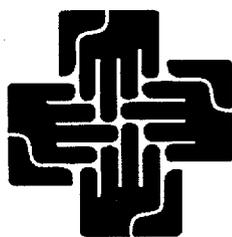


**World Relief Nicaragua  
Knowledge, Practices and Coverage Survey**

**The Sí-A-Paz Child Survival Project**

**Bluefields and Rio San Juan**

**November 1996**



**World Relief**

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## EXECUTIVE SUMMARY

The baseline Knowledge, Practices, and Coverage survey was carried out in the South Atlantic Autonomous Region (RAAS) and the Río San Juan Departments of Nicaragua from October 11-16 and October 22-25, 1996 to assess baseline levels of knowledge and practices of mothers of children 0-23 months. This information will be used to set objectives for the World Relief Nicaragua SÍ-A-PAZ Child Survival Project.

The survey followed the WHO 30 cluster model. The initial questionnaire was developed by the Private Voluntary Organization Child Survival Support Program (PVO CSSP) at Johns Hopkins University. It was then adapted by World Relief Nicaragua staff for the Child Survival Project Baseline Survey in 1993 and further revised in 1996 with recent guidelines from Johns Hopkins University.

Major findings include:

- **Child nutrition:** 48.9% of women began breastfeeding within an hour after birth; 5.6% of infants were exclusively breastfeeding to six months; 93.2% of infants 6-9 months were fed solid or semi-solid foods; 21.4% of children 20-24 months were being breastfed; and 98.4% of children 6-23 months consumed at least one type of vitamin A-rich fruit, vegetable, meat, milk, or dairy product.
- **Growth monitoring:** 68.8% of survey children had growth monitoring cards and 69.4% of these children with cards had been weighed in the three months prior to the survey, leaving 52% of children who did not have cards or were not weighed in the past three months.
- **Vitamin A:** 0.5% of children 6-23 months had received two doses of vitamin A and 1.1% of mothers had received vitamin A supplementation in the post-partum period, by card.
- **Diarrheal diseases:** 30.1% of the survey children had diarrhea in the two weeks prior to the survey and 35.9% of mothers administered oral rehydration therapy to the child during the diarrheal episode; 12.4% of mothers identified at least one sign of dehydration; and 61.3% of mothers indicated that the child recuperating from diarrhea should receive more foods, although 59% of mothers gave less semi-solid or solid foods or stopped completely during the diarrheal episode.
- **Immunizations:** 86.7% of the children age 12-23 months had access to the immunization program; 69.0% of the children age 12-23 months were fully immunized by card; and there was a 9.2% dropout rate, as defined on page 5. Eighteen percent (18.0%) of mothers had received at least two tetanus toxoid vaccines before the birth of their last child (by card).
- **Family planning:** 54.7% of the women who were not pregnant and did not want to have a child in the next two years were using a modern family planning method.
- **Nutritional anthropometry:** based on the child's weight-for-age, 56.0% of the survey children were classified as well-nourished, 32.7% as at-risk of becoming malnourished, 9.7% as moderately malnourished, and 1.6% as severely malnourished.

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## INTRODUCTION

### A. Project location

The project site is located in the buffer and agricultural development zones of the SÍ-A-PAZ ("Yes to Peace") Forest Reserve Project in southeastern Nicaragua. The entire area lies within the Department of Río San Juan and the South Atlantic Autonomous Region (RAAS) and covers a total of 34,880 square kilometers.

Up to 30 years ago, most of the project site was rain forest. Government land reform programs of the 1960s produced rapid deforestation and settlement of the northern and western segments. By 1980, settlers were scattered over much of the region. The civil war of the 1980s forced many of the settlers to serve as soldiers on both sides of the conflict, or to move as refugees to Costa Rica or as displaced people to government-designated villages. After the war ended in 1990, the area was rapidly repopulated by and continues to serve as a population safety valve for the pacific coastal and northern areas of the country.

Many families in the project area live in very inhospitable conditions, hours away from the nearest road, and with little in the way of social or economic infrastructure. Isolation and difficult access characterize the entire region. As a result, many of those to be served by the project can only be reached on foot, by horse, mule, small boat, or canoe.

The project site communities are priorities for the Nicaraguan Ministry of Health (MINSa) and have been designated by MINSa as special emergency zones. Most of the population is not served by a nearby health post and the levels of mortality and morbidity are higher in the project site than in the country as a whole.

In the project region, the rate of infant mortality is estimated to be 60/1000 live births in urban areas and 63/1000 live births in rural areas. Nationally, child mortality is 72/1000 live births; however no specific data are available for the project region. Maternal mortality in Nicaragua is 150/100,000 live births. Recent data show that the maternal mortality rate is high in Río San Juan at 930/100,000 and in RAAS at 346/100,000. No data exist on the causes of maternal mortality in the project region.

MINSa has divided the country into Local Integrated Health Attention Systems (SILAIS). The project area includes 2 SILAIS, one for Río San Juan and one for RAAS. Each SILAIS functions at four health service levels: hospitals, health centers, medical posts and base houses.

### B. Objectives of the survey

The purpose of this survey was to provide a baseline assessment of the knowledge and practices of mothers with young children in child nutrition, growth monitoring, vitamin A supplementation, diarrheal diseases, acute respiratory infections, immunizations, maternal health, family planning, and nutritional anthropometry. The data generated from the survey will be of great use to the Nicaraguan Ministry of Health. In addition, the objectives for the World Relief Nicaragua Child Survival Project will be determined based on the survey data. However, the Project will focus on the following program areas: diarrhea case management, family planning, infant and child nutrition, prevention and treatment of vitamin A deficiencies (e.g. supplementation of the child and post-partum woman, increased intake of vitamin A-rich foods by the child), breastfeeding promotion, and immunizations.

### C. Schedule of activities

|                  |  |
|------------------|--|
| October 2-8      | The Child Survival Project team planned the survey and selected the communities to be surveyed |
| October 9        | Survey team traveled to Bluefields in the South Atlantic Autonomous Region (RAAS)              |
| October 10       | Supervisors and interviewers were trained on carrying out the survey                           |
| October 11       | Continued training, practiced the survey in Bluefields   |
| October 11-16    | Data collection in the RAAS region   |
| Oct 14-17, 22-25 | Data collection in the Rfo San Juan Department   |
| Oct 22-Nov 1     | Data entered into Epi Info version 6.0   |
| November 2-22    | Data were analyzed and the report was written in English and Spanish                           |

## METHODS

### A. Survey form

The preliminary survey was developed at CSSP at Johns Hopkins University. This survey form was then translated and revised for the Child Survival Project Baseline Survey carried out in 1993 and further revised and up-dated in 1996 with guidelines from Johns Hopkins University.

The survey was designed to be administered to mothers of children under 24 months of age and was composed of 74 questions. The survey topics were arranged as follows:

| <u>Questions</u> | <u>Topics</u>                                   |
|------------------|---|
| 1-14             | Demographic information                         |
| 15-32            | Child nutrition                                 |
| 33-36            | Growth monitoring and vitamin A supplementation |
| 37-45            | Diarrheal diseases                              |
| 46-50            | Acute respiratory infections                    |
| 51-56            | Immunizations                                   |
| 57-68            | Maternal health                                 |
| 69-72            | Family planning                                 |
| 73-74            | Child nutritional anthropometry                 |

English and Spanish versions of the questionnaire are shown in Appendices A and B, respectively.

### B. Determination of sample size

Sample size was calculated using the following formula:

$$n = z^2 (p q) / d^2$$

where **n** = sample size; **z** = statistical certainty chosen;

**p** = estimated prevalence/coverage rate; **q** = 1 - p; and **d** = degree of precision.

The **p** value was defined by the coverage rate that requires the largest sample size (**p** = 0.5). The margin of error or **d** value was set at 0.1. The statistical certainty chosen was 95% (**z** = 1.96). The resulting sample size needed (**n**) was determined to be:

$$\begin{aligned} n &= (1.96 \times 1.96) (.5 \times .5) / (.1 \times .1) \\ n &= (3.84) (.25) / .01 \\ n &= 96 \end{aligned}$$

In order to compensate for bias which enters the survey from interviewing persons in clusters (rather than randomly selecting 96 persons), the sample size of 96 should be doubled. However, experience has shown that a minimum sample of 210 (7 per cluster) should be used with the given values of **p**, **d** and **z** (Henderson et al., 1982). To further eliminate bias and to take into account possible non-respondents, the sample size of 270 was chosen (9 per cluster).

Ninety-five percent confidence intervals for some of the survey results were calculated using the following formula:

$$p \pm z [\text{square root of } (p q / n)]$$

where **p** = proportion of survey population; **z**=statistical certainty (for 95%, **z** = 1.96); **q** = 1-**p**; and **n** = sample size.

For example, if the proportion of children in the survey who were immunized with measles vaccine is 61% and **n** = 270:

$$\begin{aligned} 95\% \text{ Confidence Interval (95\% CI)} &= 0.61 \pm 1.96 (\text{square root of } [(0.61 \times 0.39) / 270]) \\ &= 0.61 \pm 1.96 [\text{square root of } (0.2379 / 270)] \\ &= 0.61 \pm 1.96 (\text{square root of } 0.0008811) \\ &= 0.61 \pm 1.96 \times 0.029684 \\ &= 0.61 \pm 0.0582 \\ &= 0.61 \pm 0.06 \\ &= 0.55 - 0.67 \end{aligned}$$

In other words, we are 95% sure that the actual proportion of children in the survey region who have the measles vaccine is between 55% and 67%.

### C. Selection of the sample

The 30 cluster methodology was used, based on "probability proportionate to size," taking a community as a cluster site. The list of communities with their respective population sizes was used to draw the sample. The sampling interval was calculated by dividing the total population by 30. Two communities fell within the sampling interval. These two communities were then written on two pieces of paper and then one was randomly selected out of a bowl. The sampling frame is shown in Appendix C.

The starting point for surveying each cluster was determined in the following manner for small communities: the center of the community was located and a random direction was selected. The first household to be approached was randomly chosen among all the houses in a straight line. The second and subsequent households were the ones which were nearest to the previous one.

In each cluster, nine mothers were interviewed. In cases where the mother was not available at the time of the interview, another household was chosen (the household nearest to the last). In the case where there were two children under 24 months, the mother was questioned on the younger child.

#### D. Training of supervisors and interviewers

Five supervisors and six interviewers from World Relief Nicaragua staff were selected prior to the training. Arrangements were also made to have seven Bluefields SILAIS staff members trained as interviewers for the RAAS region. Two days of training were given to the supervisors and interviewers by Aminta Ferrufino, the World Relief Nicaragua Child Survival Project Director. All but two members of the World Relief Nicaragua staff had participated in collecting data for at least one previous knowledge, practices and coverage survey for a child survival project.

During the first day of training, supervisors and interviewers were trained on the following: purpose of the survey, selection of sample size, detailed review of the survey, the roles of supervisors and interviewers, interviewing techniques, role plays, and discussion.

Both supervisors and interviewers were present for the second day of training which was devoted to the following: proper techniques for weighing the child, practicing the survey in a nearby community (not one of the clusters selected), and discussion.

#### E. Data collection

Data collection was conducted over two separate time periods in mid-October, to allow staff time to participate in the national elections held on October 20. Two hundred seventy mothers with children under two years of age were interviewed. The average interview was completed in 25 to 35 minutes. It was necessary to substitute five of the cluster sites with the next nearest community due to the lack of children less than two years of age and impassible rivers.

#### F. Data analysis

Data entry and analysis was performed by Helena Pachón, who has experience using statistical programs, using the Epi Info version 6 software (Coulombier et al., 1994). The data were entered twice and verified for intra-survey consistencies. Frequencies were then calculated and the anthropometric data were compared to international growth standards established by the World Health Organization.

#### G. Key indicators

The principal indicators used in this report are described below.

- 1      Infants breastfed in the first hour after delivery =  
100 x (infants who were put to the breast in the first hour after delivery) / (all the survey children)
  
- 2      Exclusive breastfeeding =  
100 x (infants 0, 1, 2, 3, 4 and 5 months old for whom breastmilk is the only source of calories and do not consume other liquids or foods) / (all infants in the survey 0-5 months old)
  
- 3      Persistence of breastfeeding =  
100 x (children 20, 21, 22, and 23 months old who are still breastfed) / (all survey children 20-23 months old)

- 4 Infants eating solid or semi-solid food =  
 $100 \times (\text{infants 6, 7, 8, and 9 months old who are fed soft foods, fruits, vegetables, meats, beans or dairy products}) / (\text{all survey infants 6-9 months old})$
- 5 Children eating at least one vitamin A-rich food other than breastmilk =  
 $100 \times (\text{children 6-23 months old who eat yellow fruits or vegetables, green leafy vegetables, meat, milk, or dairy products}) / (\text{all survey children 6-23 months old})$
- 6 Children who received two doses of vitamin A =  
 $100 \times (\text{children 6-23 months whose immunization or growth monitoring card indicates they received at least two doses of vitamin A}) / (\text{all survey children 6-23 months including those without an immunization or growth monitoring card})$
- 7 Children treated with oral rehydration therapy =  
 $100 \times (\text{children with diarrhea in the past two weeks who were treated with oral rehydration salts, sugar-salt solutions, cereal-based solutions, or liquids}) / (\text{all the survey children who had diarrhea in the past two weeks})$
- 8 Mothers who identified signs or symptoms of dehydration =  
 $100 \times (\text{mothers who identified at least one sign or symptom of dehydration}) / (\text{all survey mothers})$
- 9 Mothers who indicated that the child recuperating from diarrhea should receive a greater amount of food =  
 $100 \times (\text{mothers who indicated that the recuperating child should receive smaller, more frequent meals; more food than usual; or high-calorie foods}) / (\text{all survey mothers})$
- 10 Mothers who sought help from trained health professionals for their child with cough or difficulty breathing =  
 $100 \times (\text{mothers who sought help at the hospital, health center or post, or private physician or clinic}) / (\text{all the survey children with cough or difficulty breathing in the past two weeks})$
- 11 Access to the immunization program =  
 $100 \times (\text{children 12-23 months whose immunization cards indicate they received DPT1}) / (\text{all survey children 12-23 months old including those without immunization cards})$
- 12 Completely immunized =  
 $100 \times (\text{children 12-23 months old whose immunization cards indicate they received BCG, DPT 1-3, OPV 1-3, and Measles 1}) / (\text{all survey children 12-23 months old including those without immunization cards})$
- 13 Dropout rate =  
 $100 \times (\text{children 12-23 months whose immunization cards indicate they received DPT1}) \text{ minus } (\text{children 12-23 months whose immunization cards indicate they received DPT3}) / (\text{all survey children 12-23 months whose immunization cards indicate they received DPT1})$
- 14 Mothers who received two or more tetanus toxoid vaccines =  
 $100 \times (\text{mothers who received two or more tetanus toxoid vaccines before their youngest child was born, according to their prenatal care card or other document}) / (\text{all the survey mothers including those without a prenatal care card})$

- 15 Mothers who attended at least one prenatal visit =  
 $100 \times (\text{mothers who attended at least one prenatal visit in their last pregnancy, according to her prenatal care card}) / (\text{all the survey mothers including those without a prenatal care card})$
- 16 Mothers who received vitamin A supplementation in the post-partum period =  
 $100 \times (\text{mothers who received vitamin A supplementation in the post-partum period, according to their prenatal care card or other document}) / (\text{all the survey mothers including those without a prenatal care card})$
- 17 Couples using modern family planning methods =  
 $100 \times (\text{mothers not pregnant and who do not wish to have another child in the next two years and who use modern family planning methods, excluding exclusive breastfeeding, rhythm/calendar method, withdrawal, and abstinence}) / (\text{all survey mothers not pregnant and who do not wish to have another child in the next two years})$
- 18 Well-nourished children =  
 $100 \times (\text{children whose weight-for-age Z-score is } \geq -1 \text{ standard deviation from the median weight-for-age Z-score of the World Health Organization's reference population, excludes children whose weight or age is unknown}) / (\text{all survey children whose weight and age are known})$
- 19 Children at-risk for becoming malnourished =  
 $100 \times (\text{children whose weight-for-age Z-score is } < -1 \text{ and } \geq -2 \text{ standard deviations from the median weight-for-age Z-score of the World Health Organization's reference population, excludes children whose weight or age is unknown}) / (\text{all survey children whose weight and age are known})$
- 20 Moderately malnourished children =  
 $100 \times (\text{children whose weight-for-age Z-score is } < -2 \text{ and } \geq -3 \text{ standard deviations from the median weight-for-age Z-score of the World Health Organization's reference population, excludes children whose weight or age is unknown}) / (\text{all survey children whose weight and age are known})$
- 21 Severely malnourished children =  
 $100 \times (\text{children whose weight-for-age Z-score is } < -3 \text{ standard deviations from the median weight-for-age Z-score of the World Health Organization's reference population, excludes children whose weight or age is unknown}) / (\text{all survey children whose weight and age are known})$

## RESULTS

A total of 270 women were interviewed. Four of the interviews were removed from the analysis because of inconsistencies between the vaccination dates and the birth dates recorded. The results are presented by question, beginning with question 7 (mother's age), question 10 (child's age), and then following sequentially from question 11-74. Key indicators are presented in Appendix D.

### Demographic information

7. Age, in years, of the mothers interviewed. Data were not recorded for four women who did not know their age. (n=262)

| <u>Age</u> | <u>n</u> | <u>%</u> | <u>Cumulative %</u> |
|------------|----------|----------|---------------------|
| 13         | 1        | 0.4      | 0.4                 |
| 14         | 1        | 0.4      | 0.8                 |
| 15         | 5        | 1.9      | 2.7                 |
| 16         | 10       | 3.8      | 6.5                 |
| 17         | 21       | 8.0      | 14.5                |
| 18         | 13       | 5.0      | 19.5                |
| 19         | 18       | 6.9      | 26.3                |
| 20         | 20       | 7.6      | 34.0                |
| 21         | 13       | 5.0      | 38.9                |
| 22         | 25       | 9.5      | 48.5                |
| 23         | 19       | 7.3      | 55.7                |
| 24         | 12       | 4.6      | 60.3                |
| 25         | 10       | 3.8      | 64.1                |
| 26         | 12       | 4.6      | 68.7                |
| 27         | 11       | 4.2      | 72.9                |
| 28         | 10       | 3.8      | 76.7                |
| 29         | 5        | 1.9      | 78.6                |
| 30         | 8        | 3.1      | 81.7                |
| 31         | 1        | 0.4      | 82.1                |
| 32         | 10       | 3.8      | 85.9                |
| 33         | 6        | 2.3      | 88.2                |
| 34         | 1        | 0.4      | 88.5                |
| 35         | 7        | 2.7      | 91.2                |
| 36         | 5        | 1.9      | 93.1                |
| 37         | 3        | 1.1      | 94.3                |
| 38         | 2        | 0.8      | 95.0                |
| 40         | 3        | 1.1      | 96.2                |
| 41         | 1        | 0.4      | 96.6                |
| 42         | 2        | 0.8      | 97.3                |
| 43         | 1        | 0.4      | 97.7                |
| 44         | 1        | 0.4      | 98.1                |
| 45         | 1        | 0.4      | 98.5                |
| 46         | 2        | 0.8      | 99.2                |
| 50         | 1        | 0.4      | 99.6                |
| 52         | 1        | 0.4      | 100.0               |
| Total      | 262      | 100.0    |                     |

Mean: 24.6; Standard Deviation: 7.2; Median: 23.0

10. The age of the children surveyed, in months. (n=266)

| <u>Age</u> | <u>n</u> | <u>%</u> | <u>Cumulative %</u> |
|------------|----------|----------|---------------------|
| 0          | 10       | 3.8      | 3.8                 |
| 1          | 12       | 4.5      | 8.3                 |
| 2          | 15       | 5.6      | 13.9                |
| 3          | 16       | 6.0      | 19.9                |
| 4          | 13       | 4.9      | 24.8                |
| 5          | 16       | 6.0      | 30.8                |
| 6          | 8        | 3.0      | 33.8                |
| 7          | 13       | 4.9      | 38.7                |
| 8          | 11       | 4.1      | 42.9                |
| 9          | 12       | 4.5      | 47.4                |
| 10         | 12       | 4.5      | 51.9                |
| 11         | 15       | 5.6      | 57.5                |
| 12         | 12       | 4.5      | 62.0                |
| 13         | 11       | 4.1      | 66.2                |
| 14         | 9        | 3.4      | 69.5                |
| 15         | 4        | 1.5      | 71.1                |
| 16         | 8        | 3.0      | 74.1                |
| 17         | 10       | 3.8      | 77.8                |
| 18         | 12       | 4.5      | 82.3                |
| 19         | 5        | 1.9      | 84.2                |
| 20         | 15       | 5.6      | 89.8                |
| 21         | 7        | 2.6      | 92.5                |
| 22         | 9        | 3.4      | 95.9                |
| 23         | 11       | 4.1      | 100.0               |
| Total      | 266      | 100.0    |                     |

Mean: 10.6; Standard Deviation: 6.9; Median: 17.0

11. How many years of formal schooling did you have? (n=266)

|                             | <u>n</u> | <u>%</u> |
|-----------------------------|----------|----------|
| No schooling                | 58       | 21.8     |
| Primary school, cannot read | 23       | 8.6      |
| Primary school, can read    | 133      | 50.0     |
| Secondary school            | 52       | 19.5     |

12. Do you work outside the home? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 57       | 21.4     |
| No  | 209      | 78.6     |

13. What type of income-generating work do you do? (n=266) (multiple responses possible)

|                                    | <u>n</u> | <u>%</u> |
|------------------------------------|----------|----------|
| None                               | 186      | 68.6     |
| Handicraft                         | 3        | 1.1      |
| Harvest                            | 10       | 3.7      |
| Selling agriculture products       | 7        | 2.6      |
| Selling food                       | 17       | 6.3      |
| Housemaid                          | 21       | 7.7      |
| Working in a shop or street vendor | 8        | 3.0      |
| Salaried work                      | 15       | 5.5      |
| Other                              | 4        | 1.5      |

14. When you work or are away from the house, who takes care of your youngest child? (n=266) (multiple responses possible)

|                        | <u>n</u> | <u>%</u> |
|------------------------|----------|----------|
| No one                 | 2        | 0.7      |
| Child goes with mother | 76       | 27.7     |
| Husband/partner        | 18       | 6.6      |
| Older siblings         | 54       | 19.7     |
| Relatives              | 105      | 38.4     |
| Neighbors/friends      | 8        | 2.9      |
| Maid                   | 5        | 1.8      |
| Day care center        | 3        | 1.1      |
| Other                  | 3        | 1.1      |

Child nutrition

15. Are you currently breastfeeding your youngest child? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 142      | 53.4     |

Currently breastfeeding, 95% Confidence Interval (95% CI) = 0.474-0.594

16. If you are not currently breastfeeding your youngest child, have you ever breastfed her? (n=124)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 110      | 88.7     |

17. After the delivery, when did you breastfeed your youngest child for the first time? (n=266)

|                                      | <u>n</u> | <u>%</u> |
|--------------------------------------|----------|----------|
| During the first hour after delivery | 130      | 48.9     |
| From 1-8 hours after delivery        | 32       | 12.0     |
| More than 8 hours after delivery     | 57       | 21.4     |
| Does not remember                    | 33       | 12.4     |
| Never breastfed                      | 14       | 5.3      |

INDICATOR 1. Infants breastfed in the first hour after delivery (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 130      | 48.9     |

INDICATOR 2. Infants six months of age or younger who were exclusively breastfeeding (n=53)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes |          | 6.1      |

Exclusively breastfeeding, 95% CI = 0.015-0.173

INDICATOR 3. Persistence of breastfeeding among women with children 20-23 months of age (n=42)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 9        | 21.4     |

Persistence of breastfeeding, 95% CI = 0.090-0.338

18-26. Are you giving your youngest child... (n=266)

|  | <u>n (yes)</u> | <u>%</u> |
|--|----------------|----------|
| 18. Water, tea or coffee                     | 242            | 91.0     |
| 19. Cow, goat, soy or powdered milk          | 206            | 77.4     |
| 20. Soft foods (e.g. atol, tortilla, purees) | 197            | 74.1     |
| 21. Fruit                                    | 179            | 67.3     |
| 22. Yellow fruits or vegetables              | 163            | 61.3     |
| 23. Green leafy vegetables                   | 33             | 12.4     |
| 24. Meat or fish                             | 164            | 61.7     |
| 25. Beans or nuts                            | 159            | 59.8     |
| 26. Dairy products                           | 195            | 73.3     |

27. Are you adding sugar or honey to your youngest child's food? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 241      | 90.6     |

28. Are you preparing your youngest child's food with oil or lard? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 208      | 78.2     |

29. Are you adding iodized salt to your youngest child's food?\* (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 205      | 77.1     |

\*verified by asking women about the packaging of the salt they used, as the nationally iodized salt comes in plastic bags

INDICATOR 4. Infants 6-9 months of age who were being fed solid or semi-solid foods (n=44)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 41       | 93.2     |

INDICATOR 5. Children 6-23 months old who were fed at least one type of vitamin A-rich food (n=184)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 181      | 98.4     |

30. When should a mother start introducing foods other than breastmilk? (n=266)

|                        | <u>n</u> | <u>%</u> |
|------------------------|----------|----------|
| Before 4 months of age | 94       | 35.3     |
| From 4 to 6 months     | 65       | 24.4     |
| Around 6 months        | 44       | 16.5     |
| After 6 months of age  | 36       | 13.5     |
| Does not know          | 27       | 10.2     |

31. What is the name of the vitamin that helps prevent night blindness? (n=266)

|                     | <u>n</u> | <u>%</u> |
|---------------------|----------|----------|
| Vitamin A           | 21       | 7.9      |
| Other/does not know | 245      | 92.1     |

32. Which foods contain vitamin A to help prevent night blindness? (n=266) (multiple responses possible)

|                      | <u>n</u> | <u>%</u> |
|----------------------|----------|----------|
| Green vegetables     | 14       | 5.3      |
| Yellow fruits        | 42       | 15.8     |
| Meat/fish            | 11       | 4.1      |
| Breastmilk           | 9        | 3.4      |
| Egg yolks            | 7        | 2.6      |
| Others/does not know | 209      | 78.6     |

|                             | Child's age in months |               |               |                 |                 |                 |                 |                 |
|-----------------------------|-----------------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                             | 0-3<br>(n=53)         | 4-6<br>(n=37) | 7-9<br>(n=36) | 10-12<br>(n=39) | 13-15<br>(n=24) | 16-18<br>(n=30) | 19-21<br>(n=27) | 22-23<br>(n=20) |
| Food group                  | %                     | %             | %             | %               | %               | %               | %               | %               |
| Breastmilk                  | 84.9                  | 70.3          | 63.9          | 43.6            | 37.5            | 40.0            | 18.5            | 25.0            |
| Water, tea, or coffee       | 64.2                  | 91.9          | 100.0         | 97.4            | 100.0           | 100.0           | 96.3            | 100.0           |
| Cow, goat, or soy milk      | 66.0                  | 81.1          | 83.3          | 71.8            | 75.0            | 90.0            | 77.8            | 85.0            |
| Soft foods (atol, puree)    | 32.1                  | 64.9          | 80.6          | 87.2            | 95.8            | 93.3            | 85.2            | 95.0            |
| Fruit                       | 24.5                  | 45.9          | 83.3          | 82.1            | 83.3            | 90.0            | 85.2            | 85.0            |
| Yellow fruits or vegetables | 15.0                  | 45.9          | 75.0          | 74.4            | 75.0            | 90.0            | 74.1            | 85.0            |
| Green leafy vegetables      | 3.8                   | 0.0           | 13.9          | 12.8            | 20.8            | 23.3            | 18.5            | 20.0            |
| Meat or fish                | 7.5                   | 32.4          | 72.2          | 76.9            | 87.5            | 96.7            | 85.2            | 95.0            |
| Beans or nuts               | 9.4                   | 32.4          | 72.2          | 71.8            | 83.3            | 90.0            | 88.9            | 85.0            |
| Dairy products              | 9.4                   | 54.1          | 91.7          | 97.4            | 95.8            | 96.7            | 100.0           | 100.0           |
| Add sugar or honey          | 64.2                  | 91.9          | 100.0         | 97.4            | 100.0           | 100.0           | 92.6            | 100.0           |
| Add oil or lard             | 15.1                  | 67.6          | 100.0         | 100.0           | 95.8            | 100.0           | 100.0           | 100.0           |
| Add iodized salt            | 20.8                  | 67.6          | 100.0         | 97.4            | 91.7            | 100.0           | 92.6            | 90.0            |

### Growth monitoring

33. Do you have your youngest child's growth monitoring card? (n=266)

|                   | n   | %    |
|-------------------|-----|------|
| Yes               | 183 | 68.8 |
| No, lost it       | 32  | 12.0 |
| No, never had one | 51  | 19.2 |

34. According to the card, has the child been weighed in the past three months? (n=183)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 127      | 69.4     |

35. According to the card, has the child received vitamin A supplements? (n=183)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 12       | 6.6      |

INDICATOR 6. Children 6-23 months old who received two doses of vitamin A supplements (n=184)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 1        | 0.5      |

36. How old was the child (in months) when she/he received the supplement? (n=12)

Mean: 9.3; Standard Deviation: 4.9; Median: 9.5

#### Diarrheal diseases

37. Has your youngest child had diarrhea in the last two weeks? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 80       | 30.1     |

Diarrhea in the last two weeks, 95% CI = 0.246-0.356

38. During the child's diarrhea episode, did you breastfeed... (n=45)\*

|                    | <u>n</u> | <u>%</u> |
|--------------------|----------|----------|
| More than usual    | 9        | 20.0     |
| Same as usual      | 25       | 55.6     |
| Less than usual    | 10       | 22.2     |
| Stopped completely | 1        | 2.2      |

\* 35 women no longer breastfed

39. During the child's diarrhea episode, did you provide her/him with fluids other than breastmilk... (n=70)\*

|                    | <u>n</u> | <u>%</u> |
|--------------------|----------|----------|
| More than usual    | 16       | 22.9     |
| Same as usual      | 31       | 44.3     |
| Less than usual    | 20       | 28.6     |
| Stopped completely | 3        | 4.3      |

\* 9 women were exclusively breastfeeding and one woman did not remember

40. During your youngest child's diarrhea episode, did you provide her/him with semi-solid or solid food... (n=70)\*

|                    | <u>n</u> | <u>%</u> |
|--------------------|----------|----------|
| More than usual    | 6        | 8.6      |
| Same as usual      | 23       | 32.9     |
| Less than usual    | 21       | 30.0     |
| Stopped completely | 20       | 28.6     |

\* ten women did not yet feed the child food

41. During your youngest child's diarrhea episode, what treatment did you give her/him? (n=78)\* (multiple responses possible)

|   | <u>n</u> | <u>%</u> |
|---|----------|----------|
| None  | 11       | 14.1     |
| Oral rehydration salts                                | 25       | 32.1     |
| Sugar-salt solutions                                  | 1        | 1.3      |
| Liquids   | 4        | 5.1      |
| Anti-diarrheal medicine or antibiotics                | 36       | 46.2     |
| Other<br>(e.g. anti-parasite medicine, home remedies) | 16       | 20.5     |

\* data missing for two women

INDICATOR 7. Children receiving oral rehydration therapy (oral rehydration salts, sugar-salt solutions, or liquids) (n=78)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 28       | 35.9     |

42. During your child's diarrhea episode, from whom did you seek help or advice? (n=80) (multiple responses possible)

|                       | <u>n</u> | <u>%</u> |
|-----------------------|----------|----------|
| No one                | 19       | 23.8     |
| Hospital              | 4        | 5.0      |
| Health center/post    | 26       | 32.5     |
| Private doctor/clinic | 4        | 5.0      |
| Health volunteer      | 2        | 2.5      |
| Midwife               | 1        | 1.3      |
| Relatives or friends  | 25       | 31.3     |
| Other                 | 1        | 1.3      |

43. If your youngest child had diarrhea, what signs or symptoms would cause you to seek help for the child? (n=266) (multiple responses possible)

|                                    | <u>n</u> | <u>%</u> |
|------------------------------------|----------|----------|
| None                               | 4        | 1.5      |
| Vomiting                           | 55       | 20.7     |
| Fever                              | 51       | 19.2     |
| Dehydration                        | 49       | 18.4     |
| Diarrhea > 14 days                 | 83       | 31.2     |
| Bloody stool                       | 9        | 3.4      |
| Loss of appetite                   | 29       | 10.9     |
| Weak or depressed                  | 42       | 15.8     |
| Does not know                      | 66       | 15.3     |
| Other (e.g. description of stools) | 42       | 9.8      |

INDICATOR 8. Mothers who identified at least one sign or symptom of dehydration (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 49       | 18.4     |

44. What are the most important actions a mother should take when her child has diarrhea? (n=266) (multiple responses possible)

|   | <u>n</u> | <u>%</u> |
|---|----------|----------|
| Begin feeding liquids immediately                                       | 36       | 13.5     |
| Provide more liquids than usual   | 27       | 10.2     |
| Provide smaller, more frequent meals                                    | 10       | 3.8      |
| Prepare and administer oral rehydration salts                           | 110      | 41.4     |
| Take the child to the hospital/health center                            | 120      | 45.1     |
| Give the child more food than usual when recuperating                   | 6        | 2.3      |
| Withhold liquids  | 3        | 1.1      |
| Withhold foods  | 3        | 1.1      |
| Does not know   | 15       | 5.6      |
| Other (e.g. provide medicine, maintain personal hygiene, home remedies) | 113      | 42.5     |

45. In terms of feeding, what are the most important actions a mother should take when her child is recovering from a diarrheal episode? (n=266) (multiple responses possible)

|   | <u>n</u> | <u>%</u> |
|---|----------|----------|
| Provide smaller, more frequent meals          | 97       | 36.5     |
| Provide more food than usual                  | 52       | 19.5     |
| Provide high caloric foods                    | 42       | 15.8     |
| Does not know                                 | 39       | 14.7     |
| Other (e.g. provide vitamins and other foods) | 102      | 38.3     |

INDICATOR 9. Mothers who indicated that the recuperating child should receive more food than usual (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 163      | 61.3     |

Acute respiratory infections

46. Has your youngest child been ill with a cough or with difficulty breathing in the last two weeks? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 159      | 59.8     |

47. When your youngest child was ill, did she breathe rapidly or as if she was tired? (n=159)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 137      | 86.2     |

48. When your youngest child was ill, did you seek advice or help? (n=159)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 108      | 67.9     |

49. From whom did you receive help? (n=108) (multiple responses possible)

|                          | <u>n</u> | <u>%</u> |
|--------------------------|----------|----------|
| Hospital                 | 15       | 13.9     |
| Health center/post       | 58       | 53.7     |
| Private physician/clinic | 6        | 5.6      |
| Pharmacy                 | 1        | 0.9      |
| Healer                   | 2        | 1.9      |
| Midwife                  | 2        | 1.9      |
| Relatives or friends     | 29       | 26.9     |
| Other                    | 1        | 0.9      |

INDICATOR 10. Mothers who sought help from a trained health professional (n=159)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 78       | 49.1     |

50. What are the signs or symptoms of respiratory infections that would cause you to take your youngest child to a health center? (n=266) (multiple responses possible)

|                             | <u>n</u> | <u>%</u> |
|-----------------------------|----------|----------|
| None                        | 4        | 1.5      |
| Rapid or agitated breathing | 134      | 50.4     |
| Chest indrawing             | 13       | 4.9      |
| Loss of appetite            | 16       | 6.0      |
| Fever                       | 85       | 32.0     |
| Cough                       | 84       | 31.6     |
| Does not know               | 61       | 22.9     |
| Other (e.g. a cold, asthma) | 48       | 18.0     |

### Immunizations

51. Has your youngest child ever received an immunization? (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 246      | 92.5     |

52. At what age should your youngest child get the measles vaccine? (n=266)

|                        | <u>n</u> | <u>%</u> |
|------------------------|----------|----------|
| 9 months               | 53       | 19.9     |
| Other or does not know | 213      | 80.1     |

53. What is the main reason why a pregnant woman should be vaccinated against tetanus? (n=266)

|   | <u>n</u> | <u>%</u> |
|---|----------|----------|
| To protect mother and child against tetanus | 89       | 33.5     |
| To protect only the mother against tetanus  | 19       | 7.1      |
| To protect only the child against tetanus   | 46       | 17.3     |
| Other or does not know                      | 112      | 42.1     |

54. How many vaccines against tetanus does a pregnant woman need to protect the newborn from tetanus? (n=265)\*

|               | <u>n</u> | <u>%</u> |
|---------------|----------|----------|
| None          | 3        | 1.1      |
| One           | 42       | 15.8     |
| Two           | 37       | 14.0     |
| More than two | 54       | 20.4     |
| Does not know | 129      | 48.7     |

\* data missing for one woman

55. Do you have an immunization card for your youngest child? (n=266)

|                    | <u>n</u> | <u>%</u> |
|--------------------|----------|----------|
| Yes                | 217      | 81.6     |
| Lost the card      | 31       | 11.7     |
| Never had the card | 18       | 6.8      |

56. Immunization coverage for children 12-23 months of age was as follows: (n=113)

|             | <u>n</u> | <u>%</u> |
|-------------|----------|----------|
| BCG         | 91       | 80.5     |
| OPV1        | 97       | 85.8     |
| OPV2        | 93       | 82.3     |
| OPV3        | 87       | 77.0     |
| DPT1        | 98       | 86.7     |
| DPT2        | 92       | 81.4     |
| DPT3        | 89       | 78.8     |
| Measles (1) | 89       | 78.8     |
| Measles (2) | 27       | 23.9     |

INDICATOR 11. Access to the immunization program (n=113)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 98       | 86.7     |

INDICATOR 12. Fully immunized (n=113)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 78       | 69.0     |

INDICATOR 13. Dropout rate (n=98)

|      | <u>%</u> |
|------|----------|
| Rate | 9.2      |

#### Maternal health

57. Do you have a prenatal care card? (n=266)

|               | <u>n</u> | <u>%</u> |
|---------------|----------|----------|
| Yes           | *71      | 26.7     |
| Lost it       | 104      | 39.1     |
| Never had one | 91       | 34.2     |

\* includes seven women who had tetanus toxoid vaccination information on a separate immunization card.

58. Look at the prenatal care card and record the number of tetanus toxoid vaccinations the woman received. (n=71)

|             | <u>n</u> | <u>%</u> |
|-------------|----------|----------|
| None        | 6        | 8.5      |
| One         | 17       | 23.9     |
| Two or more | 48       | 67.6     |

INDICATOR 14. Mothers who received two or more tetanus toxoid vaccines (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 48       | 18.0     |

59. Look at the prenatal care card and record the number of prenatal visits she made. (n=64)\*

|             | <u>n</u> | <u>%</u> |
|-------------|----------|----------|
| None        | 6        | 9.4      |
| One         | 7        | 10.9     |
| Two or more | 51       | 79.7     |

\* excludes seven women who only had immunization cards.

INDICATOR 15. Women who attended at least one prenatal visit (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 58       | 21.8     |

60. Look at the card and record if the woman received vitamin A supplementation in the post-partum period. (n=64)\*

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 3        | 4.7      |

\* excludes seven women who only had immunization cards.

INDICATOR 16. Mothers who received vitamin A supplementation in the post-partum period (n=266)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 3        | 1.1      |

61. When you were pregnant with your youngest child, when did you go for your first prenatal visit? (n=266)

|               | <u>n</u> | <u>%</u> |
|---------------|----------|----------|
| Never went    | 81       | 30.5     |
| Month 1-3     | 90       | 33.8     |
| Month 4-6     | 64       | 24.1     |
| Month 7-9     | 21       | 7.9      |
| Does not know | 10       | 3.8      |

62. What foods should a woman eat during pregnancy to avoid getting anemia? (n=266) (multiple responses possible)

|                                  | <u>n</u> | <u>%</u> |
|----------------------------------|----------|----------|
| Meat or fish                     | 112      | 42.1     |
| Dark green leafy vegetables      | 35       | 13.2     |
| Does not know                    | 106      | 39.8     |
| Other (e.g. vitamins, bean soup) | 84       | 31.6     |

63. How much weight should a woman gain during pregnancy? (n=266)

|                             | <u>n</u> | <u>%</u> |
|-----------------------------|----------|----------|
| 8-10 kg or 17-22 pounds     | 23       | 8.6      |
| More than the baby's weight | 5        | 1.9      |
| The baby's weight           | 2        | 0.8      |
| Does not know               | 203      | 76.3     |
| Other                       | 33       | 12.4     |

64. During your pregnancy with your youngest child, the amount of food you ate was...(n=266)

|                 | <u>n</u> | <u>%</u> |
|-----------------|----------|----------|
| More than usual | 103      | 38.7     |
| Same as usual   | 76       | 28.6     |
| Less than usual | 86       | 32.3     |
| Does not know   | 1        | 0.4      |

65. What problems during pregnancy would cause you to seek help? (n=266) (multiple responses possible)

|   | <u>n</u> | <u>%</u> |
|---|----------|----------|
| None  | 8        | 3.0      |
| Bleeding  | 53       | 19.9     |
| Loss of amniotic fluid                            | 4        | 1.5      |
| Head ache   | 16       | 6.0      |
| Inflammation of hands, face or legs               | 18       | 6.8      |
| Painful urination                                 | 24       | 9.0      |
| Decreased fetal movement                          | 13       | 4.9      |
| Anemia  | 15       | 5.6      |
| Vomiting  | 25       | 9.4      |
| Does not know                                     | 83       | 31.2     |
| Other<br>(e.g. abdominal pain, signs of abortion) | 101      | 38.0     |

66. When your youngest child was born, who tied and cut the umbilical cord? (n=265)\*

|                  | <u>n</u> | <u>%</u> |
|------------------|----------|----------|
| Woman herself    | 6        | 2.3      |
| Family member    | 55       | 20.8     |
| Midwife          | 64       | 24.2     |
| Health personnel | 137      | 51.7     |
| Other            | 3        | 1.1      |

\* data missing for one woman

67. In the 40 days after the birth of your youngest child, to whom did you go for a checkup? (n=265)\*

|                  | <u>n</u> | <u>%</u> |
|------------------|----------|----------|
| No one           | 140      | 52.8     |
| Health personnel | 119      | 44.9     |
| Midwife          | 4        | 1.5      |
| Other            | 2        | 0.8      |

\*data missing for one woman

68. What problems in the first 40 days post-partum would cause you to seek urgent help? (n=266)  
(multiple responses possible)

|                               | <u>n</u> | <u>%</u> |
|-------------------------------|----------|----------|
| None                          | 16       | 6.0      |
| Fever                         | 35       | 13.1     |
| Abdominal pain                | 81       | 30.5     |
| Bleeding                      | 99       | 37.2     |
| Painful urination             | 6        | 2.3      |
| Pain or inflammation of veins | 6        | 2.3      |
| Does not know                 | 95       | 35.7     |
| Other (e.g. infection)        | 33       | 12.3     |

Family planning

69. Are you pregnant now? (n=266)

|               | <u>n</u> | <u>%</u> |
|---------------|----------|----------|
| Yes           | 27       | 10.2     |
| No            | 237      | 89.1     |
| Does not know | 2        | 0.8      |

70. Would you like to have another child in the next two years? (n=239)

|               | <u>n</u> | <u>%</u> |
|---------------|----------|----------|
| Yes           | 41       | 17.2     |
| No            | 191      | 79.9     |
| Does not know | 7        | 2.9      |

71. Are you or your husband using a method to avoid getting pregnant or to delay your next pregnancy?  
(n=192)\*

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 111      | 57.8     |
| No  | 81       | 42.2     |

\* six women do not have a husband/partner

72. What is the primary method that you or your husband are using to avoid getting pregnant or to delay your next pregnancy? (n=111)

|                         | <u>n</u> | <u>%</u> |
|-------------------------|----------|----------|
| Tubal ligation          | 36       | 32.4     |
| Injections              | 9        | 8.1      |
| Pills                   | 33       | 29.7     |
| IUD                     | 24       | 21.6     |
| Condoms                 | 3        | 2.7      |
| Exclusive breastfeeding | 1        | 0.9      |
| Rhythm/calendar         | 1        | 0.9      |
| Abstinence              | 4        | 3.6      |

INDICATOR 17. Couples using modern family planning methods (excluding exclusive breastfeeding, rhythm/calendar, and abstinence) (n=192)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 105      | 54.7     |

Nutritional anthropometry

73. Sex of the child (n=266)

|        | <u>n</u> | <u>%</u> |
|--------|----------|----------|
| Female | 123      | 46.2     |
| Male   | 143      | 53.8     |

74. Weight-for-age (n=257) \*

|                         | <u>n</u> | <u>%</u> |
|-------------------------|----------|----------|
| Well-nourished          | 144      | 56.0     |
| At-risk                 | 84       | 32.7     |
| Moderately malnourished | 25       | 9.7      |
| Severely malnourished   | 4        | 1.6      |

\* nine children were not present at the time of the survey interview and could not be weighed

INDICATOR 18. Well-nourished children (n=257)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 144      | 56.0     |

INDICATOR 19. Children at-risk for becoming malnourished (n=257)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 84       | 32.7     |

INDICATOR 20. Children moderately malnourished (n=257)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 25       | 9.7      |

INDICATOR 21. Children severely malnourished (n=257)

|     | <u>n</u> | <u>%</u> |
|-----|----------|----------|
| Yes | 4        | 1.6      |

## DISCUSSION AND RECOMMENDATIONS

### Demographic information

The mean age of the women in the survey was 24.6 years. Mothers younger than 18 years of age or older than 35 years of age are considered at high risk for complications during pregnancy and their infants are also considered at high risk for neonatal complications. Based on this criterion, 23.3% of the women surveyed were classified as high risk. The mean age of the survey children was 10.6 months.

Among the women, 30.5% were illiterate (i.e. had no formal schooling or attended primary school but could not read), and 21.4% worked outside the home, primarily as maids or selling food. When women left their homes to work or for other reasons, most of them left their youngest child with relatives (38.4%) or older siblings (19.7%). Twenty-eight percent of the women took their youngest child with them when they had to leave the home.

These data suggest that educational materials used must take into account the literacy level of the population. Additionally, since other family members are also the children's caretakers, when possible these individuals should be included in educational programs.

### Child nutrition and anthropometry

Among the women surveyed, 94.7% had initiated breastfeeding. Forty-nine percent of the women initiated breastfeeding in the first hour after delivery. Both of these indicators exceed national averages (91.9% and 40.5%, respectively) (PROFAMILIA, 1993). 5.3% of mothers never breastfed, and 21.4% waited more than 8 hours to initiate breastfeeding. Among infants less than six months of age, 5.6% were being exclusively breastfed and over 90% were introduced to liquids other than breastmilk.

Contrary to recommendations, these younger infants were also fed other non-breastmilk foods including soft foods (64.9%) and fruits (45.9%). Notably, 35.3% of the women surveyed believed that mothers should begin introducing foods to the infant before four months of age. Among infants age six to nine months, 93.2% were being fed solid or semi-solid foods, as recommended.

Among all the children in the survey, the percentage who were being breastfed declined with increasing age. Among women with children 20-23 months of age, only 21.4% were breastfeeding at the time of the survey. In contrast, the use of other types of milk remained fairly constant across the age groups. Across all age groups, the type of food least often consumed by the children was green leafy vegetables.

Most women did not know the name of the vitamin that helps to prevent night blindness and nearly three-quarters of the women were unable to identify food sources of vitamin A. Nevertheless, 98.4% of women with a child 6-23 months of age were feeding the child at least one type of vitamin A-rich food.

An additional source of information on the children's nutritional status is the weight-for-age indicator, which is used to identify populations that currently have or have had nutritional problems. However, a limitation of this indicator is that it does not allow one to distinguish between a tall, malnourished child and a short, well-nourished or obese child (O'Donnell et al., 1994). Despite this caveat, weight-for-age is a frequently used measure in health and nutrition surveys.

Based on the weight-for-age indicator, the survey children were classified as well-nourished (56.0%), at-risk for becoming malnourished (32.7%), moderately malnourished (9.7%), or severely malnourished (1.6%). These figures are similar to those estimated by the Ministry of Health, with 20% of children under six years of age are at-risk for becoming malnourished and 13% malnourished to some degree (MINSA, 1994).

The food-intake data indicate a need to emphasize exclusive breastfeeding through at least six months and continued breastfeeding through 24 months. Although the survey results indicate that most of the children received a vitamin A-rich food, it is unknown in what quantity or with what frequency these foods were fed to the child. Additionally, in a recent national study on micronutrient deficiencies, two out of every three children were classified as vitamin A deficient or at-risk for becoming vitamin A deficient (MINSA, 1994). Therefore, it will be important to support community health personnel in their endeavors to educate women on the importance and benefits of vitamin A, as well as on the identification and preparation of available vitamin-A rich foods in adequate quantities.

The weight-for-age data are an indication of the nutritional status of the children, suggesting that 11.3% of the children were calorie-deficient recently or at one time, because of insufficient food intake or incomplete nutrient utilization due to infections or lack of needed micronutrients. Effective integration of the child survival program areas (e.g. educating mothers about micronutrient-rich foods, treatment of diarrheal diseases, vitamin A supplementation, timely immunizations, and effective family planning) can improve the nutritional status and health of the child 0-23 months of age.

#### Growth monitoring

Nearly 70% of mothers had their youngest child's growth monitoring card, although 19.2% were never given a card. A review of the cards demonstrated that 69.4% of the children had been weighed in the three months prior to the survey. Furthermore, among children 6-23 months, only 0.5% had received at least two doses of vitamin A supplements, by card.

These data suggest that growth monitoring cards need to be given to all mothers through the existing health system, that mothers need to be educated on the importance of children attending growth monitoring sessions and keeping the growth monitoring cards. Furthermore, vitamin A coverage needs to be expanded to reach a greater number of children and recorded on GM cards.

#### Diarrheal diseases

Among the survey children, 30.1% had had diarrhea in the two weeks prior to the survey. In comparison, a survey reported the national prevalence at 17.6% (PROFAMILIA, 1993). Women followed the following feeding practices during management of their child's recent diarrheal episode: 75.6% who were breastfeeding breastfed the same amount or more than usual, 67.2% provided the child with the same or more fluids (other than breastmilk) than usual, and only 41.4% provided the child with the same or more

solid and semi-solid foods than usual. Notably, women were more likely to maintain or increase liquid feedings than to maintain or increase feedings of solid or semi-solid foods. This trend is consistent with the trend observed in the 1992-1993 national health survey (PROFAMILIA, 1993). To treat the diarrhea, 35.9% of survey women provided an oral rehydration therapy.

An approximately equal percentage of women sought help for their child's diarrhea from relatives or friends (30.5%) as from the health center or post (31.7%). Eighteen percent (18.4%) of women surveyed could identify at least one sign or symptom of dehydration. When asked about feeding the child recuperating from diarrhea, 61.3% of women indicated they should provide an increased quantity of food.

These results suggest that future programming efforts should be directed towards disseminating information on the recommended uses of solid and semi-solid foods for the child with diarrhea and for the child recuperating from diarrhea, the preparation and use of oral rehydration therapies, and identification of the signs of dehydration. Exclusive breastfeeding for children under 6 months and continued breastfeeding during diarrhea will also be emphasized as prevention and treatment messages respectively.

#### Acute respiratory infections

Nearly 60% of the survey children were ill with cough or with difficulty breathing in the two weeks prior to the survey. Nationally, the prevalence of acute respiratory infections was 68.2% (PROFAMILIA, 1993). Among the survey children who were ill, 86.2% breathed rapidly or as if they were tired. Fifty percent of mothers sought help or advice at the hospital, health center or post, or private physician or clinic. At the national level, only 33.1% of women sought treatment for their sick child at a public or private health unit (PROFAMILIA, 1993). Women identified these symptoms of pneumonia as those that would cause them to take their youngest child to the health center: rapid or agitated breathing (50.4%) and chest indrawing (4.9%).

As a result of these findings, educational messages should focus on seeking treatment from a trained health professional and identifying the signs and symptoms of pneumonia. Although the project will not be focusing on pneumonia because of the lack of services, this information will be shared with SILAIS in the project area.

#### Maternal health

Although the project has decided to eliminate maternal care as a separate intervention the information collected in the KPC is reported in this section. Please note that maternal tetanus toxoid is now part of the immunization strategy, and micronutrients are part of the nutrition strategy. Due to the high level of obstetrical emergencies and appalling travel times for women in the most rural areas, the project has decided to focus its energies on increasing access to family planning in the project area, in hopes of preventing pregnancies.

Approximately one-quarter of the women surveyed had the prenatal care card for their last pregnancy. Eighteen percent of the survey women had received two or more tetanus toxoid vaccines and 21.8% had attended at least one prenatal visit. In the recent national health survey among mothers with a child 5 years of age or younger, 71.5% had received prenatal care and 78.3% had received at least one tetanus toxoid vaccine (PROFAMILIA, 1993). When all the survey women were asked about their first prenatal visit, 7.9% reported attending their first prenatal visit in their third trimester of pregnancy. This is lower than the percentage reported among women in the national health survey (11.7) (PROFAMILIA, 1993). For the current survey, it was noted on three women's cards that they had received vitamin A supplementation in the post-partum period.

Three-quarters of the women did not know how much weight a woman should gain during pregnancy. One-third of the women reported eating less food during their last pregnancy than they usually eat. Fifty-one percent of the women's births were attended by health personnel, 24.2% by midwives, and 20.8% by family members. At the national level, 61.0% of births were attended by health personnel, 26.4% by midwives, and 9.2% by family members (PROFAMILIA, 1993).

Fifty-seven percent of the survey women were examined in the first 40 days post-partum; this percentage is higher than that observed among women surveyed in the national health survey (30.5) (PROFAMILIA, 1993). The women in the current survey primarily identified bleeding and abdominal pain as those that would cause them to seek help in the post-partum period.

A large percentage of women were not given a prenatal care card or had lost it, suggesting that increased distribution of the cards by the health system and heightened maternal awareness of the importance of keeping the card are warranted. Educational emphasis can be placed on the importance of receiving early prenatal care, of monitoring all visits with the prenatal care cards, and of gaining adequate weight during pregnancy. Since 45% of the births were attended by midwives or family members, these individuals should, where possible, be included in educational efforts to reduce birth-related deaths, to monitor women in the post-partum period, and to identify when women should be referred to other health personnel.

#### Immunizations

Eighty-two percent of the mothers surveyed had an immunization card for their 0-23 month old youngest child. Among the survey children aged 12-23 months, 86.7% had access to the immunization program, 69.0% were fully immunized, and there was a dropout rate of 9.2%. In comparison, the 1992-93 national survey found that 74.8% of children age 9-59 months were fully immunized (PROFAMILIA, 1993).

Among all the women surveyed, 19.9% identified nine months as the age when their youngest child should receive the measles vaccine. One-third of the women correctly identified the main reason why a pregnant woman should be vaccinated against tetanus. Forty-nine percent of the women did not know how many vaccines against tetanus a pregnant woman should receive. Eighteen percent (18%) of the women surveyed had received two or more tetanus toxoid vaccines before the birth of their last child (by card). In the recent national health survey among mothers with a child 5 years of age or younger, 78.3% had received at least one tetanus toxoid vaccine (PROFAMILIA, 1993). One reason for the disparity between these percentages could be that a large percentage of women were not given a prenatal care card (34.2%) or had lost it (39.1%), suggesting that increased distribution of the cards by the health system and heightened maternal awareness of the importance of keeping the card are warranted.

These data suggest that the Project should emphasize supporting the Ministry of Health in order to increase the administration of immunizations to child and pregnant women, and educating women about the proper timing of the first measles vaccination, the importance of keeping the immunization card, and the importance of tetanus toxoid vaccinations for the pregnant woman and unborn child.

#### Family planning

Among the 192 women who were neither pregnant nor who wanted to have a child in the next two years, 57.8% were using a modern family planning method. This percentage is on par with the percentage of women in the national health survey who did not want another child and who were using modern family planning methods (55.7) (PROFAMILIA, 1993). The main methods used by women in the current study included tubal ligation, pills, and intra-uterine devices (IUDs).

## SURVEY COSTS

The total cost of the survey was US\$3,082.97. The expenses were paid in córdobas and, for the purposes of this report, converted to dollars at the exchange rate of 8.75 córdobas per dollar.

| <u>Budget item</u>   | <u>Cost (in US dollars)</u> |
|--|-----------------------------|
| Travel (e.g. fuel for automobiles and boats; mule rentals)   | 671.94                      |
| Food and lodging; salary for interviewers                    | 2,117.89                    |
| Photocopying   | 11.43                       |
| Materials (e.g. backpacks, scales, rain coats, rubber boots) | 256.57                      |
| Guides for remote regions                                    | 13.71                       |
| Technical assistance with data analysis                      | 11.43                       |
| <b>Total</b>   | <b>3,082.97 dollars</b>     |

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APPENDIX A. English version of baseline survey.

**Baseline Survey, 1996-Knowledge, Practices and Coverage  
Child Survival Project, World Relief Nicaragua**

**The following questions are for women with children less than 24 months of age.**

When you reach a home, you can say the following:

Good morning/good afternoon (depending on the time of day)

My name is (**say your name**) and I'm working with the Ministry of Health. Do you have a child less than 24 months of age?

If she says no thank her for her time and go to the next house.

If she says yes ask her if she'd be willing to spend approximately 30 minutes with you, answering some questions about the health of her youngest child less than 24 months of age. If she says yes, continue with the survey.

|                      |                      |
|----------------------|----------------------|
| Cluster number       | [ ] [ ] CONGLOM      |
| Number of the survey | [ ] [ ] [ ] REGISTRO |

|  |                          |
|--|--------------------------|
| 1. Interviewer                         | _____ 1. ENTREVIST       |
| 2. Supervisor                          | _____ 2. SUPERVISOR      |
| 3. Community                           | _____ 3. COMUNIDAD       |
| 4. Date of first interview (dd/mm/yy)  | ____/____/____ 4. ENTRE1 |
| 5. Date of second interview (dd/mm/yy) | ____/____/____ 5. ENTRE2 |

|  |                         |
|--|-------------------------|
| 6. Mother's name                                 | _____ 6.                |
| 7. Mother's age (in years)                       | [ ] [ ] 7. EDADMADRE    |
| 8. Name of child less than 24 months old         | _____ 8.                |
| 9. Child's birthdate (dd/mm/yy)                  | ____/____/____ 9. NACIO |
| 10. Age of child less than 24 months (in months) | [ ] [ ] 10. EDADNIÑO    |

Mother's education and employment status

- |   |              |
|---|--------------|
| 11. What was the highest educational level you attained?  | 11. EDUC     |
| 1. none   | [ ] 1.       |
| 2. primary and <b>does not</b> read   | [ ] 2.       |
| 3. primary and <b>does</b> read   | [ ] 3.       |
| 4. secondary or higher  | [ ] 4.       |
| 12. Do you work outside the home?   | 12. TRABAJA  |
| 1. yes  | [ ] 1.       |
| 2. no   | [ ] 2.       |
| 13. Do you do any work that brings in an income?<br>(multiple answers possible)                         | 13. INGRESOS |
| 1. no, none   | [ ] 1.       |
| 2. handicrafts  | [ ] 2.       |
| 3. harvest  | [ ] 3.       |
| 4. selling agriculture products   | [ ] 4.       |
| 5. selling food   | [ ] 5.       |
| 6. housemaid  | [ ] 6.       |
| 7. working in a shop/street vendor  | [ ] 7.       |
| 8. salaried work  | [ ] 8.       |
| 9. other (specify) _____  | [ ] 9.       |
| 14. When you work or leave the house, who takes care of<br>(name of child)? (multiple answers possible) | 14. CUIDA    |
| 1. no one   | [ ] 1.       |
| 2. child goes with mother   | [ ] 2.       |
| 3. husband/partner  | [ ] 3.       |
| 4. older siblings   | [ ] 4.       |
| 5. relatives  | [ ] 5.       |
| 6. neighbors/friends  | [ ] 6.       |
| 7. maid   | [ ] 7.       |
| 8. day care center  | [ ] 8.       |
| 9. other (specify) _____  | [ ] 9.       |

Breastfeeding

- |  |                      |
|--|----------------------|
| 15. Are you breastfeeding (name of child)?   | 15. AHORAPECHO       |
| 1. yes                                       | [ ] 1. ---> GO TO 17 |
| 2. no  | [ ] 2.               |
| 16. Have you ever breastfed (name of child)? | 16. UNAVEZPECHO      |
| 1. yes                                       | [ ] 1.               |
| 2. no  | [ ] 2. ---> GO TO 18 |
| 3. answered #15 yes (NOT APPLICABLE)         | [ ] 3.               |

17. After the delivery, when did you breastfeed (name of child) for the first time?

1. during the first hour after delivery
2. from 1-8 hours after delivery
3. more than 8 hours after delivery
4. does not remember
5. never breastfed (NOT APPLICABLE)

17. PARTOPECHO

- 1.
- 2.
- 3.
- 4.
- 5.

Nutrición del niño

18. Are you giving (name of child) water, tea or coffee?

1. yes
2. no
3. does not know

18. AGUAS

- 1.
- 2.
- 3.

19. Are you giving (name of child) cow, goat, soy or powdered milk?

1. yes
2. no
3. does not know

19. LECHES

- 1.
- 2.
- 3.

20. Are you giving (name of child) semi-solid foods like atol, tortilla, avena, pinolillo, maicena, cebada, millón, purées or cereals?

1. yes
2. no
3. does not know

20. BLANDOS

- 1.
- 2.
- 3.

21. Are you giving fruits to (name of child)?

1. yes
2. no
3. does not know

21. FRUTAS

- 1.
- 2.
- 3.

22. Are you giving yellow vegetables or fruits like carrots, ayote, mango or papaya to (name of child)?

1. yes
2. no
3. does not know

22. VERDFRUT

- 1.
- 2.
- 3.

23. Are you giving (name of child) green leafy vegetables like the leaves of beets, cassava, yuca, quelite, yerba buena, culantro, or mustard?

1. yes
2. no
3. does not know

23. HOJAVERDE

- 1.
- 2.
- 3.

- |  |   |
|--|---|
| <p>24. Are you giving (<b>name of child</b>) meat (beef, pork, chicken, garrobo or cusuco) or fish?</p> <p>1. yes<br/>2. no<br/>3. does not know</p> | <p>24. CARNE</p> <p><input type="checkbox"/> 1.<br/><input type="checkbox"/> 2.<br/><input type="checkbox"/> 3.</p>   |
| <p>25. Are you giving (<b>name of child</b>) kidney beans, soy benas, peanuts or lentils?</p> <p>1. yes<br/>2. no<br/>3. does not know</p>           | <p>25. FRIJOL</p> <p><input type="checkbox"/> 1.<br/><input type="checkbox"/> 2.<br/><input type="checkbox"/> 3.</p>  |
| <p>26. Are you giving (<b>name of child</b>) eggs, cuajada, cheese or cream?</p> <p>1. yes<br/>2. no<br/>3. does not know</p>                        | <p>26. LACTEOS</p> <p><input type="checkbox"/> 1.<br/><input type="checkbox"/> 2.<br/><input type="checkbox"/> 3.</p> |
| <p>27. Are you adding sugar or honey to (<b>name of child</b>) food?</p> <p>1. yes<br/>2. no<br/>3. does not know</p>                                | <p>27. AZUCAR</p> <p><input type="checkbox"/> 1.<br/><input type="checkbox"/> 2.<br/><input type="checkbox"/> 3.</p>  |
| <p>28. Are you preparing (<b>name of child</b>) food with oil or lard?</p> <p>1. yes<br/>2. no<br/>3. does not know</p>                              | <p>28. ACEITE</p> <p><input type="checkbox"/> 1.<br/><input type="checkbox"/> 2.<br/><input type="checkbox"/> 3.</p>  |
| <p>29. Are you adding iodized salt to (<b>name of child</b>) food?</p> <p>1. yes<br/>2. no<br/>3. does not know</p>                                  | <p>29. SALYODO</p> <p><input type="checkbox"/> 1.<br/><input type="checkbox"/> 2.<br/><input type="checkbox"/> 3.</p> |

30. When should a mother start introducing foods other than breastmilk?

1. before 4 months of age
2. from 4 to 6 months
3. around 6 months
4. after 6 months
5. does not know

31. What is the name of the vitamin that helps prevent night blindness?

1. vitamina A
2. does not know or others

32. Which foods contain vitamin A to help prevent night blindness? (**multiple answers possible**)

1. green vegetables
2. yellow fruits
3. meat/fish
4. breastmilk
5. egg yolk
6. does not know or others

30. INICIAR

- 1.
- 2.
- 3.
- 4.
- 5.

31. VITAMINA

- 1.
- 2.

32. COMIDAVITA

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Growth monitoring

33. Do you have (**name of child**) growth monitoring card?

1. yes
2. lost the card
3. never had the card

34. Look at the card and note if the child has been weighed in the past three months.

1. yes
2. no
3. does not have the card (NOT APPLICABLE)

35. Look at the card and note if the child has received vitamin A supplement.

1. yes
2. no
3. does not have the card (NOT APPLICABLE)

33. CARNETNIÑO

1. **ASK FOR THE CARD**
2. ---> **GO TO 37**
3. ---> **GO TO 37**

34. PESADO

- 1.
- 2.
- 3.

35. GOTASVITA

- 1.
2. ---> **GO TO 37**
- 3.

36. Write the dates when the child received vitamin A supplements.

1. first dose
2. second dose
3. third dose
4. fourth dose
5. no card or did not receive supplement

36. FECHAVITAN

(dd / mm / yy)

- \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ 1.
- \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ 2.
- \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ 3.
- \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ 4.
- [ ] 5.

Diarrheal disease

37. Has (**name of child**) had diarrhea in the past two weeks?

1. yes
2. no
3. does not know

37. DIARRREA

- [ ] 1.  
[ ] 2. ---> GO TO 43  
[ ] 3. ---> GO TO 43

38. During (**name of child**) diarrhea, did you breastfeed...(read options 1 to 4 to the mother)

1. more than usual
2. same as usual
3. less than usual
4. stopped completely
5. child is not being breastfed
6. (NOT APPLICABLE)

38. DIARPECHO

- [ ] 1.  
[ ] 2.  
[ ] 3.  
[ ] 4.  
[ ] 5.  
[ ] 6..

39. During the (**name of child**) diarrhea, did you provide her/him with fluids other than breastmilk...(read options 1 to 4 to the mother)

1. more than usual
2. same as usual
3. less than usual
4. stopped completely
5. exclusively breastfed
6. (NOT APPLICABLE)

39. DIARLIQUIDO

- [ ] 1.  
[ ] 2.  
[ ] 3.  
[ ] 4.  
[ ] 5.  
[ ] 6.

40. During the (**name of child**) diarrhea, did you provide her/him with solid or semisolid foods...(read options 1 to 4 to the mother)

1. more than usual
2. same as usual
3. less than usual
4. stopped completely
5. (NOT APPLICABLE)

40. DIARALIMENTO

- [ ] 1.  
[ ] 2.  
[ ] 3.  
[ ] 4.  
[ ] 5.

41. When (name of child) had diarrhea, what treatments did you give her? (multiple responses possible)

1. none
2. oral rehydration salts
3. sugar-salt solution
4. cereal-based solution
5. liquids
6. anti-diarrheal medicine or anti-biotics
7. other (specify) \_\_\_\_\_
8. (NOT APPLICABLE)

42. When (name of child) had diarrhea, from whom did you seek advice or help? (multiple answers possible)

1. no one
2. hospital
3. health center/post
4. private doctor/clinic
5. pharmacy
6. health volunteer
7. healer
8. midwife
9. relatives or friends
10. other (specify) \_\_\_\_\_
11. (NOT APPLICABLE)

43. If (name of child) had diarrhea, what signs or symptoms would cause you to seek help for the child? (multiple answers possible)

1. none
2. vomiting
3. fever
4. dehydration
5. diarrhea > 14 days
6. bloody stool
7. loss of appetite
8. weak or depressed
9. does not know
10. other (specify) \_\_\_\_\_

41. DIARTRATAM

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

42. DIARAYUDA

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

43. DIARSENAL

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

44. What are the most important actions a mother should take when her child has diarrhea?  
(multiple answers possible)

1. begin feeding liquids immediately
2. provide more liquids than usual
3. provide smaller, more frequent meals
4. prepare and administer oral rehydration salts
5. take the child to the hospital/health center
6. give the child more food than usual when recuperating
7. withhold liquids
8. withhold foods
9. does not know
10. other (specify) \_\_\_\_\_

44. DIARCOSAS

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

45. In terms of feeding, what are the most important actions a mother should take when her child is recovering from a diarrheal episode? (multiple answers possible)

1. provide smaller, more frequent meals
2. provide more food than usual
3. provide high caloric foods
4. does not know
5. other (specify) \_\_\_\_\_

45. DIARALIMEN

- 1.
- 2.
- 3.
- 4.
- 5.

Acute respiratory infections

46. Has (name of child) been ill with cough or with difficulty breathing in the last two weeks?

1. yes
2. no
3. does not know

46. NIÑOTOS

- 1.
- 2. ---> GO TO 50
- 3. ---> GO TO 50

47. When (name of child) was ill, did she breathe rapidly or as if she was tired?

1. yes
2. no
3. ( NOT APPLICABLE)

47. RESPIRABA

- 1.
- 2.
- 3.

48. When (**name of child**) was ill, did you seek advice or help?

1. yes
2. no
3. (NOT APPLICABLE)

49. When (**name of child**) was ill, from whom did you seek advice or help? (**multiple answers possible**)

1. no one
2. hospital
3. health center/post
4. private physician/clinic
5. pharmacy
6. health volunteer
7. healer
8. midwife
9. relatives or friends
10. other (**specify**) \_\_\_\_\_
11. (NOT APPLICABLE)

50. What are the signs or symptoms of respiratory infections that would cause you to take (**name of child**) to a health center? (**multiple answers possible**)

1. none
2. rapid or agitated breathing
3. chest indrawing
4. loss of appetite
5. fever
6. cough
7. does not know
8. other (**specify**) \_\_\_\_\_

48. TOSCONSEJO

- 1.
- 2.
- 3.

49. TOSAYUDA

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

50. TOSSEÑAL

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

#### Immunizations

51. Has (**name of child**) ever received an immunization?

1. yes
2. no
3. does not know

52. At what age should (**name of child**) get the measles vaccine?

1. 9 months
2. other or does not know

51. VACUNANINO

- 1.
- 2.
- 3.

52. SARAMPION

- 1.
- 2.

53. What is the main reason why a pregnant woman should be vaccinated against tetanus?

1. to protect mother and child against tetanus
2. to protect only the mother against tetanus
3. to protect only the child against tetanus
4. other or does not know

54. How many vaccines against tetanus does a pregnant woman need to protect the newborn from tetanus?

1. none
2. one dose
3. two doses
4. more than two doses
5. does not know

55. Do you have an immunization card for (name of child)?

1. yes
2. lost the card
3. never had the card

56. Look at the immunization card and write down the dates of the immunizations below correspondent.

BCG

POLIO

-1st

-2nd

-3rd

DPT

-1st

-2nd

-3rd

MEASLES

-1st

-2nd

53. TETANOS

1.

2.

3.

4.

54. VEZTETANO

1.

2.

3.

4.

5.

55. CARNETVACU

1. ASK FOR THE CARD

2. --->GO TO 57

3. --->GO TO 57

56. FECHVACNIN

(dd /mm /yy)

\_\_\_\_/\_\_\_\_/\_\_\_\_ BCG

\_\_\_\_/\_\_\_\_/\_\_\_\_ ANTIPOLIO 1a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 2a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 3a

\_\_\_\_/\_\_\_\_/\_\_\_\_ DPT 1a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 2a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 3a

\_\_\_\_/\_\_\_\_/\_\_\_\_ ANTISAR. 1a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 2a

Maternal health

57. Do you have a prenatal care card?

1. yes
2. lost the card
3. never had the card

58. Look at the prenatal care card and record the number of tetanus toxoid vaccinations that the woman received.

1. none
2. one dose
3. two or more doses
4. does not have the card

59. Look at the card and record the number of prenatal visits she made.

1. none
2. one
3. two or more
4. does not have the card

60. Look at the card and record if the woman received vitamin A supplementation in the post-partum period.

1. yes
2. no
3. does not have the card

61. When you were pregnant with (name of child) when did you go for your first prenatal visit?

1. never went
2. month 1-3
3. month 4-6
4. month 7-9
5. does not know

62. What foods should a woman eat during pregnancy to avoid getting anemia? (multiple answers possible)

1. meat or fish
2. dark green leafy vegetables
3. does not know
4. other (specify) \_\_\_\_\_

57. CARNETMAMA

- 1. ASK FOR THE CARD
- 2. ---> GO TO 61
- 3. ---> GO TO 61

58. MAMATETANO

- 1.
- 2.
- 3.
- 4.

59. VISITAPREN

- 1.
- 2.
- 3.
- 4.

60. MAMAVITA

- 1.
- 2.
- 3.

61. MESVISITA

- 1.
- 2.
- 3.
- 4.
- 5.

62. ANEMIA

- 1.
- 2.
- 3.
- 4.

63. How much weight should a woman gain during pregnancy?

1. 8-10 kilos (17-22 pounds)
2. more than the baby's weight
3. the baby's weight
4. does not know
5. other (specify) \_\_\_\_\_

64. During your pregnancy with (name of child), the amount of food you ate was...

(read option 1 to 3 to the woman)

1. more than usual
2. same as usual
3. less than usual
4. does not know

65. What problems during pregnancy would cause you to seek help? (multiple answers possible)

1. none
2. bleeding
3. loss of amniotic fluid
4. head ache
5. inflammation of hands, face or legs
6. painful urination
7. decreased fetal movement
8. anemia
9. vomitting
10. does not know
11. other (specify) \_\_\_\_\_

66. When (name of child) was born, who tied and cut the umbilical cord?

1. woman herself
2. family member
3. midwife
4. health personnel
5. does not know
6. other (specify) \_\_\_\_\_

63. PESOEMBAR

- 1.
- 2.
- 3.
- 4.
- 5.

64. EMBARCOMIO

- 1.
- 2.
- 3.
- 4.

65. PROBLEMEMB

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

66. OMBLIGO

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

67. In the 40 days after the birth of (name of child), to whom did you go for a checkup?

1. no one
2. health personnel
3. midwife
4. other (specify) \_\_\_\_\_

68. What problems in the first 40 days post-partum would cause you to seek urgent help? (multiple responses possible)

1. none
2. fever
3. abdominal pain
4. bleeding, odor
5. painful urination
6. pain or inflammation of veins
7. hemorrhage
8. does not know
9. other (specify) \_\_\_\_\_

67. CUAREXAMEN

- 1.
- 2.
- 3.
- 4.

68. CUARAYUDA

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

Family planning

69. Are you pregnant now?

1. yes
2. no
3. does not know

70. Would you like to have another child in the next two years?

1. yes
2. no
3. does not know
4. (NOT APPLICABLE)

71. Are you or your husband using a method to avoid getting pregnant or to delay your next pregnancy?

1. yes
2. no
3. (NOT APPLICABLE)

69. EMBARAZHOY

- 1. ---> GO TO 73
- 2.
- 3.

70. QUERERHIJO

- 1. ---> GO TO 73
- 2.
- 3.
- 4.

71. METODO

- 1.
- 2. ---> GO TO 73
- 3.

72. What is the primary method that you or your husband are using to avoid getting pregnant or to delay your next pregnancy?

1. none
2. tubal ligation
3. vasectomy
4. norplant
5. injections
6. pills
7. IUD
8. diaphragm
9. condoms
10. foam/gel
11. exclusive breastfeeding
12. rhythm/calendar
13. abstinence
14. withdrawal
15. other (specify) \_\_\_\_\_
16. (NOT APPLICABLE)

72. METODOAC

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.

Child's weight

73. Sex of the child less than 24 months

1. female
2. male

73. SEXO

- 1.
- 2.

74. El peso del niño (NAKED)

1. in kilos
2. child not present

74. PESONIÑO

- \_\_\_\_\_ 1.
- 2.

\*\*\*END OF THE SURVEY\*\*\*

APPENDIX B. Spanish version of baseline survey.

**Cuestionario Sobre Conocimientos, Prácticas, y Cobertura (CAP) en Supervivencia Infantil.  
Auxilio Mundial Nicaragua.**

**Las siguientes preguntas son para madres de niños menores de 24 meses**

Al llegar a la casa puede decir lo siguiente:

Buenas días/ buenas tardes! (dependiendo de la hora)

Mi nombre es (**diga su nombre**) vengo de parte del Ministerio de Salud y antes de continuar quisiera saber si tiene ud un niño menor de 24 meses.

Si la madre contesta no agradezca por su tiempo y retírese.

Si ella contesta si pregúntele si está dispuesta a prestarle aproximadamente 30 minutos de su tiempo para hacerle algunas preguntas de salud en relación a su niño menor de dos años. Si ella está de acuerdo proceda a hacerle las preguntas.

|                         |                      |
|-------------------------|----------------------|
| Número del conglomerado | [ ] [ ] CONGLOM      |
| Número del registro     | [ ] [ ] [ ] REGISTRO |

|   |                          |
|---|--------------------------|
| 1. Nombre del entrevistador             | _____ 1. ENTREVIST       |
| 2. Supervisor                           | _____ 2. SUPERVISOR      |
| 3. Comunidad                            | _____ 3. COMUNIDAD       |
| 4. Fecha de la entrevista (dd/mm/aa)    | ____/____/____ 4. ENTRE1 |
| 5. Fecha de la re-entrevista (dd/mm/aa) | ____/____/____ 5. ENTRE2 |

|  |                         |
|--|-------------------------|
| 6. Nombre de la madre                          | _____ 6.                |
| 7. Edad de la madre (en años)                  | [ ] [ ] 7. EDADMADRE    |
| 8. Nombre del niño menor de 24 meses           | _____ 8.                |
| 9. Fecha de nacimiento del niño (dd/mm/aa)     | ____/____/____ 9. NACIO |
| 10. Edad del niño menor de 24 meses (en meses) | [ ] [ ] 10. EDADNIÑO    |

Educación/ocupación de la madre

- |   |              |
|---|--------------|
| 11. ¿Cual fue el grado de educación más alto que alcanzó?   | 11. EDUC     |
| 1. ninguno  | [ ] 1.       |
| 2. primaria y NO lee  | [ ] 2.       |
| 3. primaria y SI lee  | [ ] 3.       |
| 4. secundaria o más   | [ ] 4.       |
| 12. ¿Trabaja ud fuera de su casa?   | 12. TRABAJA  |
| 1. sí   | [ ] 1.       |
| 2. no   | [ ] 2.       |
| 13. ¿Realiza ud alguna actividad que le produce dinero?<br>(respuestas múltiples, anote todas)                            | 13. INGRESOS |
| 1. no, ninguna  | [ ] 1.       |
| 2. artesanías, tejidos, etc   | [ ] 2.       |
| 3. en la cosecha  | [ ] 3.       |
| 4. vendiendo productos agrícolas  | [ ] 4.       |
| 5. venta de comidas o alimentos preparados  | [ ] 5.       |
| 6. empleada doméstica/otros servicios   | [ ] 6.       |
| 7. tienda/almacén, vendedor callejero   | [ ] 7.       |
| 8. trabajador asalariado  | [ ] 8.       |
| 9. otros (especifique) _____  | [ ] 9.       |
| 14. Cuando trabaja o está fuera de la casa ¿quien le cuida a<br>(nombre del niño)?<br>(respuestas múltiples, anote todas) | 14. CUIDA    |
| 1. nadie lo cuida   | [ ] 1.       |
| 2. el niño va con la mamá   | [ ] 2.       |
| 3. el esposo/compañero  | [ ] 3.       |
| 4. hermanos mayores   | [ ] 4.       |
| 5. parientes  | [ ] 5.       |
| 6. vecinos/amigos   | [ ] 6.       |
| 7. la empleada  | [ ] 7.       |
| 8. guardería  | [ ] 8.       |
| 9. otro (especifique) _____   | [ ] 9.       |

Lactancia materna

15. ¿Está dándole el pecho a (nombre del niño)?

- 1. sí
- 2. no

16. ¿Le ha dado alguna vez pecho a (nombre del niño)?

- 1. sí
- 2. no
- 3. contesto sí en #15 (NO APLICA)

17. Después del parto ¿Cuándo le dio pecho por primera vez a (nombre del niño)?

- 1. durante la primera hora después del parto
- 2. entre la primera y 8 horas después del parto
- 3. más de 8 horas después del parto
- 4. no se acuerda
- 5. nunca le dio pecho (NO APLICA)

15. AHORAPECHO

- 1. ---> PASE A LA 17
- 2.

16. UNAVEZPECHO

- 1.
- 2. ---> PASE A LA 18
- 3.

17. PARTOPECHO

- 1.
- 2.
- 3.
- 4.
- 5.

Nutrición del niño

18. ¿Le está dando agua, tes, o café a (nombre del niño)?

- 1. sí
- 2. no
- 3. no sabe

19. ¿Le está dando leche de vaca, cabra, soya o en polvo a (nombre del niño)?

- 1. sí
- 2. no
- 3. no sabe

20. ¿Le está dando alimentos blandos como atol, tortilla, avena, pinolillo, maicena, cebada, millón, purés o cereal a (nombre del niño)?

- 1. sí
- 2. no
- 3. no sabe

18. AGUAS

- 1.
- 2.
- 3.

19. LECHES

- 1.
- 2.
- 3.

20. BLANDOS

- 1.
- 2.
- 3.

21. ¿Le está dando frutas a (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

22. ¿Le está dando verduras o frutas amarillas como la zanahoria, ayote, mango o papaya a (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

23. ¿Le está dando de comer hojas verdes como hoja de rábano, yuca, quelite, yerba buena, culantro, o hoja de mostaza a (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

24. ¿Le está dando carne de pescado, res, cerdo, pollo, garrobo o cusuco a (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

25. ¿Le está dando frijoles, soya, maní, pindá, cacahuate o lentejas a (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

26. ¿Le está dando huevos, cuajada, queso o crema a (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

27. ¿Le está añadiendo azúcar o miel a los alimentos de (**nombre del niño**)?

- 1. sí
- 2. no
- 3. no sabe

21. FRUTAS

- 1.
- 2.
- 3.

22. VERDFRUT

- 1.
- 2.
- 3.

23. HOJAVERDE

- 1.
- 2.
- 3.

24. CARNE

- 1.
- 2.
- 3.

25. FRIJOL.

- 1.
- 2.
- 3.

26. LACTEOS

- 1.
- 2.
- 3.

27. AZUCAR

- 1.
- 2.
- 3.

28. ¿Cocina los alimentos de (**nombre del niño**) con aceite, manteca, o leche de coco?

1. sí
2. no
3. no sabe

29. ¿Le está añadiendo sal yodada a los alimentos de (**nombre del niño**)?

1. sí
2. no
3. no sabe

30. ¿A qué edad debería iniciar la madre a dar otros alimentos además de la leche materna?

1. iniciar otros alimentos antes de los 4 meses
2. iniciar otros alimentos entre 4 a 6 meses
3. iniciar otros alimentos cerca de los 6 meses
4. iniciar otros alimentos después de los 6 meses
5. no sabe

31. ¿Cual es el nombre de la vitamina que ayuda a prevenir la ceguera nocturna?

1. la vitamina A
2. no sabe u otras

32. ¿Qué alimentos contienen vitamina A para la prevención de la ceguera nocturna?  
(respuesta múltiples, anote todas)

1. vegetales verdes
2. frutas de color amarillo intenso
3. carne/pescado
4. leche materna
5. la yema de huevo
6. no sabe u otras

28. ACEITE

1.  
 2.  
 3.

29. SALYODO

1.  
 2.  
 3.

30. INICIAR

1.  
 2.  
 3.  
 4.  
 5.

31. VITAMINA

1.  
 2.

32. COMIDAVITA

1.  
 2.  
 3.  
 4.  
 5.  
 6.

Control de crecimiento

33. ¿Tiene (**nombre del niño**) su tarjeta o carnet infantil para el control del peso?

1. sí
2. perdió el carnet
3. nunca la tuvo

33. CARNETNIÑO

1. PIDA QUE SE LO MUESTRE  
 2. ---> PASE A LA 37  
 3. ---> PASE A LA 37

34. Mire también en el carnet infantil y registre si el niño ha sido pesado en los últimos 4 meses

1. sí
2. no
3. no tiene el carnet (NO APLICA)

35. Mire también en la tarjeta o carnet del niño y registre si ha recibido o no las dosis respectivas de vitamina A

1. sí
2. no
3. no tiene el carnet (NO APLICA)

36. Anote en el espacio correspondiente las fechas en que le dieron la vitamina A al niño.

1. primera dosis
2. segunda dosis
3. tercera dosis
4. cuarta dosis
5. no tiene el carnet o no le dieron la vit. A

34. PESADO

1.  
 2.  
 3.

35. GOTASVITA

1.  
 2. --->PASE A LA 37  
 3.

36. FECHAVITAN

- (dd / mm / aa)
- |       |   |       |   |       |    |
|-------|---|-------|---|-------|----|
| _____ | / | _____ | / | _____ | 1. |
| _____ | / | _____ | / | _____ | 2. |
| _____ | / | _____ | / | _____ | 3. |
| _____ | / | _____ | / | _____ | 4. |
- 5.

#### Enfermedades diarreicas

37. ¿Ha tenido (**nombre del niño**) diarrea durante las dos últimas semanas?

1. sí
2. no
3. no sabe

38. Durante la diarrea de (**nombre del niño**) ¿Le dio el pecho... (lea las opciones 1 a la 4 a la madre)

1. más de lo acostumbrado?
2. igual a lo acostumbrado?
3. menos de lo acostumbrado?
4. paro completamente de darle?
5. ya no le da el pecho?
6. (NO APLICA)

37. DIARREA

1.  
 2. ---> PASE A LA 43  
 3. ---> PASE A LA 43

38. DIARPECHO

1.  
 2.  
 3.  
 4.  
 5.  
 6.

39. Durante la diarrea de (nombre del niño) ¿Le dio otros líquidos además del pecho...

(lea las opciones 1 a la 4 a la madre)

1. más de lo acostumbrado?
2. igual a lo acostumbrado?
3. menos de lo acostumbrado?
4. paró completamente de darle?
5. solo dio el pecho?
6. (NO APLICA)

40. Durante la diarrea de (nombre del niño) ¿Le dio alimentos blandos como purés o sólidos como pollo...

(lea las opciones 1 a la 4 a la madre)

1. más de lo acostumbrado?
2. igual a lo acostumbrado?
3. menos de lo acostumbrado?
4. paro completamente?
5. (NO APLICA)

41. Cuando (nombre del niño) tuvo diarrea ¿Qué tratamientos le dio?

(respuestas múltiples, anote todas)

1. nada
2. sales de rehidratación oral (suero oral)
3. solución de agua y sal (suero casero)
4. soluciones a base de cereales
5. agua, infusiones u otros líquidos disponibles
6. medicinas anti-diarreicas o antibióticos
7. otro (especifique) \_\_\_\_\_
8. (NO APLICA)

42. Cuando (nombre del niño) tuvo diarrea ¿A quién le pidió consejo o ayuda?

(respuesta múltiples, anote todas)

1. a nadie
2. hospital general
3. centro de salud/puesto de salud
4. médico/clínica particular
5. farmacia
6. trabajador voluntario de salud
7. curandero
8. partera
9. parientes y amigos
10. otro (especifique) \_\_\_\_\_
11. (NO APLICA)

39. DIARLIQUIDO

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

40. DIARALIMENTO

- 1.
- 2.
- 3.
- 4.
- 5.

41. DIARTRATAM

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

42. DIARAYUDA

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

43. Si (nombre del niño) tuviera diarrea ¿Qué señales o síntomas harían que busque ayuda? (respuestas múltiples, anote todas)

1. ninguno
2. vómitos
3. fiebre
4. boca seca, ojos hundidos, mollera hundida, orina poco (deshidratación)
5. diarrea prolongada (mas de 14 días)
6. sangre en la heces
7. perdida del apetito
8. débil o deprimido
9. no sabe
10. otros (especifique) \_\_\_\_\_

43. DIARSENAL

- [ ] 1.
- [ ] 2.
- [ ] 3.
- [ ] 4.
- [ ] 5.
- [ ] 6.
- [ ] 7.
- [ ] 8.
- [ ] 9.
- [ ] 10.

44. ¿Cuales son las cosas más importantes que debe hacer una madre cuando su niño tiene diarrea? (respuestas múltiples, anote todas)

1. iniciar líquidos inmediatamente
2. dar al niño más líquidos de lo usual
3. dar al niño alimentación en menor cantidad y mas frecuentemente
4. preparar y administrar correctamente las sales de rehidratación oral
5. llevar al niño a un hospital/centro de salud
6. alimentar más al niño después de la diarrea para recuperarle el peso
7. no dar más líquidos
8. no dar más alimentos
9. no sabe
10. otros (especifique) \_\_\_\_\_

44. DIARCOSAS

- [ ] 1.
- [ ] 2.
- [ ] 3.
- [ ] 4.
- [ ] 5.
- [ ] 6.
- [ ] 7.
- [ ] 8.
- [ ] 9.
- [ ] 10.

45. En relación a la alimentación ¿Cuales son las cosas más importantes que debe hacer una madre cuando su niño se está recuperando de una diarrea? (respuestas múltiples, anote todas)

1. dar al niño alimentación en menor cantidad y más frecuentemente
2. más alimentos de lo usual
3. proveer alimentos con alto contenido calórico
4. no sabe
5. otros (especifique) \_\_\_\_\_

45. DIARALIMEN

- [ ] 1.
- [ ] 2.
- [ ] 3.
- [ ] 4.
- [ ] 5.

Infecciones respiratorias agudas

46. ¿Ha estado (**nombre del niño**) enfermo con tos o dificultad para respirar en las últimas dos semanas?

1. sí
2. no
3. no sabe

47. Cuando estuvo enfermo (**nombre del niño**) ¿Respiraba rápido o respiraba como cansado?

1. sí
2. no
3. (NO APLICA)

48. Cuando (**nombre del niño**) ha estado enfermo con tos o dificultad para respirar ¿Ha pedido consejo o ayuda?

1. sí
2. no
3. (NO APLICA)

49. Cuando estuvo (**nombre del niño**) con tos o dificultad para respirar ¿De quien recibió ayuda? (**respuestas múltiples, anote todas**)

1. de nadie
2. hospital general
3. centro de salud/puesto de salud
4. médico/clínica particular
5. farmacia
6. trabajador voluntario de salud
7. curandero
8. partera
9. parientas y amigos
10. otro (**especifique**) \_\_\_\_\_
11. (NO APLICA)

46. NIÑOTOS

- [ ] 1.  
[ ] 2. ---> PASE A LA 50  
[ ] 3. ---> PASE A LA 50

47. RESPIRABA

- [ ] 1.  
[ ] 2.  
[ ] 3.

48. TOSCONSEJO

- [ ] 1.  
[ ] 2.  
[ ] 3.

49. TOSAYUDA

- [ ] 1.  
[ ] 2.  
[ ] 3.  
[ ] 4.  
[ ] 5.  
[ ] 6.  
[ ] 7.  
[ ] 8.  
[ ] 9.  
[ ] 10.  
[ ] 11.

50. ¿Cuales son las señales o síntomas de infección respiratoria que le harían llevar a (**nombre del niño**) a un centro de salud?

(respuestas múltiples, anote todas)

1. ninguno
2. respiración rápida y agitada
3. retracciones intercostales (tiraje)
4. perdida de apetito
5. fiebre
6. tos
7. no sabe
8. otros (especifique) \_\_\_\_\_

50. TOSSEÑAL

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

#### Inmunizaciones

51. ¿Ha recibido (**nombre del niño**) alguna vez vacunas?

1. sí
2. no
3. no sabe

51. VACUNANINO

- 1.
- 2.
- 3.

52. ¿A que edad (**nombre del niño**) debería recibir la vacuna contra el sarampión?

1. 9 meses
2. otro o no sabe

52. SARAMPION

- 1.
- 2.

53. ¿Cual es la razón principal por la que una mujer embarazada debe ser vacunada contra el tétanos?

1. para proteger a la madre y al niño contra el tétanos
2. para proteger SOLO a la mujer contra el tétanos
3. para proteger SOLO al niño contra el tétanos
4. otro o no sabe

53. TETANOS

- 1.
- 2.
- 3.
- 4.

54. ¿Cuántas vacunas contra el tétanos debe recibir una mujer embarazada para proteger el recién nacido?

1. ninguna
2. una dosis
3. dos dosis
4. más de dos dosis
5. no sabe

54. VEZTETANO

- 1.
- 2.
- 3.
- 4.
- 5.

55. ¿Tiene Ud. el carnet o tarjeta de vacunas de (nombre del niño)?

1. sí
2. perdió el carnet
3. nunca la tuvo

56. Mire el carnet de vacunación y registre las fechas de las vacunas en el espacio correspondiente.

BCG

ANTIPOLIO

-1a

-2a

-3a

DPT (TRIPLE)

-1a

-2a

-3a

ANTISARAMPION

-1a

-2a

No tiene el carnet del niño

55. CARNETVACU

1. PIDA QUE SE LA MUESTRA

2. --->PASE A LA 57

3. --->PASE A LA 57

56. FECHVACNIN

(dd /mm /aa)

\_\_\_\_/\_\_\_\_/\_\_\_\_ BCG

\_\_\_\_/\_\_\_\_/\_\_\_\_ ANTIPOLIO 1a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 2a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 3a

\_\_\_\_/\_\_\_\_/\_\_\_\_ DPT 1a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 2a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 3a

\_\_\_\_/\_\_\_\_/\_\_\_\_ ANTISAR. 1a

\_\_\_\_/\_\_\_\_/\_\_\_\_ 2a

no tiene carnet

### Salud materna

57. ¿Tiene Ud. su carnet de salud materna o del control prenatal?

1. sí
2. perdió el carnet
3. nunca la tuvo

58. Mire el carnet y registre el número de vacunas de TT en el espacio correspondiente.

1. ninguna
2. una dosis
3. dos o más dosis
4. no tiene el carnet

59. Mire el carnet y anote cuantas visitas de control prenatal ha hecho.

1. ninguna
2. una
3. dos o más
4. no tiene el carnet

57. CARNETMAMA

1. PIDA QUE SE LO MUESTRE

2. ---> PASE A LA 61

3. ---> PASE A LA 61

58. MAMATETANO

1.

2.

3.

4.

59. VISITAPREN

1.

2.

3.

4.

60. Mire el carnet y anote si la madre recibió vitamina A en la etapa del post-parto.

1. sí
2. no
3. no tiene el carnet

61. ¿Cuántos meses de embarazo de (nombre del niño) tenía Ud. cuando fue a su primer control prenatal?

1. nunca fue
2. de 1 a 3 meses
3. de 4 a 6 meses
4. de 7 a 9 meses
5. no sabe

62. Para evitar la anemia durante el embarazo ¿Qué alimentos debería comer una mujer?  
(respuestas múltiples, anote todas)

1. proteínas ricas en hierro (carne, pescado, huevo, hígado, otras viseras animales)
2. hojas de color verde oscuro (quelite, culantro, hoja de rábano, yuca, espinaca)
3. no sabe
4. otro (especifique) \_\_\_\_\_

63. ¿Cuánto peso debería ganar una mujer durante el embarazo?

1. 8-10 kilos (17-22 libras)
2. más del peso del bebe
3. el peso del bebe
4. no sabe
5. otro (especifique) \_\_\_\_\_

64. Durante el embarazo de (nombre del niño) ¿La cantidad de alimentos que Ud. comió fue...  
(Lea las opciones de la 1 a la 3 a la madre)

1. más de lo acostumbrado?
2. igual a lo acostumbrado?
3. menos de lo acostumbrado?
4. no sabe

60. MAMAVITA

1.  
 2.  
 3.

61. MESVISITA

1.  
 2.  
 3.  
 4.  
 5.

62. ANEMIA

1.  
 2.  
 3.  
 4.

63. PESOEMBAR

1.  
 2.  
 3.  
 4.  
 5.

64. EMBARCOMIO

1.  
 2.  
 3.  
 4.

65. Qué problemas durante el embarazo harían que Ud. tuviera que buscar ayuda?

1. ninguno
2. sangrado
3. salida líquido
4. dolor de cabeza
5. hinchazón manos, cara o pierna
6. dolor orinar
7. disminución movimiento fetal
8. anemia
9. vómitos
10. no sabe
11. otros (especifique) \_\_\_\_\_

66. Cuando nació (nombre del niño) ¿Quién le ató y cortó el ombligo?

1. ella misma
2. un miembro de la familia
3. partera
4. personal de salud (médico, enfermera o partera)
5. no sabe
6. otro (especifique) \_\_\_\_\_

67. Durante la cuarentena del nacimiento de (nombre del niño) ¿A quién acudió Ud. para que la examinaran?

1. a nadie
2. personal de salud
3. partera
4. otra (especifique) \_\_\_\_\_

68. ¿Qué problemas durante la cuarentena harían que Ud. tuviera que buscar ayuda urgente? (respuestas múltiples, anote todas)

1. ninguno
2. calentura
3. dolor abdominal intenso
4. sangrado con mal olor
5. dolor al orinar
6. dolor o inflamación de venas
7. hemorragia
8. no sabe
9. otros (especifique) \_\_\_\_\_

65. PROBLEMEMB

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

66. OMBLIGO

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

67. CUAREXAMEN

- 1.
- 2.
- 3.
- 4.

68. CUARAYUDA

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

Planificación familiar

69. ¿Está Ud. ahora embarazada?

1. sí
2. no
3. no sabe

69. EMBARAZHOY

1. ---> PASE A LA 73  
 2.  
 3.

70. ¿Quisiera Ud. tener otro hijo en los próximos dos años?

1. sí
2. no
3. no sabe
4. (NO APLICA)

70. QUERERHIJO

1. ---> PASE A LA 73  
 2.  
 3.  
 4.

71. ¿Está Ud o su marido usando ahora algún método para no embarazarse o retrasar el próximo embarazo?

1. sí
2. no
3. (NO APLICA)

71. METODO

1.  
 2. ---> PASE A LA 73  
 3.

72. ¿Cual es el método principal que Ud. o su marido están usando ahora para no embarazarse o para retrasar el próximo embarazo?

1. ninguno
2. operación en la mujer
3. operación en el hombre
4. norplant
5. inyecciones
6. pastillas anticonceptivas
7. dispositivo intra-uterino
8. diafragma
9. condones
10. espumas o gel
11. lactancia materna exclusiva
12. método del ritmo o calendario
13. abstinencia
14. coito interrumpido
15. otros (especifique) \_\_\_\_\_
16. (NO APLICA)

72. METODOAC

1.  
 2.  
 3.  
 4.  
 5.  
 6.  
 7.  
 8.  
 9.  
 10.  
 11.  
 12.  
 13.  
 14.  
 15.  
 16.

Peso del niño

73. Sexo del niño menor de 24 meses

- 1. femenina
- 2. masculino

74. El peso del niño (DESNUDO)

- 1. en kilos
- 2. no estaba presente el niño

73. SEXO

1.

2.

74. PESONIÑO

\_\_\_\_\_ 1.

2.

\*\*\*FIN DEL CUESTIONARIO\*\*\*

# Population Data by Etherean Groups

## RIO SAN JUAN - Follow-up

| No.   | Community          | 1st year | 1 to 5 years | W.F.A. | Population |    |
|-------|--------------------|----------|--------------|--------|------------|----|
| 1     | San Miguelito      | 187      | 823          | 636    | 4601       | #1 |
| 2     | Los Pantanos       | 28       | 124          | 96     | 421        |    |
| 3     | Las Palomas        | 36       | 158          | 122    | 1579       | #2 |
| 4     | La Conquista       | 41       | 183          | 141    | 690        |    |
| 5     | El Fajardo         | 31       | 137          | 107    | 486        |    |
| 6     | El Tamboral        | 29       | 129          | 100    | 446        |    |
| 7     | Mancha de Coyol    | 20       | 88           | 68     | 257        |    |
| 8     | Morillos           | 20       | 87           | 67     | 253        |    |
| 9     | Esperanza No.1     | 69       | 310          | 237    | 3249       | #3 |
| 10    | Melchora           | 15       | 66           | 51     | 160        |    |
| 11    | Santa Isabel       | 39       | 174          | 134    | 650        |    |
| 12    | La Argentina       | 28       | 122          | 94     | 414        |    |
| 13    | La Culebra         | 22       | 96           | 74     | 1295       |    |
| 14    | Nueva Jerusalem    | 29       | 126          | 96     | 1131       | #4 |
| 15    | Emp. Cruz Verde    | 25       | 112          | 86     | 1366       |    |
| 16    | Cruz Verde         | 29       | 128          | 100    | 443        |    |
| 17    | Laurel Galán       | 59       | 258          | 200    | 2036       | #5 |
| 18    | México             | 39       | 173          | 134    | 647        |    |
| 19    | Mata de Caña       | 13       | 57           | 44     | 120        |    |
| 20    | Las Azucenas       | 88       | 387          | 299    | 2616       |    |
| 21    | Melchorita         | 46       | 204          | 157    | 785        |    |
| 22    | Pavón 1 y 2        | 24       | 105          | 81     | 335        | #6 |
| 23    | Las Maravillas     | 22       | 98           | 76     | 305        |    |
| 24    | Los Chiles         | 118      | 519          | 401    | 2220       |    |
| 25    | Buena Vista        | 20       | 89           | 69     | 265        |    |
| 26    | La Palmera         | 18       | 80           | 62     | 222        |    |
| 27    | San Agustín        | 21       | 95           | 73     | 289        |    |
| 28    | Nueva Armenia 1    | 25       | 110          | 85     | 361        |    |
| 29    | Poza Redonda       | 25       | 110          | 85     | 357        |    |
| 30    | El Ventura         | 16       | 69           | 53     | 171        |    |
| 31    | El Espejo          | 31       | 138          | 107    | 489        | #7 |
| 32    | Nueva Armenia 2    | 32       | 139          | 108    | 492        |    |
| 33    | Marcelo            | 30       | 133          | 103    | 464        |    |
| 34    | Buena Vista (Sa)   | 52       | 230          | 178    | 1207       |    |
| 35    | Mauricio Galán     | 30       | 132          | 102    | 458        |    |
| 36    | Palma Africana     | 30       | 132          | 102    | 457        |    |
| 37    | Che Guevara        | 31       | 133          | 103    | 467        |    |
| 38    | Las Colinas        | 39       | 166          | 128    | 613        | #8 |
| 39    | Marlon Zelaya      | 31       | 132          | 102    | 458        |    |
| 40    | El Castillo        | 42       | 180          | 139    | 1677       |    |
| 41    | Libertad Sandino   | 27       | 114          | 88     | 375        |    |
| 42    | Mónico             | 37       | 161          | 124    | 590        |    |
| 43    | Guásimo            | 32       | 135          | 104    | 474        |    |
| 44    | La Quezada         | 29       | 124          | 95     | 1424       | #9 |
| 45    | Laguna Blanca      | 33       | 142          | 110    | 510        |    |
| 46    | La Escalera        | 43       | 182          | 140    | 699        |    |
| 47    | Las Maravillas (S) | 34       | 144          | 111    | 1517       |    |
| 48    | Gordiano           | 28       | 117          | 90     | 397        |    |
| Total |                    | 1793     | 7851         | 6062   | 40938      |    |

**New Population - RSJ**

| 2 No.        | Community          | 1st Year    | 1987        | W/F/A       | Population   |
|--------------|--------------------|-------------|-------------|-------------|--------------|
| 49           | Papatuno           | 20          | 97          | 50          | 534          |
| 50           | Caño Luis          | 19          | 93          | 26          | 513 #10      |
| 53           | San Juan del Norte | 10          | 42          | 13          | 280          |
| 54           | San Ramón          | 26          | 114         | 78          | 609          |
| 55           | Santa Elena        | 24          | 115         | 65          | 612          |
| 56           | La Trinidad        | 51          | 198         | 119         | 1061         |
| 57           | La Bodega          | 27          | 128         | 53          | 671          |
| 58           | La Minas           | 13          | 55          | 3           | 392 #11      |
| 59           | Posa R. 1          | 17          | 73          | 11          | 422          |
| 60           | Posa R. 2          | 28          | 121         | 48          | 639          |
| 61           | San Carlos Urbano  | 300         | 1428        | 1040        | 4746 #12     |
| 61           | Isla San Bartolo   | 2           | 7           | 7           | 35           |
| 62           | Las Puertas        | 1           | 3           | 3           | 14           |
| 63           | Los Arrollos       | 2           | 8           | 6           | 32           |
| 64           | Copel              | 4           | 25          | 16          | 80           |
| 65           | Palo de Arquito 1  | 36          | 183         | 157         | 922          |
| 66           | Palo de Arquito 2  | 11          | 45          | 40          | 294          |
| 67           | El Limón           | 1           | 4           | 19          | 109          |
| 68           | Morrito            | 39          | 181         | 125         | 953          |
| 69           | La Cruz            | 3           | 27          | 27          | 140          |
| 70           | Chagüitillo        | 1           | 18          | 19          | 97           |
| 71           | Las Lajas          | 5           | 36          | 37          | 191 #13      |
| 72           | San Cástulo        | 10          | 60          | 58          | 297          |
| 73           | Copelito           | 8           | 60          | 50          | 255          |
| 74           | El Carrizal        | 1           | 20          | 21          | 109          |
| 75           | La Flor            | 6           | 42          | 21          | 216          |
| 76           | Palos Ralos        | 39          | 195         | 148         | 488          |
| 77           | El Zacadero        | 4           | 42          | 23          | 165          |
| 78           | El Proyecto        | 32          | 173         | 87          | 559          |
| 79           | La Oropéndola      | 1           | 22          | 22          | 115          |
| 80           | Las Delicias       | 3           | 31          | 30          | 156          |
| 81           | San Francisco      | 3           | 14          | 14          | 70           |
| 82           | Miralejos          | 5           | 36          | 36          | 182          |
| 83           | El Raicero         | 5           | 37          | 32          | 187          |
| 84           | Buena Vista        | 1           | 20          | 17          | 101          |
| 85           | Mayasán            | 17          | 97          | 31          | 445          |
| 86           | El Hojachigual     | 1           | 2           | 21          | 110          |
| 87           | Los Cerritos       | 6           | 50          | 40          | 205          |
| 88           | El Sincoyol        | 9           | 64          | 53          | 273          |
| 89           | El Oyote           | 9           | 60          | 50          | 282          |
| 90           | Jesús María        | 4           | 31          | 31          | 157 #14      |
| 91           | Coquito            | 3           | 6           | 6           | 29           |
| 92           | Las Marías         | 2           | 20          | 20          | 120          |
| 93           | El Peñón           | 15          | 63          | 64          | 376          |
| 94           | El Ojoche          | 9           | 39          | 46          | 268          |
| 95           | El Cacao           | 15          | 63          | 64          | 378          |
| 96           | Los Potreros       | 21          | 91          | 86          | 505          |
| 97           | Valencia           | 9           | 36          | 44          | 256          |
| 98           | El Espabel         | 7           | 30          | 39          | 230          |
| 99           | Santa María        | 14          | 71          | 70          | 414          |
| 100          | La Tigra           | 14          | 61          | 2           | 369          |
| 101          | Aristides García   | 9           | 36          | 40          | 255          |
| 102          | Las Nubes          | 13          | 53          | 50          | 333          |
| 103          | El Roble           | 8           | 35          | 23          | 252          |
| 104          | El Tule            | 23          | 75          | 50          | 548          |
| 105          | El Dorado          | 24          | 111         | 101         | 594 #15      |
| 106          | Quebrada Seca      | 19          | 60          | 77          | 454          |
| 107          | El Cojo            | 36          | 127         | 137         | 304          |
| 108          | Aguas Calientes    | 7           | 30          | 39          | 230          |
| 109          | El Ayote           | 11          | 45          | 50          | 296          |
| 110          | Los Cerritos       | 8           | 32          | 40          | 236          |
| 111          | San Bartolo        | 11          | 62          | 68          | 397          |
| 112          | El Corosal         | 7           | 18          | 21          | 107          |
| 113          | La Cruz            | 6           | 20          | 27          | 140          |
| 114          | Los Angeles        | 3           | 8           | 23          | 118          |
| <b>Total</b> |                    | <b>1098</b> | <b>5249</b> | <b>3934</b> | <b>24927</b> |

**RAAS - PUNTA GORDA**

| No  | Community           | 1st year | 10-5y | W/F/A | Population |
|-----|---------------------|----------|-------|-------|------------|
| 150 | Salto San Brown     | 8        | 19    | 10    | 90         |
| 151 | El Guarí            | 8        | 31    | 11    | 95         |
| 152 | Nueva Alianza       | 10       | 45    | 33    | 200        |
| 153 | Boca Tapada         | 6        | 47    | 14    | 90         |
| 154 | La Gloria           | 3        | 33    | 8     | 50         |
| 155 | Diamante            | 6        | 50    | 21    | 132 #19    |
| 156 | El Guineo           | 4        | 24    | 11    | 70         |
| 157 | Atlanta             | 6        | 37    | 16    | 100        |
| 158 | Masayán             | 4        | 14    | 9     | 60         |
| 159 | Pijibay             | 3        | 13    | 6     | 50         |
| 160 | Dos de Oro          | 2        | 13    | 7     | 45         |
| 161 | Valentín            | 5        | 15    | 12    | 75         |
| 162 | Boca de Kama        | 2        | 12    | 7     | 50         |
| 163 | Cuenca Punta Gorda  | 34       | 82    | 111   | 659        |
| 164 | Monkey Point        | 7        | 37    | 20    | 121        |
| 165 | Long Beach          | 6        | 47    | 16    | 103        |
| 166 | Cuenca Río Maíz     | 5        | 27    | 13    | 84         |
| 167 | Cane Creek          | 4        | 27    | 8     | 58         |
| 168 | El Cocal -Haulover  | 3        | 26    | 7     | 48         |
| 169 | Barra Punta Gorda   | 3        | 26    | 6     | 42         |
| 170 | San Nicolás         | 4        | 17    | 11    | 72         |
| 171 | La Fonseca          | 18       | 83    | 45    | 175        |
| 172 | Fonseca Sector 1    | 35       | 125   | 152   | 1400       |
| 173 | Fonseca Sector 2    | 27       | 103   | 125   | 743        |
| 174 | Otilio Argüello     | 12       | 29    | 36    | 220        |
| 175 | Santa Rita          | 16       | 41    | 50    | 300 #20    |
| 176 | Sn Luis-Aguas Gatas | 51       | 138   | 165   | 1500       |
| 177 | Los Limones         | 8        | 20    | 24    | 152        |
| 178 | Nueva San Antonio   | 12       | 29    | 36    | 220        |
| 179 | El Pajaro           | 13       | 32    | 39    | 240        |
| 180 | Maritza Quezada     | 46       | 200   | 254   | 2030       |
| 181 | Esperancita 1       | 21       | 55    | 67    | 400 #21    |
| 182 | San Isidro          | 22       | 57    | 70    | 420        |
| 183 | Serrano Sector 1    | 41       | 102   | 135   | 1000       |
| 184 | Serrano Sector 2    | 38       | 83    | 124   | 740        |
| 185 | Santa Rosa 2        | 13       | 33    | 40    | 245        |
| 186 | Esperancita 2       | 11       | 27    | 33    | 200        |
| 187 | La Providencia      | 52       | 152   | 204   | 1230       |
| 188 | El Peñibaye         | 7        | 16    | 20    | 126        |
| 189 | El Paraíso          | 8        | 15    | 19    | 120        |
| 190 | Buena Vista         | 33       | 90    | 108   | 661 #22    |
| 191 | Santa Rosa 3        | 28       | 74    | 90    | 540        |
| 192 | Cerro Bonito        | 22       | 57    | 70    | 420        |
|     |                     | 667      | 2203  | 2263  | 15376      |

**URBAN BLUEFIELDS**

| No  | Community        | 1st year | 10-5y | W/F/A | Population |
|-----|------------------|----------|-------|-------|------------|
| 193 | El Canal         | 47       | 225   | 316   | 1,020      |
| 194 | Pancasán         | 110      | 456   | 771   | 2,647 #23  |
| 195 | 19 de Julio      | 164      | 660   | 1122  | 3,971 #24  |
| 196 | San Mateo        | 103      | 495   | 713   | 2,591      |
| 197 | Fatima           | 164      | 750   | 1125  | 4,173 #25  |
| 198 | Santa Rosa       | 216      | 829   | 1468  | 4,330 #26  |
| 199 | Ricardo Morales  | 129      | 521   | 891   | 3,071 #27  |
| 200 | San Pedro        | 29       | 166   | 226   | 915        |
| 201 | Teodoro Martínez | 60       | 289   | 427   | 1,427      |
| 202 | Punta Fria       | 101      | 400   | 674   | 2,295 #28  |
| 203 | Beholdeen        | 111      | 465   | 776   | 2,680      |
| 204 | New York         | 31       | 190   | 251   | 763 #29    |
| 205 | Old Bank         | 81       | 342   | 556   | 1,869      |
| 206 | Tres Cruces      | 27       | 158   | 217   | 874        |
| 207 | Pointeen         | 29       | 170   | 233   | 939        |
| 208 | Central          | 51       | 280   | 365   | 1,313 #30  |
| 209 | El Bluff         | 70       | 280   | 392   | 1,414      |
|     |                  | 1523     | 6676  | 10523 | 36292      |

**KUKRA HILL**

| No. | Community         | 1st year | 1 to 5y | W/F/A | Population |     |
|-----|-------------------|----------|---------|-------|------------|-----|
| 115 | Kukra Hill        | 138      | 384     | 471   | 2795       | #16 |
| 116 | Samuel Lau        | 17       | 44      | 59    | 340        |     |
| 117 | Las Palmas        | 4        | 7       | 13    | 73         |     |
| 118 | Manhattan         | 6        | 14      | 22    | 121        |     |
| 119 | Lomas de Mico     | 2        | 3       | 8     | 41         |     |
| 120 | Big Lagoon        | 12       | 31      | 42    | 243        |     |
| 121 | El Panchón        | 4        | 9       | 15    | 84         |     |
| 122 | Malopi            | 2        | 1       | 6     | 28         |     |
| 123 | Krisinvilla       | 6        | 11      | 18    | 100        |     |
| 124 | Las Limas         | 5        | 7       | 13    | 73         |     |
| 125 | El Borboyón       | 3        | 3       | 8     | 44         |     |
| 126 | Nary Rivers       | 7        | 15      | 23    | 632        |     |
| 127 | Las Lapas         | 6        | 11      | 17    | 575        |     |
| 128 | Carolina          | 3        | 5       | 8     | 244        |     |
| 129 | El Cacao          | 4        | 6       | 12    | 262        |     |
| 130 | Los Angeles       | 6        | 11      | 18    | 101        |     |
| 131 | El Capricho       | 2        | 3       | 6     | 31         |     |
| 132 | Las Delicias      | 6        | 12      | 19    | 108        |     |
| 133 | Los Cinco         | 2        | 2       | 14    | 33         |     |
| 134 | El Escobal        | 10       | 24      | 34    | 194        | #17 |
| 135 | El Almendro       | 7        | 15      | 23    | 132        |     |
| 136 | Cabeceras- Wilson | 67       | 181     | 225   | 1460       |     |
| 137 | Santa Rita        | 54       | 144     | 180   | 1356       |     |
| 138 | Pueblo Nuevo      | 40       | 107     | 135   | 792        |     |
| 139 | La Ceiba          | 3        | 3       | 13    | 47         |     |
| 140 | Flor de Pino      | 8        | 17      | 25    | 143        |     |
| 141 | Carlos Fonseca    | 29       | 75      | 95    | 556        | #18 |
| 142 | Neysi Ríos        | 22       | 42      | 41    | 227        |     |
| 143 | San Brown         | 14       | 58      | 46    | 264        |     |
| 144 | San Ramón         | 5        | 33      | 14    | 73         |     |
| 145 | La Pichinga       | 13       | 57      | 43    | 250        |     |
| 146 | El Porvenir       | 49       | 173     | 164   | 987        |     |
| 147 | Nuevo Chontales   | 34       | 110     | 113   | 660        |     |
| 147 | La Palma          | 50       | 186     | 169   | 1000       |     |
| 149 | El Sfilco         | 8        | 38      | 23    | 132        |     |
|     |                   | 648      | 1842    | 2135  | 14201      |     |

Comparison of Proposal and DIP objectives, after KPC Baseline results.

| Proposal Project Objectives   | DIP Revised Objectives   |
|---|--|
| <p><b>DIARRHEAL CASE MANAGEMENT (25%)</b><br/>                     1. Increase from 30% to 70% the number of children with diarrhea in the last 2 weeks will have received ORT.</p>                 | <p><b>DIARRHEA Case Management</b><br/>                     1. <u>Objective:</u> Increase from 36% to 55% numbers of children with diarrhea who receive ORT.<br/> <u>Indicator:</u> Children 0-23 months with diarrhea in the last 2 weeks who will have received ORT (ORS, Recommended Home Fluids such as rice water, breastmilk, and coconut water.)</p>  |
| <p>2. Increase from 20% to 60% the number of mothers who will know to give an increased amount of food for at least two weeks after diarrhea.</p>   | <p>2. <u>Objective:</u> Increase from 61.3 to 70% the percentage of mothers who know it is important to give an increased amount of food for at least two weeks after diarrhea.<br/> <u>Indicator:</u> Mothers of infants/ children (less than 24 months), not being exclusively breastfed, who had diarrhea in the past 2 weeks and who were giving their children the same amount or more food than usual afterwards.</p>                            |
| <p>3. Increase from 30% to 60% the number of mothers will know at least two signs of dehydration.</p>   | <p>3. <u>Objective:</u> Increase from 12.4% to 40% the percentage of mothers who know at least one sign/symptom of dehydration.<br/> <u>Indicator:</u> Mothers of children 0-23 months who know at least one sign of dehydration.</p>  |
| <p>Was not a proposal objective, newly added.</p>   | <p>4. <u>Objective:</u> Increase from 41% to 60% the percentage of mothers who know that it is important to give children the same amount or more food during diarrhea.<br/> <u>Indicator:</u> Mothers of infants/children (less than 24 months) not being exclusively breastfed, who had diarrhea in the past two weeks and who were giving their children the same amount or more food as usual.</p>   |
| <p><b>MATERNAL AND NEWBORN CARE (20%)</b><br/>                     4. Increase from 30% to 60% the number of mothers who will have had at least one prenatal visit during their last pregnancy.</p> | <p>Maternal care as an intervention was dropped in favor of greater efforts in family planning and breastfeeding.<br/>                     This objective was dropped.</p>   |
| <p>5. Increase from 30% to 70% the number of women 10-49 yrs who will have received at least 2 doses of tetanus toxoid</p>  | <p>This objective is now part of the Immunizations intervention, see Objective #12 below.</p>  |
| <p><b>FAMILY PLANNING (15%)</b><br/>                     6. Increase to 55% the number of couples using a modern contraceptive.</p>   | <p><b>FAMILY PLANNING</b><br/>                     5. <u>Objective:</u> Increase from 54.7% to 65% of women who aren't pregnant, do not want another child in the next 2 years or are not sure, who are using a modern family planning method.<br/> <u>Indicator:</u> Mothers of children 0-23 months of age who are not pregnant, do not want another child in the next two years or are not sure, who are using a modern family planning method.</p> |

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|--|---|
| <p><b>PREVENTION AND TREATMENT OF VITAMIN A DEFICIENCIES. (15%)</b><br/> 7. Increase from 50% to 80% the number of children 6-59 months receiving 2 doses of Vitamin A during the last year.</p> | <p><b>PREVENTION OF VITAMIN A DEFICIENCY</b><br/> 6. <u>Objective:</u> Increase from 0.5% to 50% the proportion of children 6-59 months of age who receive a vitamin A dose every 6 months.<br/> <u>Indicator:</u> Children 18-23 months who received at least 2 or 3 doses of vitamin A (by card). (KPC survey table- children 18-23 months, giving 1,2 or 3+ doses of vitamin A. Report overdose. Correct answer is 2 or 3 doses.)</p>  |
| <p>8. Increase from 20% to 50% the number of mothers receiving Vitamin A within two months postpartum.</p>   | <p>7. <u>Objective:</u> Increase from 1.1% to 20% the percentage of mothers who receive one dose of vitamin A dose within one month post-partum.<br/> <u>Indicator:</u> Mothers of children 1-23 months who received vitamin A within one month postpartum after the birth of their youngest child.</p>   |
| <p>9. Increase from 30% to 70% the number of mothers will be giving Vitamin A rich foods to children.</p>  | <p>This objective was dropped due to its lack of specificity. Baseline KPC found 98% of mothers were giving vitamin A rich foods to their children.</p>   |
| <p><b>NUTRITIONAL IMPROVEMENT (15%)</b><br/> 10. Increase to 30% the number of mothers who exclusively breastfeeding to at least four months.</p>  | <p><b>NUTRITION</b> (Note the increase to 6 months exclusive breastfeeding)<br/> 8. <u>Objective:</u> Increase from 6% to 14% the percentage of mothers who breastfeed exclusively for the first six months.<br/> <u>Indicator:</u> % infants less than 6 months exclusively breastfed.</p>   |
| <p>11. Increase to 50% the number of mothers attending HEARTH sessions will successfully rehabilitate a malnourished child.</p>  | <p>9. <u>Objective:</u> Increase from 48% to 75% the % of registered children who have been weighed according to MINSA protocols in the past three months.<br/> <u>Indicator:</u> % children 0-23 months who have been weighed according to MINSA protocols.<br/> 10. <u>Objective:</u> Increase to 70% of registered children being weighed, % of those not gaining weight who received nutritional counseling and had catch-up growth/gained weight.<br/> <u>Indicator:</u> % registered children 0-23 months who have been weighed and are not gaining weight who received nutritional counseling and had catch up growth.</p> |
| <p><b>IMMUNIZATION</b><br/> 12. Increase to 80% the number of children completely immunized by their first birthday.</p>   | <p><b>IMMUNIZATIONS</b><br/> 11. <u>Objective:</u> Increase from 69 to 80% the percentage of children 12-23 months who are completely immunized.<br/> <u>Indicator:</u> % children 12-23 months who are completely immunized (by card).<br/> 12. <u>Objective:</u> Increase from 18% to 40% the percentage of pregnant women 10-49 years who received at least two doses of tetanus toxoid before the birth of their youngest child.<br/> <u>Indicator:</u> Mothers of children 0-23 months of age who received at least 2 doses of TT before the birth of their youngest child (by card).</p>                                    |