Aims

• The first set of primary data collected just before the full implementation of OHEP

• The main aims include:
  (i) To obtain baseline information on the characteristics of health providers, households, women aged 13-49 and their children;

  (ii) To enable an examination of the differences in characteristics of the study population between the eligible individuals in the intervention and comparison, and

  (iii) To provide information on outcomes against which the OHEP project impact will be evaluated.

Improving health worldwide

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Study population

• **For the household survey**
  - A representative sample of all households in the study woreda with particular focus on women aged 13 to 49 years, and
  - Children under the age of 5 years.

• **For the health provider survey**
  - Health Centre staff who provide care for neonates and children under 5 years of age working at Health Centre in selected household clusters.
  - Health Extension Workers in the selected household clusters.
  - Women’s Development Army members who reside in selected household clusters.
Designing the sample

• **Sampling frame**
  - We used existing sampling frame from CSA
  - the lists of enumeration Areas (EA) based on the 2007 Ethiopian Housing and Population Census were used.
  - 200 enumeration areas were selected with probability proportional to size (PPS).

• **Stratification**
  - Stratified by intervention and comparison area
  - Representative sample drawn from each stratum
## Designing the sample

### Sample size

<table>
<thead>
<tr>
<th>Survey</th>
<th>Intervention group</th>
<th>Comparison group</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
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<td>Children aged 2-59 months</td>
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<td>Health Posts</td>
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<td>200</td>
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<tr>
<td>Sick children observed at health posts</td>
<td>400</td>
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</table>
Selection of comparison sites

• The comparison woredas were identified by Oromia, Tigray, SNNP and Amhara RHBS
• Support from their respective local universities- MU, HU, JU and UoG.
• Based on all or some of the following criteria:
  1. Woredas which are similar to intervention woredas in
     • Population size and number of PHCUs
     • Performance data from 2007/2008
     • Length of WDA network establishment
     • Length of time since starting ICCM and CBNC program
     • Socio demographic status of the population
     • Prior exposure to other similar programs
     • Burden of disease. Malaria vs. non-Malaria kebeles
  2. Woredas with no presence of partners working on demand generation.
  3. Woreda’s proximity to the intervention woredas
  4. Woredas adjacent to intervention Woredas.
Selection of comparison sites

• For Oromia region
  • Similar population size and socio demographic characteristics (for example Agrarian vs pastoralist)
  • Distance from the intervention site to avoid contamination of information. So nearby districts were excluded.
  • Similar exposure with the intervention district in terms of specific programs such as iCCM and CBNC programs or
  • Specific burden of disease such as Malaria.

• For SNNP region
  • Similarities in length of time since iCCM and CBNC program started;
  • Length of time since WDA network established;
  • Population size and number of PHCUs
  • Performance on service utilization (e.g. ANC, facility delivery, PNC and immunization)

• For Tigray region
  • Similarities in performance on iCCM and CBNC programs,
  • Location of the Woredas (if Woreda is adjacent to intervention Woreda), and
  • Proximity of the Woreda from the intervention Woredas

• For Amhara region
  • Similarities in service utilisation rate based on performance data from EFY 2008 (LAFP, Maternity service coverage including ANC4+, SBA, early PNC, immunization coverage, access to latrine, model HHs graduated);
  • How accessible the Woreda is and
  • No presence of active partners working on demand generation programs
Survey tools

**Questionnaire design**
- Developed by LSHTM research team
- Other sources also provided guides to the questionnaires;
  - Demographic and Health Survey,
  - IDEAS CBNC and Household Survey.
- These various sources ensured
  - A comprehensive coverage
  - Practicality and validity of questionnaires.

**Questionnaire translation**
- Final draft translated by partner universities
- Three local languages.
  - Amharic, Oromifia and Tigrigna
Survey tools

• We have 8 tools:

1. Household Survey
2. Woman Development Army Survey
3. Health Extension Worker Survey
4. Health Provider Assessment Survey
5. Health Centre Staff Survey
6. Health Centre Survey
7. Health Post Survey
8. Woreda Contextual Survey
Study settings

• The survey was carried out in 52 woredas, 10 zones in four regions.
  • **SNNP:**
    • Segen and Dawuro zones
  • **Tigray:**
    • South East, Eastern, Southern and Central zones
  • **Amhara:**
    • Awi and North Gondar zones
  • **Oromia:**
    • Guji and West Hararge zones
Segen and Dawuro zone in SNNP Region

Legend
- Green: Comparison Woredas
- Brown: Intervention Woredas

1. Segen
2. Dawuro
3. Comparison Woredas
4. Intervention Woredas

Scale: 0 20 40 80 Kilometers

Evaluation, mutual capacity strengthening and learning to increase child health service use in Ethiopia

London School of Hygiene & Tropical Medicine
Guji and West Harage zones in Oromia Region

Legend
- Orange: Intervention
- Green: Comparison

Dagu
Evaluation, mutual capacity strengthening and learning to increase child health service use in Ethiopia

London School of Hygiene & Tropical Medicine
Awi and North Shewa Zones in Amhara Region

Legend
- Orange: Intervention
- Green: Comparison

Dagu Evaluation, mutual capacity strengthening and learning to increase child health service use in Ethiopia

London School of Hygiene & Tropical Medicine
Household Sampling

A two-stage stratified cluster sampling technique

STAGE 1

- Stratify the sampling frame by intervention and comparison area
- Select clusters from each strata
- List households in selected cluster

STAGE 2

- Select households to be interviewed
Household listing

• **First stage**
  • 200 clusters selected from 2007 census frame.
  • Systematically selected with probability proportional to size

• **Second stage**
  • A complete household listing was carried out in each selected cluster (EA)
  • Based on the household listing, 30 households are selected from each cluster systematically.
Health Providers Sampling

• For every cluster of 30 households:
  • The WDA leader serving the household cluster were selected.
  • The health post serving these households were selected.
  • The two HEWs serving the selected health post were selected.
  • The health centre serving the selected health post were selected.
  • Within the HC, we collect information on each member of health center staff who work on sick child services whether or not they have been trained in IMNCI and ICCM.
  • The woreda serving the selected health centre were selected.
Sick Children Sampling

To identify sick children, for every cluster:

• Interviewers will conduct community mobilization
  • Interviewers contacted 1 to 30 WDA leaders,
  • Kebele focal person and
  • Other key figures in the community
• We sampled on average 4 sick children per health post.
## Field Staff by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Teams</th>
<th>Clusters</th>
<th>Number of HHs</th>
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<td>2190</td>
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<tr>
<td>Oromia</td>
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<td>69</td>
<td>2070</td>
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<tr>
<td>Tigray</td>
<td>2</td>
<td>29</td>
<td>870</td>
</tr>
</tbody>
</table>
Survey Field Staff

- **Recruitment**
  - 45 Interviewers
  - 15 Team leaders
  - 1 Data manager
  - 1 Central Coordinator
  - 4 Regional Coordinators (PhD Students)

- **Training**
  - Two weeks training
  - 3 days field piloting

- **Field materials**
  - Field Manual
  - Tablets
  - GPS
  - Other
Questionnaire in tablet
Module 3 - Child Health

Section 3.1: Identification of and consent from caregivers

396h. ከውለው እንችትን እንጂ ከምላው ጥበት የቤት እስከ ከጳ ያስሇ ይሆና ይገባ ይችላል።

397h. ከውለው በማወቅ ያስሇ ይናውን ይህ የጳ እስከ ከጳ ስወ ይችላል።

398h. የአስተናኝ ያስጭ ይችላል።

399h. ከውለው ከማወቅ ያስሇ ይህ የጳ እስከ ከጳ ስወ ይችላል።

400h. ከውለው ከማወቅ ያስሇ ይህ የጳ እስከ ከጳ ስወ ይችላል።

401h. ሙለ ያስጭ ይችላል። የእ ከማወቅ ያስጭ ይህ የጳ እስከ ከጳ ስወ ይችላል።

402h. ሙለ ያስጭ ይችላል። የእ ከማወቅ ያስጭ ይህ የጳ እስከ ከጳ ስወ ይችላል።

403h. ከውለው ያስጭ ይችላል።

403h_odh. እል የጳ (፹ንስ)

413h. ከውለው ከማወቅ ያስጭ ይህ የጳ እስከ ከጳ ስወ ይችላል።

413h_odh. እል የጳ (፹ንስ)

423h. ከውለው ከማወቅ ያስጭ ይህ የጳ እስከ ከጳ ስወ ይችላል።

Mamo

2,8,0,7,0,1

0,2

0,5
Data Transfer to Central Office

Data transfer mechanisms

1. IFSS(EVDO)

2. 3G modem

3. USB flash disk sent by regional coordinators
Quality Control

• **At the field**
  - Well trained interviewers and team leaders
  - Team leaders repeat interview
  - Regional coordinators supervision
  - Weekly Progress report Regional coordinators

• **At Central Office**
  - Weekly Quality Control report
    - Internal inconsistencies
    - Feedback loop from Central Office
  - Frequency check
## Quality Control

### Cluster ID 030

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<th>House_No</th>
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<th>Head of HH</th>
<th>Date</th>
<th>Latitude</th>
<th>Longitude</th>
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## Quality Control

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<th>Prop. of HH with &lt;5 children</th>
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Current status

- Data collection expected to be completed in first week of February.

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<th>Clusters Completed</th>
<th>Clusters not Completed</th>
<th>Number of survey conducted</th>
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Next step

- Preparing the data for Analysis
- Analysis workshop (in March)
- PhD students writing their first paper
- Baseline report for
  - Implementers
  - FMoH