline survey

- C4H National sample N=13,016: USD 3.0
- C4H Life Stage Sample N=2,250: USD 14.5
- Burkina Faso Tablet-based CDA HSS N=10,000: USD 21
- Burkina Faso Paper-based HSS N=10,000: USD 25
Let’s Look at Malawi’s IVR Surveys

<table>
<thead>
<tr>
<th>Description</th>
<th>Food Safety KAP Survey</th>
<th>Government Resources KAP Survey</th>
<th>World Bank (Call center-based survey)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of calls made</td>
<td>794,558</td>
<td>928,271</td>
<td>1,504</td>
</tr>
<tr>
<td>Dates calls made</td>
<td>July 21-27</td>
<td>July 21-25</td>
<td>August 14</td>
</tr>
<tr>
<td>Time calls made</td>
<td>8am-6pm</td>
<td>8am-9pm</td>
<td>Information not provided</td>
</tr>
<tr>
<td>Number of questions asked</td>
<td>98</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>Average time of survey completion</td>
<td>106 minutes</td>
<td>91.68 minutes</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Response rates</td>
<td>5.54%</td>
<td>6%</td>
<td>Information not provided</td>
</tr>
<tr>
<td>Cooperation rates</td>
<td>16.52%</td>
<td>18.72%</td>
<td>Information not provided</td>
</tr>
<tr>
<td>Cost per survey completed</td>
<td>$42.37</td>
<td>$25.50</td>
<td>$8.80</td>
</tr>
</tbody>
</table>
Breaking down the numbers: IVR Food Safety and Aflatoxins
Breaking down the numbers: Malawi Governance Survey
## Difference Between IVR/RDD and Household Surveys

<table>
<thead>
<tr>
<th>Variable</th>
<th>IVR/RDD Survey</th>
<th>Household Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection</td>
<td>Mobile Phone</td>
<td>Door-to-door</td>
</tr>
<tr>
<td>Time</td>
<td>Quick to carry out</td>
<td>Time consuming</td>
</tr>
<tr>
<td>Resources</td>
<td>Less resources intensive</td>
<td>Resource intensive</td>
</tr>
<tr>
<td>Representativeness</td>
<td>Coverage bias (more males, young, urban, and educated). Representativeness increases with high mobile phone penetration</td>
<td>High (DHS over sample females)</td>
</tr>
<tr>
<td>Survey length</td>
<td>Short to medium length, 16-50 questions</td>
<td>Longer</td>
</tr>
<tr>
<td>Response Rate</td>
<td>Lower (31% for national sample and 9.3% for Life Stage sample)</td>
<td>Higher</td>
</tr>
<tr>
<td>Cost</td>
<td>Lower</td>
<td>Higher</td>
</tr>
</tbody>
</table>
Benefits of Mobile Phone Data Collection/Surveys-1

- Real-time data collection reduces lag time between data collection and data utilization to improve content and programming
- Supports small, quick pilot or A/B tests
- Supports frequent data collection
- Quickly informs decision makers and scale-up plan
- Mobile phones provide access to harder-to-reach populations
- Virtual data collection means fewer resources needed and lower cost per completed survey
Limitations of Mobile Phone Surveys

- Not everyone has mobile phone access so coverage and non-response bias may be substantial
  - **Coverage** refers to how well the sample matches the larger population
  - **Non response** refers to non-working numbers, calls not answered, refusals, language and literacy concerns
- **Measurement errors** may result
  - **Measurement error** refers to how data quality might be impacted by poor understanding or response to questions
  - Caused by language or literacy challenges, short questions, lack of interviewer present, limited best practices documented for IVR, etc.
What will we do differently going forward?

- Alternative recruitment methods for hard to reach demographic groups needed
- Redial people who hang up at introduction message to increase start up rates
- Reduce the number of survey questions
- Conduct A/B tests to provide insights on effects of communicating incentives early in the survey
Conclusions

- IVR is an alternative or supplemental data collection method
- The methodology is suitable for reaching populations with high access to mobile phones
- Real time data available for immediate program use
Thank You