Survey of knowledge, attitudes, and practices:
Birth attendance and contraception

DEDAYE TOWNSHIP, MYANMAR
FINAL REPORT

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Abbreviations

AMW  Auxilliary mid-wife.

CHW  Community Health Worker.

DOH  Department of Health.

FHH  Female head of household.

HMIS  Health Management Information System.

IQR  Interquartile range.

IUD  Intra-uterine device.


LHV  Lady health visitors.

MCH  Maternal and Child Health.

MW  Midwife.

OR  Odds ratio.

PPS  Probability proportional to size.

RHC  Rural Health Centre.

RI  Relief International.

SBA  Skilled birth attendant.

SRHC  Sub-rural health centre.

TBA  Traditional birth attendant.
Acknowledgements

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The 3MDG team and donors, in particular Dr. KNS, Dr. Myint Thu Lwin, Dr. Yin Yin Htun Ngwe, and Dr. Linn Thant Aung for their input on survey design and valuable feedback on the survey results.

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The survey enumerators who listened attentively and participated actively during the training sessions, and who did a great job conducting the research.

And finally, to the population of Dedaye who consented to participate.
Introduction

Background

Myanmar was severely struck by Cyclone Nargis in 2 May 2008, especially in its south-western delta region. The total population of more than seven millions of mainly rural people were affected by the storm and many lost family members, homes and livelihoods. Billions of dollar were lost due to huge damage caused by it. Among the affected population, the children and mothers of various ages were no exception. Cyclone Nargis severely impacted the health system and its capacity to deliver essential services. At the same time, the status of maternal and child health in Myanmar was in poor state for many decades which simply needed for improvement urgently.

In December 2008 the Tripartite Core Group (Government of the Union of Myanmar, ASEAN and U.N. partners) approved Joint Initiative on Maternal, New-born and Child Health (JIMNCH) plan for the 11 most affected townships by the Cyclone Nargis. The three year JIMNCH main objective was to increase access to essential maternal and child health services, through strengthening and coordination of health systems, capacity building, referral systems and improved community education and outreach, which is also in line with the Government of Myanmar’s National Health Plan’s objective to achieve “health for all” using a primary health care approach and increasing the quantity and quality of medical services human resources. JIMNCH is currently being implemented in six affected townships, including Dedaye, under a joint partnership approach between respective Township Health Departments and service implementing partners.

Relief International’s intervention in the study area

Relief International started the JIMNCH-Dedaye programme on 16 June 2011 in coordination and cooperation with the Department of Health (DOH) in Dedaye Township, Ayeyarwaddy Region, Myanmar. The programme goal is to contribute to Myanmar’s achievement of Millennium Development Goals 4 and 5 by improving maternal and child healthcare through the strengthening of the township health system.

JIMNCH-Dedaye covers a population of 218,828 people (including 61,234 women between 15 and 49 years old and 18,968 children under five years old) from 90 village tracts and 3 downtown wards of Dedaye Township. JIMNCH-Dedaye supports the Dedaye township health department services of 35 Sub-
rural health centres (SRHCs), 8 Rural Health Centres (RHCs), 1 Maternal and Child Health (MCH) centre, 3 Station Hospitals and the Township Hospital. Programme activities include coordination, cooperation, and support of strengthening the township health system in terms of maternal and child health services, emergency maternal and children referral services, Expanded Program on Immunization (EPI), provision of capacity building trainings such as trainings for Community Health Volunteers [Community Health Workers (CHWs) and Auxiliary mid-wives (AMWs)] and Basic Health Staff (BHS), and facilitation of the revitalization of Village Tract Health Committees (VTHCs).

JIMNCH-Dedaye achieves its aim by assisting township health personnel, basic health staff and village health committees in establishing quality maternal, new-born and child health care system. Key interventions include:

1. at the township level - JIMNCH improves Township coordination, monitoring and supervision mechanism; and builds basic health staff capacity;

2. at the rural health centre level - JIMNCH ensures accessibility of essential maternal and child health care services as well as strengthens coordination, monitoring and supervision mechanism; and

3. at the community level - JIMNCH empowers communities to actively plan, access and monitor health services and practices through the revitalization of village health committees, supporting committee members to participate in rural health centre meetings, and provision of emergency referral funds.
Rationale and objectives

Rationale

The rationale for this study was that two years had passed since Relief International (RI) and the DOH implemented the JIMNCH programme in Dedaye township, and five years since the area was struck by Cyclone Nargis. The study was conducted as part of regular monitoring and evaluation of the programme, but also to identify current attitudes and potential future trends in decision making regarding these issues.

Objectives

General objectives  The general objective of this study was to describe knowledge, attitudes and practices among female heads of households of child-bearing age, regarding a) delivery with a skilled birth attendant, b) delivery at health facilities, and c) contraception.

Specific objectives  The specific objectives of this study were:

1. To describe the annual trends of coverage of both birth attendant and facility-based delivery since Cyclone Nargis, and to determine whether there has been an improvement since RI began their activities;

2. To describe current preferences for birth attendant and facility-based delivery; and

3. To describe current practices regarding contraception, including awareness and ever-use of different methods, provision, motivations for use, and satisfaction rating of the preferred method.
Methods

Study design

This was a two-stage cluster sampling survey.

The study area consisted of the entire catchment area of the JIMNCH programme in Dedaye, i.e. 90 village tracts and 3 downtown wards.

The study population included all people living in the villages in the study area. The most recent population estimation, derived from Health Management Information System (HMIS) 2012, estimated the total population living in the study area at 214,181 people (including 59,658 women between 15 and 49 years old and 18,207 children under five years old). However, due to sensitivities related to questions regarding births at the time of conducting the survey, it was decided to exclude Muslim villages from the study.

Sampling method

A sample size of 875 households (assuming average household size of 4.5 persons, calculated based on an estimated 47,409 households in Dedaye township, and the HMIS 2012 report on fertility trends. The expected Skilled birth attendant (SBA) coverage was approximately 50% [1], the annual mean number of children born per Female head of household (FHH) was estimated to be 0.06 (taken from HMIS). The desired precision was 5%, and we assumed a design effect of 2.

The number of subjects necessary, and households to visit, has been chosen as a function of the estimated annual proportion of births delivered by SBA as this indicator required the largest sample size. The number of clusters from which this sample was selected was chosen as 30, according to logistic and timing constraints. Consequently, a minimum of 30 households had to be investigated in each cluster.

A two-stage cluster sampling method was used during this survey. The sampling frame was constructed from a list of all villages within Dedaye township, and their respective populations.

- First level: 30 clusters were selected from a list of all villages within Dedaye township, using a probability of allocation proportional to the respective population size, or Probability proportional to size (PPS) sampling [2, 3]. The procedure was performed using the tool Emergency
Nutrition Assessment (ENA) [4], which has an internal function for PPS cluster selection.

- Second level: 30 households were randomly selected within each cluster.

Within each of the villages selected, the first household was selected using the method of spinning a pen, pointing in a randomly-selected direction from the centre of the village [5, 6]. The survey team walked in this direction to the end of the village. Standing at the edge of the village, the pen was spun once more, and the houses were counted along this line until the edge of the village was reached. One of the counted houses was selected (using a random number table) as the first to be surveyed. The subsequent household was selected according to physical proximity (the nearest visible house when standing with one’s back to the front door of the household just surveyed), until the desired number of households (30) had been interviewed.

Study implementation

A team of 28 enumerators were recruited from among the local population in Dedaye. They were selected on the basis of minimal criteria (basic literacy and numeracy, fluency in both English and Myanmar, and involvement in prior surveys). These 28 survey enumerators were divided into seven teams, in each of which was one supervisor from the permanent RI team.

Having selected each household to visit, these survey enumerators introduced themselves to the appropriate head of household, explaining the purpose of the survey and reading the informed consent document in the presence of the FHH. Respondents were free to refuse to participate, and to withdraw participation at any time during interview. Consenting FHHs were then interviewed in a private space where confidentiality could be assured.

The survey consisted of three parts: a household survey addressing:

1. questions regarding knowledge, attitudes and preferences of FHHs regarding birth attendance (appendix 0.2);
2. questions regarding knowledge, attitudes and preferences of FHHs regarding contraception (appendix 0.2);
3. questions regarding recent birth practices (appendix 0.3).

After finishing each survey form, the survey enumerator selected the next household for inclusion by standing with their back to the door of the finished
household and selecting the nearest household to the left. This process was
continued until the desired sample size in each cluster had been reached.

Data collection forms were collected at the end of each day by survey
supervisors, who checked the forms for accuracy and completeness together
with the survey implementers. Three data entry clerks entered the data,
which was checked for accuracy and consistency each day after the data had
been entered.

**Training of survey enumerators**

Survey enumerators attended 2 days of training before starting data collec-
tion. The first day was dedicated to training on the aims of the survey, the
importance of data collection and how to collect data avoiding selection, in-
formation and measurement biases. Training consisted of an intensive review
of the questionnaires and role-plays, and methodology for assessing malnu-
trition. Survey enumerators were given a reference guide to keep with them
at all times in the field (appendix 0.4). When questions arose that could not
be answered by this guide, enumerators would call the survey supervisors,
who had been provided with mobile telephones and sufficient credit to call
back and respond to questions.

The second day was spent on the field with the survey enumerators in
order to test the study instruments and verify data collection skills. The
data entry clerks were also trained in entry of the collected data.

**Data management and analysis**

Completed data collection forms were collected at the end of each day by the
principal investigators, and any abnormal or missing values were discussed
with the team supervisors, and rectified with their aid (whenever possible).
Data entry into EpiData 3.1 software [7] was performed by three data entry
clers. Data cleaning was done to check for inconsistencies in data entry and
responses. Data analysis was conducted using R 3.0.1 [8]. Paper data was
stored at the RI office in Dedaye town. At the end of the survey, all paper
data was transferred to the RI offices in Yangon, where they will be stored
under lock and key for two years, and then destroyed.
Ethical considerations

The study was conducted in accordance with the Helsinki declaration. Authorities in the study area and head of villages selected for the study were informed via letters or personal visits before the field part of the study started. When arriving at a new cluster site, study teams first visited the head of the village to inform him again about the purpose of the study and to seek permission. Households were only interviewed after giving informed written consent (see appendix 0.5).
Results

Household description

We replaced three selected clusters before implementing the survey: two were geographically inaccessible during rainy season; one was a downtown ward with a predominantly Muslim population.

The location of the 30 clusters selected for inclusion in the survey are shown in figure 1.

Figure 1: Numbered locations of clusters included in survey, Dedaye Township, Ayeyarwaddy region, Myanmar. [Dashed red line shows Dedaye township limits; green circle shows location of Dedaye town.]
Birth attendance

Recent history of delivery preference

Almost all FHHs (98.2%; 95%CI: 98.2% - 98.3%) interviewed reported their religion as Buddhist, with the remainder (1.8%) reporting their religion as Christian. Muslim villages were excluded from the survey as described in the methods section. The median household size was 5 (Interquartile range (IQR): 4 - 6). The median age of the FHHs was 35 (IQR: 29 - 41).

Approximately half of the respondents (47.3%; 95%CI: 42.4% - 52.2%) reported having given birth in the five years since Cyclone Nargis, and one quarter (25.1%; 95%CI: 21.7% - 28.5%) reported having given birth since Thingyan 2011 (when RI began their activities in Dedaye township).

513 children were reported to have been born to survey respondents during the recall period. We observed a trend of increasing proportion of children being born in subsequent birth cohorts, with the lowest proportion of children (16.2%) among cohort 1 and the highest (26.1%) among cohort 5 (Table 1).

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Proportion (%)</th>
<th>95%CI (lower)</th>
<th>95%CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.2</td>
<td>13.3</td>
<td>19.1</td>
</tr>
<tr>
<td>2</td>
<td>17.0</td>
<td>13.4</td>
<td>20.5</td>
</tr>
<tr>
<td>3</td>
<td>20.9</td>
<td>16.7</td>
<td>25.0</td>
</tr>
<tr>
<td>4</td>
<td>19.9</td>
<td>16.5</td>
<td>23.2</td>
</tr>
<tr>
<td>5</td>
<td>26.1</td>
<td>21.4</td>
<td>30.8</td>
</tr>
</tbody>
</table>

Approximately three quarters of children born during this period (74.1%; 95%CI: 68.8 - 79.3) were delivered at home (Figure 2). The majority of the remainder were born at the township hospital in Dedaye town, with fewer than 10% of deliveries taking place at other available facilities.
Figure 2: Proportion of children born since Cyclone Nargis, by (a) location and (b) birth attendant
Delivery by SBA accounted for approximately half (52%) of all births during the recall period (Figure 2). The highest proportion of deliveries were performed by Traditional birth attendant (TBA)s. Few deliveries were attended by either Lady health visitors (LHV) or AMW.

The proportion of children delivered by SBA was generally stable at around 50% (overall = 52.2%).

However, while the overall proportion of children delivered at facilities during this period was 24.5%, there was a trend of increasing facility-based delivery over time, from 12.5% (95%CI: 4.9 - 20.1) among cohort 1 to 33.3% (95%CI: 23.3 - 43.4) among cohort 5 (Figure 3).

Figure 3: Proportion of children born in facilities and with skilled birth attendant present, by annual cohort, June 2008 - July 2013

The odds of begin born at a facility were two and a half times greater in the two years since RI began activities in Dedaye than during the three previous years (Odds ratio (OR) = 2.4; p=0). There were also increased odds of delivering with a SBA in the two years since RI began activities, but this association was not significant at the 5% level (OR = 1.4; p=0.1).

Between one half and two-thirds of respondents (58.4%; 95%CI: 51.6 – 65.2) reported having ever given birth with a SBA, which was approximately the same as the proportion of respondents who reported having ever given
birth with AMW or TBA (59%; 95%CI: 52.6 – 65.5). There is underlying heterogeneity in the geographic distribution of these two variables, such that the likelihood of having ever delivered by SBA was greater the closer to Dedaye township (Figure 4 (a)). The opposite was true for the likelihood of having ever delivered by TBA (Figure 4 (b)), with the likelihood much greater in remote, less accessible areas.
Figure 4: Mapping of ever use of (a) skilled (SBA), and (b) traditional (TBA), birth attendant
Awareness of the availability of SBAs at health facilities was nearly universal (97.6%; 95%CI: 96.1 – 99.1). 56 FHHs (6.4%; 95%CI: 4 – 8.8) reported being pregnant at the time of the survey.

Approximately half of the respondents reported preferring to deliver at home if/when they next give birth (Table 2). The majority of the remaining respondents reported preferring to deliver at the township hospital.

Table 2: Delivery location preference

<table>
<thead>
<tr>
<th>Location</th>
<th>Estimate (%)</th>
<th>95%CI (lower)</th>
<th>95%CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home birth</td>
<td>48.7</td>
<td>41.7</td>
<td>55.7</td>
</tr>
<tr>
<td>Rural health centre</td>
<td>39.4</td>
<td>34.6</td>
<td>44.2</td>
</tr>
<tr>
<td>Sub-rural health centre</td>
<td>5.2</td>
<td>-2.5</td>
<td>12.8</td>
</tr>
<tr>
<td>Station hospital</td>
<td>3.5</td>
<td>1.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Township hospital</td>
<td>2.5</td>
<td>0.5</td>
<td>4.6</td>
</tr>
</tbody>
</table>

The underlying heterogeneity in the geographic distribution of current/future delivery preferences is shown in figure 5. Preference for either future delivery at a facility or by SBA was higher in areas closer to Dedaye township, and lowest in remoter, less accessible areas.
Figure 5: Mapping of current/future preferences for (a) facility-based delivery, and (b) skilled birth attendant (SBA)
Older respondents were significantly more likely to report preferring to deliver at a facility (OR = 1.8; p=0).

Three-quarters of respondents reported preferring to deliver with a SBA (Table 3).

Table 3: Birth attendant preference

<table>
<thead>
<tr>
<th>Birth attendant</th>
<th>Estimate (%)</th>
<th>95%CI (lower)</th>
<th>95%CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician</td>
<td>40.2</td>
<td>34.8</td>
<td>45.5</td>
</tr>
<tr>
<td>MW</td>
<td>34.0</td>
<td>26.0</td>
<td>41.9</td>
</tr>
<tr>
<td>TBA</td>
<td>18.8</td>
<td>12.3</td>
<td>25.3</td>
</tr>
<tr>
<td>AMW</td>
<td>6.1</td>
<td>1.4</td>
<td>10.9</td>
</tr>
<tr>
<td>LHV</td>
<td>0.7</td>
<td>0.1</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Older respondents were more likely to report preferring to deliver with SBA, but this was not significant at the 5% level (OR = 1.4; p=0.2).
Figure 6: Differences between age groups in delivery preferences, (a) Location, and (b) birth attendant.
Location and birth attendant preferences for future births are shown in figures 6 (a) and (b), respectively.

**Perceptions of delivery alternatives**

Among respondents reporting a preference for delivery with a TBA or AMW, or at home, the biggest motivating factor was cost, with more than half (52.5%; 95%CI: 41.6% - 63.5%) having reported this as an important factor (Table 4).

**Table 4:** Reported reasons for preference for unskilled birth attendant and/or home delivery

<table>
<thead>
<tr>
<th>Reason</th>
<th>Estimate (%)</th>
<th>95%CI (lower)</th>
<th>95%CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense</td>
<td>53.4</td>
<td>43.0</td>
<td>63.8</td>
</tr>
<tr>
<td>Quality</td>
<td>32.5</td>
<td>21.4</td>
<td>43.5</td>
</tr>
<tr>
<td>Tradition</td>
<td>20.2</td>
<td>14.1</td>
<td>26.4</td>
</tr>
<tr>
<td>Distance</td>
<td>18.6</td>
<td>6.1</td>
<td>31.0</td>
</tr>
<tr>
<td>Hygiene</td>
<td>7.9</td>
<td>3.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Pressure</td>
<td>1.4</td>
<td>0.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Health education</td>
<td>1.0</td>
<td>0.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Perceived quality, distance to the facility, and a preference for a ‘traditional’ birth were also reported to be important factors. Poor perceptions of hygiene, family/peer pressure, and health education during ANC visits were not reported to be important factors.

Among respondents reporting a preference for either institutional delivery or by SBA, the biggest motivating factor was the availability of trained staff, with nearly three quarters (71.8%; 95%CI: 62.8% - 80.9%) having reported this as an important factor (Table 5).

Nearly two-thirds of respondents (63.5%; 95%CI: 55.7% - 71.4%) reported that the availability of medicines was an important motivating factor, while just over one-quarter of respondents (28.6%; 95%CI: 22.3% - 34.9%) reported the perceived quality of care available as an important factor.

The distributions of rating scores of perceptions of different aspects of institutional deliveries are shown in Figure 7, and the mean score for each (separately by delivery location preference) in Figure 8. These figures reiterate that cost is the major barrier preventing greater uptake of institutional
Figure 7: Proportional ratings of various aspects of institutional deliveries, on a scale of 1 (very poor) to 5 (excellent)
Table 5: Reported reasons for preference for skilled birth attendant and/or institutional delivery

<table>
<thead>
<tr>
<th>Reason</th>
<th>Estimate (%)</th>
<th>95%CI (lower)</th>
<th>95%CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>71.4</td>
<td>62.4</td>
<td>80.4</td>
</tr>
<tr>
<td>Medicines</td>
<td>63.1</td>
<td>55.5</td>
<td>70.7</td>
</tr>
<tr>
<td>Quality</td>
<td>29.2</td>
<td>23.0</td>
<td>35.5</td>
</tr>
<tr>
<td>Tradition</td>
<td>8.2</td>
<td>5.2</td>
<td>11.3</td>
</tr>
<tr>
<td>Hygiene</td>
<td>5.2</td>
<td>2.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Health education</td>
<td>2.1</td>
<td>1.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Pressure</td>
<td>0.5</td>
<td>-0.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

delivery. Again, distance and perceived quality were rated low, while acceptability, perceived hygiene and sanitation conditions, and overall feeling of ease were highly rated.

Figure 8: Median rating of various aspects of institutional deliveries, on a scale of 1 (very poor) to 5 (excellent)

No differences were observed in rating the cost and distance to facilities...
when analysed separately according to preferred location for next delivery (Figure 8), with both being rated poorly. However, significant differences in rating of acceptability, perceptions of hygiene/sanitation, overall feeling of ease, and quality were observed.

The distributions of rating scores of perceptions of different aspects of deliveries with SBA are shown in Figure 9, and the mean score for each (separately by birth attendant preference) in Figure 10. These figures reiterate that cost is the major barrier preventing greater SBA coverage. Acceptability, perceived hygiene and sanitation conditions, and overall feeling of ease were highly rated, while friendliness of staff and perceived quality of service were rated slightly lower.

![Graph showing distribution of rating scores of perceptions of different aspects of skilled birth attendant deliveries.](image)

**Figure 9:** Proportional ratings of various aspects of skilled birth attendants, on a scale of 1 (very poor) to 5 (excellent)

No differences were observed in rating the cost when analysed separately according to preferred birth attendant (Figure 10), which was rated poorly by all respondents. However, significant differences in rating of all other aspects were observed, with those reporting a preference to deliver with SBA rating each aspect higher than those preferring TBA or AMW.
Figure 10: Median rating of various aspects of skilled birth attendants, on a scale of 1 (very poor) to 5 (excellent)
Contraception

The reported awareness and ever use of various contraceptive methods is shown in figure 11. Awareness and usage of injectables was greatest, while reported awareness and usage of both condoms and ‘natural methods’ was low. Awareness of Intra-uterine devices (IUDs) and the pill was high, but ever use of these methods was relatively low.

![Figure 11: Awareness and usage of different contraceptive methods](image)

Overall, 57.4% (95%CI: 51.5 – 63.3) of the population reported currently using contraceptives. Reported use of condoms and natural methods was non-existent, while over half of respondents (56.6; 95%CI: 51.1 – 62) reported currently using injectables (Figure 11). Approximately one-tenth are currently using IUD, and approximately one-quarter reported currently using the pill.

Among respondents reporting currently using contraceptives, approximately two-thirds (63.9) obtain their contraceptives directly from health staff - either clinician, LHV, or Midwife (MW) (Table 6). The remainder obtain their contraceptives through the private sector, either at private clinics or private pharmacies.
More than half of those respondents reporting currently using contraceptives reported economic reasons as a motivating factor for the decision (Table 7). The next most important reason reported was that the desired family size had been reached. One-fifth of respondents reported that it was for the benefit of existing children in the household, while approximately one-tenth reported health reasons being a factor.

Both ease of obtaining contraceptives and overall satisfaction in using contraceptives were highly rated by respondents currently using contraceptives (Figure 12), with over three-quarters of respondents rating these ‘excellent’ (a score of five), and almost no respondents rating these below ‘mediocre’ (a score of three).

Few respondents reported ever having experienced difficulties in obtaining and/or using their preferred contraceptive method (6.2%; 95%CI: 3.2 – 9.1). Of those reporting ever having experienced such difficulties, more than half (58; 95%CI: 43.1 - 73) reported cost as a difficulty (Table 8). Distance and time to access, and no provider and no stock, were reported as difficulties by approximately 10 – 20% of these respondents. Few respondents reported opposition from spouse and social taboo as difficulties.
Figure 12: Proportional ratings of ease of obtaining, and overall satisfaction with, preferred contraceptive method, on a scale of 1 (very poor) to 5 (excellent)
Table 8: Reported barriers to accessing contraceptives

<table>
<thead>
<tr>
<th>Reason</th>
<th>Estimate (%)</th>
<th>95% CI (lower)</th>
<th>95% CI (upper)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>58.0</td>
<td>43.1</td>
<td>73.0</td>
</tr>
<tr>
<td>Distance</td>
<td>18.5</td>
<td>9.2</td>
<td>27.8</td>
</tr>
<tr>
<td>Time to access</td>
<td>14.8</td>
<td>5.9</td>
<td>23.7</td>
</tr>
<tr>
<td>No stock</td>
<td>11.6</td>
<td>2.7</td>
<td>20.4</td>
</tr>
<tr>
<td>No provider</td>
<td>7.8</td>
<td>0.4</td>
<td>15.2</td>
</tr>
<tr>
<td>Opposition (spouse)</td>
<td>2.3</td>
<td>-1.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Social taboo</td>
<td>0.6</td>
<td>-0.4</td>
<td>1.6</td>
</tr>
</tbody>
</table>
Discussion

Recent delivery history

Among households included in the survey, a trend of increasing proportion of children born in later years was observed, such that approximately 25% of all reported births occurred during the 12 months prior to the survey date, while just 15% of births occurred during the same period during the year following Cyclone Nargis. One possible explanation is that fertility patterns were affected by Cyclone Nargis, such that many households chose to postpone having (more) children until conditions improved. However, this may also be an artefact resulting from recall bias, which is known to increase with time since an event, leading to misclassification of when births occurred.

Trends over the five year recall period prior to the survey date indicate that, while the overall proportion of births taking place at institutions was low (of the order of 25%), there was a significant positive trend over time, increasing from 12.5% during the 12 months following Cyclone Nargis to 33.3% in the 12 months prior to the survey date. The odds of being born at a health facility were 2.4 times greater for the two years since JIMNCH was initiated in Dedaye compared with the three years previous, and while this cannot be directly attributed to the JIMNCH programme, these trends indicate that welcome progress is being made.

Among facilities at which children can be delivered, the township hospital was the favourite choice among mothers, accounting for the majority of institutional deliveries during the recall period. An important question to address is why this might be, in order to understand what could be improved at more peripheral levels to capitalise on the willingness of women to deliver at facilities. Providing at least some of these well-perceived qualities at institutions other than the township hospital would be one way to increase the proportion of children delivered at facilities.

Although the overall proportion of children delivered by SBA was relatively high compared with the proportion of institutional deliveries, there was no evidence for an improvement over time.

Approximately the same proportion of respondents reported having ever had a child delivered by a SBA as by a TBA or AMW. However, the spatial heterogeneity in responses was shown in figure . Although the questions were asked separately and are therefore independent responses, similar patterns can be observed, such that in areas with a high proportion of respondents reporting having ever had a child delivered by SBA, there tends to be a
low proportion of respondents reporting having ever had a child delivered by TBA or AMW, and vice versa. This suggests that geography has played an important role in past choices of birth attendant. In particular, ever use of SBAs was highest in areas closer to the main town of Dedaye, and lowest in more remote areas.

Current/future delivery preference

Awareness of the availability SBAs and the possibility of institutional delivery was nearly universal, and therefore we can conclude that lack of awareness is not playing an important role in delivery preferences.

Approximately half of the respondents reported preferring to deliver at a facility the next time they give birth which compares favourably with the five-year history of delivery practices, and may suggest that the trend of increasing facility-based deliveries observed during the 5-year recall period will increase, reaching at least 50% in the near future. However, it may also highlight a gap between preference and choice, where what is desirable is not actually attainable due to barriers to access. Indeed, cost and distance of health facilities, both commonly reported barriers to accessing health care, were the most poorly rated elements.

The finding that older respondents were significantly more likely to report preferring to deliver at home was unexpected, as we assumed that the younger generation would be more open to a less ‘traditional’ form of delivery. This may reflect the fact that older women may have had more experience of difficult deliveries and therefore feel more comfortable with the expertise and medicines available at facilities (particularly the township hospital). On the other hand, it may reflect the fact that barriers to health care are more pronounced for younger women, who may have less money for seeking health care. An important next step is to investigate this finding further, in order to understand this difference and attempt to bring younger women more in line with the older women. In any case, it is unfortunate that younger women reported preferring to deliver at home, as these women are those who will be delivering more children in the future, and this suggests that younger women should form the target of reinforced health education and other campaigns aimed at increasing coverage of facility-based deliveries.

Approximately three-quarters of the respondents reported preferring to deliver with a SBA the next time they give birth, which again compares favourably with the five-year history of delivery practices, and may suggest that the proportion of deliveries performed by SBAs will increase in the near
future. However, it may also highlight a gap between preference and choice, where what is desirable is not actually attainable due to barriers to access, as mentioned previously for facility-based deliveries.

No significant differences were observed in birth attendant preference by age group.

**Perceptions of delivery alternatives**

Cost was the biggest motivating factor for respondents reporting a preference to deliver at home with an unskilled birth attendant, while perceptions of quality, distance, and a preference for ‘traditional’ birth practices were also important factors. Meanwhile, the availability of trained staff and medicines, and perceptions of better quality, were motivating factors for respondents who reported a preference for institutional delivery or delivery by SBA. These findings were reflected in the poor ratings given for cost of, and distance to, facilities, and poor rating of cost of SBA. Friendliness of staff was also poorly rated, echoing anecdotal reports RI has received during JIMNCH implementation that facilities can sometimes be perceived as less friendly spaces compared with home delivery with TBAs, who are frequently part of the local community.

When we explored the ratings of aspects of institutional deliveries separately according to where respondents reported preferring to deliver, we observed significant differences in median score for quality, hygiene/sanitation, acceptability, and overall score, with those reporting a preference for home delivery consistently rating these aspects lower than those preferring to deliver at a facility. However, we observed no difference in the rating of both cost and distance, with both groups rating these poorly. This suggests that, while both groups rate these aspects poorly, it is in the other aspects where gains can be made, perhaps by addressing the poor perceptions of women reporting a preference to deliver at home. Therefore, by targeting these women with health education and other campaigns specifically addressing these concerns, it may be reasonably assumed that we would observe an increase in preference for facility-based delivery among this group of women.

Similarly, while cost of SBA was equally poorly rated by both respondents reporting a preference for SBA and those reporting a preference for TBA, there were significant differences in the rating of all other aspects. This again suggests that the opportunity for increasing the coverage of delivery by SBA lies in addressing the discrepancy in perceptions of these other aspects through health education and other targeted campaigns.
Of course, by reducing the cost and distance barrier to accessing both facility-based deliveries and SBAs, these results suggest that there would be a broad increase in preference for these among all women, and this tactic should therefore be explored as part of any strategy aiming to increase their coverage.

**Contraception**

There was almost universal awareness of at least one form of contraception, but the reported awareness of both condoms and 'natural methods' was very low. Reported awareness and use of natural methods was negligible, which may reflect a poor explanation of the definition of this term, as the withdrawal and rhythm methods are often the most commonly practiced methods in resource-poor areas. The lack of awareness, and almost non-existent use of condoms was surprising but may reflect the fact that this is a form of contraception outside of the control of women, in comparison to methods within the control of women, such as injectables, the pill, and IUDs.

The most commonly used contraceptive method was injectables, and there was a larger difference between awareness and use of the pill and IUDs, suggesting that these methods are either more difficult to obtain or are less desirable. This question should be explored further, as it may represent an opportunity to offer women a form of contraceptive for which there is an unmet demand.

Overall, current-users of contraceptives reported a high degree of satisfaction with, and few difficulties in obtaining, their chosen method. The few difficulties reported related primarily to financial cost, followed by costs in terms of distance and time to obtain, and finally to stock ruptures, but difficulties were reported by so few respondents, and the ratings were so high, that these were not important concerns.
Conclusions and recommendations

Skilled birth attendant coverage

The recent trends in skilled birth attendant coverage, and in delivery at health facilities, has been encouraging, and future trends based on currently reported preferences suggest even more progress can be made if people do not face any barriers in accessing these services. Coverage of both should continue to increase, but the considerable gains already made in recent years with the introduction of the JIMNCH programme in Dedaye township should be consolidated. This will require further efforts to reduce the barriers to access, particularly financial and geographical barriers. Specific campaigns should also target younger women to address the higher preference among these women for home delivery.

Health education campaigns should also aim to address the poorer perception of a variety of aspects of both facility-based delivery and delivery with skilled birth attendants observed among women reporting a preference for home delivery or delivery with an unskilled birth attendant. If these are addressed, there is good reason to expect SBA coverage to increase from the current level of 50% to the reported preference of 75%, while facility-based delivery coverage could increase from 35% to 50%.

Further gains could be made by addressing the reasons why women choosing to deliver at a facility rarely choose any facility other than the township hospital. Further studies should investigate why this is the case, and recommendations made to improve the service at more peripheral institutions to encourage delivery at these facilities.

The spatial patterns described herein should be used to advocate for greater focus being made on improving access to facilities and SBAs among geographically isolated communities, among whom overage of these is lower than in areas with better transport links to larger towns.

Contraception

Improving the coverage of contraception use appears to be a difficult task based on the results reported here. Awareness of, and satisfaction with, contraceptive methods was generally high, showing that these do not provide an entry point for increasing uptake. In addition, a relatively large proportion of respondents reported currently using contraception, and it is therefore
quite possible that there is little unmet need for contraception among this population.

Two potential avenues to explore include raising awareness and use of condoms, perhaps by specifically targeting men with health education campaigns, as there may currently be (or could be encouraged) an unmet need for contraception among men. Further investigation should explore this unmet need, and also the finding that there was a large gap between awareness and use of the pill and IUDs, and whether this is due to difficulty in access rather than by choice.
References


Appendix
Any household members aged <5y?

Yes

No

Where was/will be (next) oldest be delivered?

Home delivery

Institutional delivery

Why did they choose home delivery (positive aspects)?

Why did they choose institutional delivery (positive aspects)?

Why did they not choose institutional delivery (negative aspects)?

Why did they not choose home delivery (negative aspects)?

Who attended/will attend this delivery?

Non-SBA

SBA

Why did they choose non-SBA (positive aspects)?

Why did they choose SBA (positive aspects)?

Why did they not choose SBA (negative aspects)?

Why did they not choose non-SBA (negative aspects)?

Is this child the youngest in the household?

No

Yes

What does FHH plan to do for next delivery?

The same as for the most recently delivered child

Different from most recent child/no previous children

BRIEFING on benefits of SBA in facilities

Has the briefing changed where they will next deliver?

Has the briefing changed with which attendant they will next deliver?
Household questionnaire – Dedaye Township

Date: ___________ Team #: _______ Cluster #: _______ Household #: _______

Consent (signature/thumbprint): __________

Part 1: Delivery

1. Total number of household members? __________
2. Age of female head of household (FHH)? __________
3. Are you aware that babies can be delivered at health facilities with skilled birth attendants in Dedaye? YES NO
4. Did FHH give birth since Cyclone Nargis? YES NO

   *If yes, fill out child questionnaire. If no, continue with this household questionnaire!*

5. Has FHH ever given birth with a skilled birth attendant? YES NO
6. Has FHH ever given birth with an auxiliary midwife or a traditional birth attendant? YES NO
7. Is FHH currently pregnant? YES NO
8. If/when you will next give birth (circle the option):

<table>
<thead>
<tr>
<th>a. Where would be your preference for the delivery?</th>
<th>b. Who would be your preference for birth attendant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Township hospital</td>
<td>2. Lady Health Visitor (LHV)</td>
</tr>
<tr>
<td>3. Station hospital</td>
<td>3. Mid-wife (MW)</td>
</tr>
<tr>
<td>4. Rural health centre</td>
<td>4. Auxiliary mid-wife (AMW)</td>
</tr>
<tr>
<td>5. Sub-rural health centre</td>
<td>5. Traditional birth attendant (TBA)</td>
</tr>
<tr>
<td>6. Other (specify)</td>
<td>6. Other (specify)</td>
</tr>
</tbody>
</table>
9 For the following question, ask ‘why do you have these preferences’, and tick all that apply.

<table>
<thead>
<tr>
<th>a. If the response to question 6a was ‘Home birth’ OR the answer to 6b was ‘TBA’/’AMW’, what factors influenced this response?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Distance to facility</td>
</tr>
<tr>
<td>☐ Facility too expensive</td>
</tr>
<tr>
<td>☐ Better quality of service offered at home</td>
</tr>
<tr>
<td>☐ Better sanitation/hygiene conditions at home</td>
</tr>
<tr>
<td>☐ Personal preference to give birth in ‘traditional’ way</td>
</tr>
<tr>
<td>☐ Family/peer pressure to give birth in ‘traditional’ way</td>
</tr>
<tr>
<td>☐ Health education during ANC visit</td>
</tr>
<tr>
<td>☐ Other (specify)_________________________________________</td>
</tr>
</tbody>
</table>

10 What are your perceptions of institutional deliveries? Rate from 1 (very poor/discouraging) to 5 (very good/encouraging). Circle the response provided.

<table>
<thead>
<tr>
<th>Distance to facility</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of institutional delivery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Quality of service offered</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sanitation/hygiene conditions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Acceptability to give birth in ‘non-traditional’ way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overall feeling of ease</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11 What are your perceptions of skilled birth attendants? Rate from 1 (very poor/discouraging) to 5 (very good/encouraging). Circle the response provided.
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friendliness/communication skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of skilled birth attendants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of service offered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitation/hygiene conditions</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceptability to give birth in ‘non-traditional’ way</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall feeling of ease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12  Have the FHH given birth since water festival (Thingyan) 2011?  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

a. If yes, briefly describe in your own words where you delivered, what type of birth attendant there was, and why these choices were made. If there have been more than one births in this period, describe the most recent:

____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
Part 2: Contraception

13 Are you aware of the different methods of contraception available in Dedaye? (Tick all that apply)

☐ Condoms  ☐ Pill  ☐ Intra-uterine device (IUD)  ☐ Injectable  ☐ Natural methods

14 Which of these have you previously used? (Tick all that apply)

☐ Condoms  ☐ Pill  ☐ Intra-uterine device (IUD)  ☐ Injectable  ☐ Natural methods

15 Are you currently using contraceptives to prevent pregnancy? YES NO (if no, go to question 16)

a. If so, which one(s)? (Tick all that apply)

☐ Condoms  ☐ Pill  ☐ Intra-uterine device (IUD)  ☐ Injectable  ☐ Natural methods

b. Where do you obtain your contraceptives? ________________________________

☐ Govt. Health centre (hospital, RHC, SRHC)  ☐ Health staff (midwives/lady health visitors/nurses/doctors)

☐ Voluntary Health Workers (AMW, CHW)  ☐ Private clinic  ☐ Private pharmacy  ☐ Mobile clinic

☐ Other (specify)______________________________

c. What are the reasons that you use contraception? (Tick all that apply)

☐ Reached desired family size  ☐ Is better for children  ☐ Economic reasons  ☐ Health reasons

☐ Other (specify)______________________________

d. How frequently do you have difficulties obtaining your preferred contraceptive (1=Very frequently; 5=Never)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. How satisfied are you with your contraceptive method (1=Very unsatisfied; 5=Very satisfied)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

f. What problems, if any, have you experienced with your contraceptive method? Or if there is none, what are the reasons for satisfaction with using the current method?

____________________________________________________________________________________________

____________________________________________________________________________________________

____________________________________________________________________________________________
Have you ever wanted to access and use contraceptives, but could not?  YES  NO

a. If so, what barriers prevented you from accessing and using contraceptives? (Tick all that apply)

☐ Cost  ☐ Time taken to access supplies  ☐ Long distance to access supplies

☐ Social taboo  ☐ Opposition from husband  ☐ No provider available  ☐ No stock at provider
Children questionnaire – Dedaye

Date: ______/_____/______  Team #: _______  Cluster #: _______  Household #: _______

Consent (signature/thumbprint): _______

For all children born since Cyclone Nargis (one row for each child):

<table>
<thead>
<tr>
<th>Child number</th>
<th>Sex</th>
<th>Birth Cohort</th>
<th>Where child was born</th>
<th>Birth attendant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M=Male F=Female</td>
<td>1=Nargis 2008 – Thingyan 2009</td>
<td>1=Home birth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2=Thingyan 2009- Thingyan 2010</td>
<td>2=Township hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3=Thingyan 2010- Thingyan 2011</td>
<td>3=Station hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4=Thingyan 2011 - Thingyan 2012</td>
<td>4=Rural health centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5=Thingyan 2012 - Now</td>
<td>5=Sub-rural health centre</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6=Other (specify)</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1=Clinical (doctor/nurse)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2=Mid-wife</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3=Lady Health Visitor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4= Auxiliary mid-wife</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5=Traditional birth attendant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6=Other (specify)</td>
</tr>
</tbody>
</table>

For the most recently born child only, explain the reason for the choice of where the child was born, and why you chose this birth attendant:

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

Now return to continue the household questionnaire!
Surveyors guide

Survey of knowledge, attitudes, and practices
Birthing attendance and contraception
Relief International, Myanmar

Dedaye Township, Myanmar
May 2013
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1 Introduction

On 16th June 2011, Relief International began the Joint Initiative on Maternal, Newborn and Child Health (JIMNCH) programme, in coordination and cooperation with the Department of Health (DOH) in Dedaye Township, Ayeyarwaddy Region, Myanmar. The programme goal is to contribute to Myanmar’s achievement of Millennium Development Goals 4 and 5 by improving maternal and child healthcare through the strengthening of the township health system. The core objective of the “JIMNCH” programme is to increase access to essential maternal and child health services in hard-to-reach populations most affected by Cyclone Nargis.

JIMNCH-Dedaye covers a population of 218,828 people (including 61,234 women between 15 and 49 years old and 18,968 children under five years old) from 90 village tracts and 3 downtown wards of Dedaye Township.

The objective of this survey is to better understand the current attitudes and practices of the target population regarding birthing and contraception. This will provide a view of the current situation and form a baseline against which future surveys will be compared.

Before any data collection, it is important for all people involved to be familiar with all goals and expected results. It is also indispensable to master the way to pose questions and fill in the questionnaire. This manual is designed to help survey teams manage their work in the field. It represents their main guide to which they will refer during data gathering.

2 Objectives

To assess the knowledge, attitudes and practices of women of childbearing age with regards to:

1. Birthing, particularly skilled birth attendance and facility-based delivery
2. Contraception

3 Methods

3.1 Target population

All households selected for inclusion will be asked to participate. Individuals selected for interview will be the female heads of households (defined as the most senior (in either age or social rank) female member of the household) aged at least 18 years.

3.2 Selection of survey population

The survey population will be selected randomly, to ensure that each household has an equal chance of being selected. It is impossible to measure the entire population; therefore 30 clusters (each containing 30 households) will be included in the survey. This sample population will be sufficient to represent the entire catchment population. Each team will receive a list of cluster sites to survey in the area.
The survey population will be selected in two steps:

**Step 1 - Cluster selection:** The survey supervisors will randomly choose the clusters in the survey areas.

**Step 2 - Household selection:** The households will also be randomly selected; however they will be selected by the survey teams on the field. The method to do this is described further down in the manual.

### 3.3 Composition of the team

Each team will be composed of 2 people, with pre-assigned roles.

**1 team leader/supervisor:**

- In charge of survey implementation;
- Responsible for selection of households;
- Ensures that data is collected appropriately;
- Maintains contact with the person in charge of the survey;
- Determines the age of eligible children (identifies the children aged under 5 years old for the surveyor)

**1 surveyor:**

- Introduces survey team and survey objectives to chief of village or representative;
- Introduces the team to the family in an appropriate manner;
- Administers and fills in the questionnaires;
- Thanks the family for their cooperation after all the data has been gathered.

### 4 Material

- Questionnaires (always carry extra copies);
- A calendar of local events (to assist in determining the age of the children);
- Table of random numbers;
- Surveyor’s guide with summary (for referral purposes);
- Daily itinerary;
- Chalk;
- Writing board and document holder;
- Pencils with pencil case and pencil sharpener;
- Eraser;
- Notebook to write down notes when on the field;
- Backpacks;
- Large container for water;
- Hat;
- Relief International identification.
5 Survey implementation

5.1 Household identification:

5.1.1 How to select the first household to survey

1. Go to somewhere near the centre of the selected cluster area accompanied by the head of the village or their representative;
2. Randomly choose a direction by spinning a pen on the ground and noting the direction in which it points;
3. Follow the direction indicated by the pen tip;
4. Walk in this direction until the extremity of the village is reached;
5. Upon arrival at the extremity of the village, choose another direction by spinning the pen one more time;
6. Follow the direction indicated by the tip of the pen until the end of the village while counting all the houses along the straight line that you have to follow (count the houses on the left and right closest to the line) and writing down the number of each one on its door with a piece of chalk;
7. Upon arrival at the next extremity of the village, randomly choose a number (between 1 and the number of households counted) from the random number table;
8. The chosen number is the first household that should be visited.

For example, if the number of households counted is 47, a random number between 1 and 47 should be picked from the random number table. If the number is 10, visit the 10th household (indicated by the chalk number inscribed in the line) and begin the survey. However, if the number chosen is larger than 47, repeat the procedure until a number between 1 and 47 is chosen.

Figure 1: Selection of first household in the village
5.1.2 How to select the second household in the village to visit?

1. Having surveyed the 1st household, select the 2nd household by standing with your back to the door, and selecting the nearest visible household.
2. For all other households, selection is by standing with your back to the door, and selecting the nearest visible household, until the necessary number of households have been surveyed.

If there are no more houses visible, return to the centre of the site and repeat the steps. Randomly pick a new direction by spinning the pen. Find a new starting point according to the method described above.

5.2 Procedures to follow in the field:

5.2.1 How to prepare before leaving the base

1. Ensure you have all survey material with you;
2. Ensure that the drivers have full tanks of petrol and that they know how to reach the site.

5.2.2 What to do when arriving in village

1. Meet with the chief of the village (or their representative) and explain the objectives of the survey;
2. Determine where the village centre is located and go there accompanied by the head of the village or the representative.

5.2.3 What to do in the selected household

1. Meet with the head of the family and briefly explain the purpose of the visit (see ‘consent statement’);
2. Ask for the vaccination cards, the health cards or a piece of ID for the young children in the household;
3. The surveyor administers the questionnaire to the female head of household (see section on questionnaire below for further instructions). Assign a household number to the household on the household questionnaire and use the same number for the children questionnaire.

If more than one adult woman is present in the household, the one who will answer the questionnaire should be the one who has authority to speak for the others (female head of household).
A child that belongs to the household is defined as a child that eats and sleeps under the same roof as the female head of household.

To determine the age:
- Ask to see the vaccination booklet of the child and **note down the age (in months)** and write it the questionnaire.
- If no proof of age is available, use a local events calendar to estimate the age or compare the child with the child of a neighbour whose age is known. **Write down the age in months.**

5.2.4 Special cases

- **If the home is empty**
  - If the home is empty, ask a neighbour of the residents’ whereabouts. If they are expected to return before the survey team leaves the village, the survey team should return to administer the questionnaire on the same day if possible.

- **Households without children**
  - If it is determined that a selected household does not have any children aged under 5 years, **the household questionnaire should still be administered.**

- **There is more than one family in the same compound**
  - Stick to the definition of family. See how many families live there, and include them all in the survey (until 30 have been included in the cluster, but no more).

- **One husband with several wives**
  - If they are not eating out of the same pot, it is two families. You have to include both households in the survey, but only include the husband in the first family.
  - If they all eat out of the same pot and sleep in the same place you can put them all in the same family questionnaire.

- **Homes that cannot be visited**
  - If the residents of the household refuse to participate in the survey or cannot participate, write down in the notebook the family’s number and a note explaining that the home could not be visited. It is important to keep a note of the number of households that refused to participate.
  - Choose the next household by making use of the method previously described.

- **Not enough households at the site**
  - If after visiting all the households in a cluster area it is determined that there are not enough households to complete the cluster, **the closest neighbouring village must be used to complete the cluster.**
When arriving at the neighbouring village, repeat the procedure for introduction and selecting the first household.

5.2.5 What to do before leaving village
1. Ensure that previously absent households were re-visited.
2. Ensure that all equipment is present.
3. Ensure that the questionnaires were properly filled out and that no data is missing. The team leader must sign the questionnaires after they have been verified.
4. Thank the head of the village for his collaboration.

6 Questionnaires

6.1 Questions to ask while filling out the questionnaires

Fill out the household questionnaire header by indicating the number of the family visited (the number used in the child questionnaire must be the same). Ask the following questions in order and follow the instructions.

First you should explain the purpose of the survey to the FHH, and ask for written consent to participate. Try to speak to the FHH in private if possible.

• Once consent has been given, ask the questions listed in the questionnaire in order.

Part 1: Delivery

If the answer to question 4 (Did FHH have any children born since Cyclone Nargis) is ‘No’, continue with the household questionnaire. If the answer was ‘Yes’, switch to using the child questionnaire.

For each child born since Cyclone Nargis, note the following information:

• Sex: Put ‘M’ for male or ‘F’ for female
• Birth date: It is not necessary to add the day, but you should try to get the month and year of birth. If the FHH has difficulties remembering, use the event calendar
• Where child was born: put the number corresponding to the appropriate answer
• Who attended the birth: put the number corresponding to the appropriate answer

FINAL PROBE: “Were there any other children born in your household since Cyclone Nargis?”

• For the most recently born child only, note the reason for the choice of where the child was born, and why the FHH chose this birth attendant.
• Try to make brief notes using key words, not long sentences (e.g. facility too far; facility too expensive; better quality of care at hospital, etc)
Using an events calendar

In general, the child’s mother knows either the age of her child in years or the birth date (but with no official proof). In these 2 cases, it is necessary to estimate the age as accurately as possible by using the event calendar.

✓ **When the mother knows the age in years**, convert this age in months with the help of calendar and ask her questions about the circumstances surrounding the child’s birth. If there is a particular event on the calendar (for example, Christmas or the end of Ramadan) close to the child’s birth, ask the mother if her child’s birth took place before or after this event. Ask during which season was the child born: the rainy, the hot, the cold season, etc. These different pieces of information will allow us to estimate the child’s age in a more precise manner.

✓ **When the mother knows neither the age nor the date**, you will use the events on the calendar to help her remember the circumstances of her child’s birth and estimate the age in months. Ask the mother or the person taking care of the child if they remember the period or an event from that child’s birth. Ask a series of questions according to her response to locate the month and year of birth.

**Frequent errors in the age estimation**
The common errors in the age estimation in months are:

✓ Errors of + or – 12 months due to an error in the birth year.
✓ An overestimation of multiples of 12 (12, 24, 36, 48 months) due to the conversion of age in years without refining the estimation.

Now return to using the household questionnaire.

**Question 6:** Ask what would be the preference for the next delivery, in terms of:

a. Place
b. Birth attendant

Circle the correct response (circle ONLY ONE answer)

**N.B.** This question should be asked of ALL FHH, even if not pregnant – it can show what are her future plans, which is very useful information!

**Question 7:** Ask **WHY** she has these particular preferences

- If answer to 6a was ‘Home birth’ OR the answer to 6b was either ‘TBA’ or ‘AMW’, note responses in question 7a
- If answer to 6a was **not** ‘Home birth’ OR the answer to 6b was either ‘Clinician’, ‘LHV’, or ‘MW’, note responses in question 7b
- **Ask EITHER question 7a OR 7b, but NOT both**

Tick all responses provided.

**N.B.** Do not suggest responses. Instead listen to the answers volunteered by the FHH and tick these

**Question 8:** **Circle** the FHH attitude to each of the aspects of institutional deliveries in turn.

- First explain the rating system (1= very negative; 3= OK; 5= very positive)
• Circle only one response per aspect

**Question 9**: Circle the FHH attitude to each of the aspects of skilled birth attendance in turn.
- First explain the rating system (1= very negative; 3= OK; 5= very positive)
- Circle only one response per aspect

**Question 10**: Note if the FHH has given birth since the onset of the rainy season 2011 (two years ago)
- Circle the correct response
- If yes, ask the FHH to describe the delivery, and note down her experiences, paying particular attention to why she chose those options (what influenced her decisions)
  N.B. If the FHH has given birth to more than one child during this time, record the experiences of the most recent birth only!

**Part 2: Contraception**

**Question 13**: Ask FHH if she is currently using contraceptives to prevent pregnancy.

If the answer is 'No', go to question 14
If the answer is 'Yes', go to question 13a

**Question 13a**: If the answer is yes, tick all the contraceptive methods currently in use

**Question 13b**: Tick all the places where FHH obtains contraceptives

**Question 13c**: Tick all reasons for using contraception

**Question 13d**: Circle the rating for how frequently FHH has difficulties obtaining her preferred contraceptive (1=Never; 5=Very frequently)

**Question 13e**: Circle the rating for how satisfied the FHH is with the contraceptive method (1=Very unsatisfied; 5=Very satisfied)

**Question 13f**: Ask the FHH to describe any problems experienced with contraceptive method, and note the key issues mentioned. These can be of any nature – allow FHH to respond freely, and let her take her time to think before answering.
If there are no problems to mention, ask FHH to describe why she feels satisfied with her current method of contraception

**Question 14**: Ask if FHH has ever wanted to access contraceptives but could not

If the answer is 'No', there are no further questions to ask
If the answer is 'Yes', tick all barriers that prevented her from accessing &/or using contraception

At the end of the working day, the entire survey team should meet and briefly discuss the day's events. Do not hesitate to share the difficulties you are facing with your supervisor (team leader) and the people in charge of the survey. THANK YOU!
Hello. My name is _________ and I am working with Relief International.

With the agreement of the Ministry of Health, we are conducting a survey to better understand the reproductive health choices of the population living in Dedaye Township. This survey is performed in a few randomly selected households in this town or village. The aim of this survey is to know what about reproductive health choices in this village, and what influences these choices. This information will help our organisation to understand better the health situation in this area and try to find appropriate ways to help this population.

Your household has been randomly selected and we would be grateful if you agree to participate in this survey. We would like to ask you several questions to learn about the people living in your household.

All the information that you tell us will remain confidential. It is not necessary for us to know your name. You are free to participate only if you wish, and you may refuse to answer any questions at any time. It should take approximately 10-15 minutes to ask you all of the questions.

Do you have any questions for us at this point?

Do you agree to participate in this survey?