Feasibility of Collecting Nutrition Data Remotely Using Computer-Assisted Telephone Interviewing (CATI)

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Systematic collection of real time nutrition data is crucial to provide early warning and respond promptly to deteriorating nutritional status during emergencies and humanitarian crises. Traditional Face-to-Face (F2F) methods for collecting nutrition data are often expensive, slow and irregular. Remote data collection methodologies have the potential to facilitate quick, affordable and more frequent collection of nutrition data, especially in hard-to-reach areas and humanitarian contexts. WFP and ICRAF conducted a mixed-methods study in Kenya to assess the feasibility and accuracy of using Computer-Assisted Telephone Interviewing (CATI) for collecting dietary data from women.

**Phase I: Formative Study**
- 16 in-depth interviews,
- 17 focus group discussions,
- 22 key informant interviews
- 16 sub-locations
- Women’s use of mobiles
- Willingness to participate in mobile surveys
- Local diet

**Phase II: Mode Experiment**
- Test/retest design comparing CATI & F2F
- 2,200 samples
- 32 sub-locations
- MDD-W & MAD
- Prevalence, score, sampling bias, cost, success rate

**Indicators**

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<th>Indicator</th>
<th>Description</th>
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<tr>
<td>MDD-W</td>
<td>Minimum Dietary Diversity - Women</td>
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<tr>
<td>MAD</td>
<td>Minimum Acceptable Diet</td>
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**Phase I: Can women in rural Kenya be reached using mobile surveys?**
Yes, innovative remote data collection methodologies such as CATI can be used to collect nutrition information from rural women in Kenya.

**Phase II: Mode effect on MAD and MDD-W estimates**
CATI mode had no significant effect on MDD-W scores. However, estimated prevalence of MAD was substantially higher via CATI compared to the prevalence produced by F2F method, with 18% higher prevalence of adequate dietary diversity and 12% higher prevalence of adequate meal frequency.

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<th>Difference (CATI - F2F)</th>
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<tr>
<td>MDD-W</td>
<td>- 0.1 food groups</td>
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<tr>
<td>MDD</td>
<td>+0.5 food groups</td>
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<tr>
<td>MMF</td>
<td>+0.75 meals per day</td>
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**Sampling bias?** Women without mobiles had fewer assets, but did not necessarily have significantly lower MDD-W scores

**Costs:** One-third the cost of F2F per survey ($5 per CATI survey vs. $16 per F2F survey)

Remote data collection using CATI can be used as a rapid and cost-efficient method to collect data on MDD-W and MAD. MAD data collected via CATI is biased towards higher dietary diversity and more adequate diets for young children; however this bias is consistent across locations and indicators, and may be corrected through use of statistical methods.