

# SM2015-Nicaragua

## Baseline Household Census & Survey

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**Final Report**

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This Final Report on the SM2015-Nicaragua Baseline Household Census and Survey was produced in agreement with the Inter-American Development Bank (IDB). All analyses and report writing were performed by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington.

### **About IHME**

IHME monitors global health conditions and health systems and evaluates interventions, initiatives, and reforms. Our vision is that better health information will lead to more knowledgeable decision-making and higher achievements in health. To that end, we strive to build the needed base of objective evidence about what does and does not improve health conditions and health systems performance. IHME provides high-quality and timely information on health, enabling policymakers, researchers, donors, practitioners, local decision-makers, and others to better allocate limited resources to achieve optimal results.

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## CHAPTER 1: INTRODUCTION

This chapter provides a general overview of the objectives, design, and implementation of the SM2015-Nicaragua Baseline Household Census and the SM2015-Nicaragua Baseline Household Survey.

### 1.1 Objectives

The Salud Mesoamerica 2015 Initiative (SM2015) is an innovative public/private partnership which seeks to reduce health equity gaps in Mesoamerica faced by those living in extreme poverty.

The principal objective of the SM2015-Nicaragua Baseline Household Survey was to collect baseline data on household characteristics, household expenditures, and numerous reproductive health, maternal and neonatal health, immunization, and nutrition indicators (including physical measurements) related to the strategic areas of the Initiative in Nicaragua (Figure 1.1).



**Figure 1.1 Map of Mesoamerica with Nicaragua highlighted**

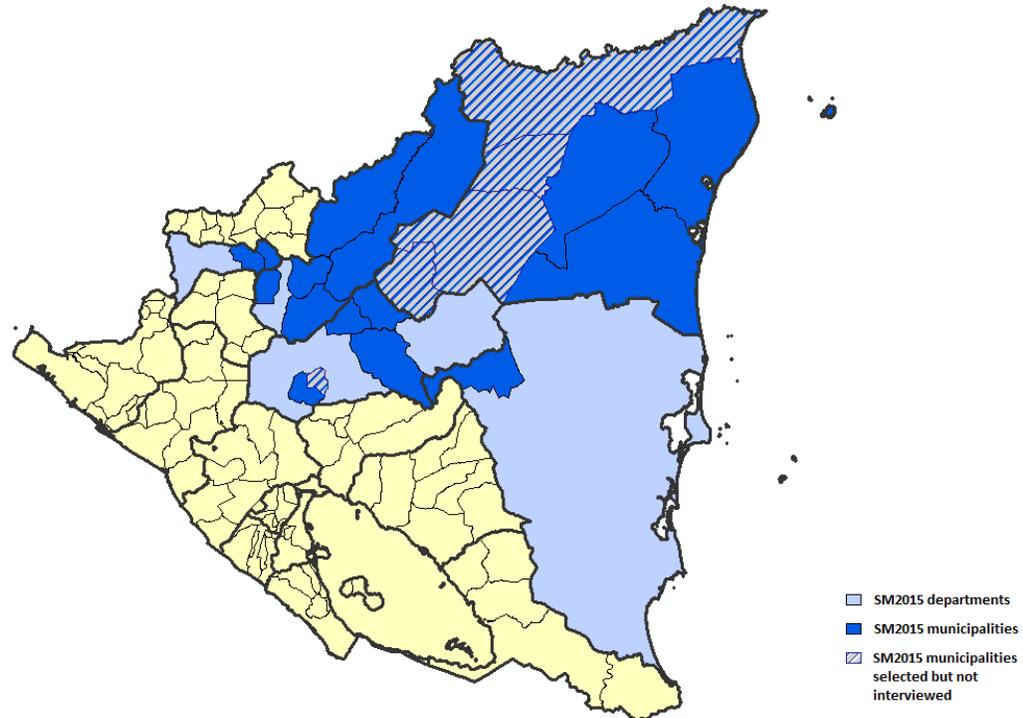
### 1.2 Design

#### 1.2.1 Sample selection

The sample for the SM2015-Nicaragua Baseline Household Survey was designed to provide estimates of the coverage of key health interventions and indicators among the lowest wealth quintile of the population.

The primary administrative units in Nicaragua are departments and autonomous regions, each subdivided into municipalities. There are a total of 15 departments and 2 autonomous regions. For SM2015, there will be two phases, the first targeting municipalities with the highest rates of unsatisfied basic needs, and the second targeting municipalities that belong to 3 local health systems or SILAIS. In Nicaragua, IDB has identified 19 intervention municipalities in which to conduct the baseline SM2015 Household Survey for the Initiative on the basis of their high concentration

of residents in the country's lowest wealth quintile, and 4 control municipalities with similar socio-economic characteristics and ethnic composition (Figure 1.2.1). From these 23 municipalities, a random sample of eligible households was selected to reach the sample size of 2,464 households (1,714 intervention and 750 control households). A detailed description of the sampling procedure can be found in Appendix A.



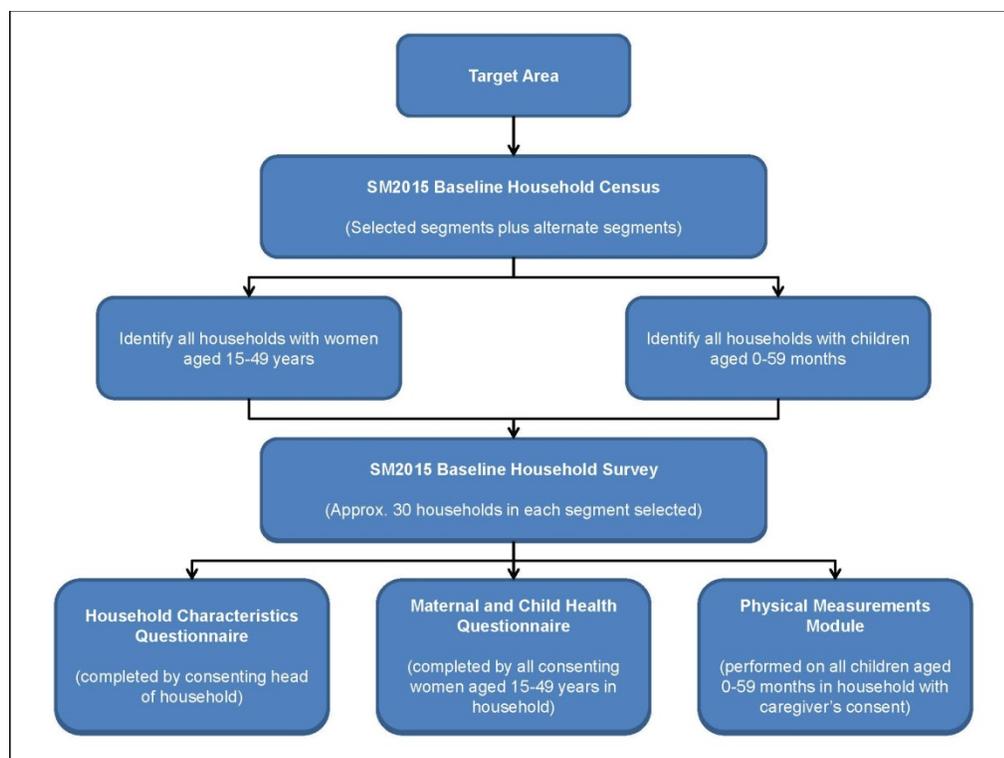
**Figure 1.2.1 Map of Nicaragua with targeted municipalities highlighted**

Briefly, the 23 targeted municipalities were divided into segments. From this list, a representative sample of 90 segments was selected. Segments were randomly-selected with probability proportional to size, where size was represented by the number of occupied households within the segment, as captured on the 2005 Nicaragua Population Census. In addition, a set of alternate segments was selected using identical methodology, to be surveyed in the event that any of the selected segments could not be surveyed and needed to be replaced for any reason (e.g., security concerns or high proportion of absent households). The total number of segments represented in the final dataset is shown in Table 1.2.1.

**Table 1.2.1 Number of segments, by municipality**

Department	Municipality	Number of segments
<b>Interviewed</b>		
Jinotega	El Cua	3
	Jinotega	13
	San Sebastián de Yali	3
	Santa María de Pantasma	4
	Wiwili	3
	San Juan Río Coco	6
	Telpaneca	6
Matagalpa	Matiguás	3
	Rancho Grande	2
	Terrabona	1
	Tuma - La Dalia	10
Region Atlantico Norte	Bocana de Paiwas	2
	Mulukuku	2
	Prinzapolka	1
	Puerto Cabezas	8
	Rosita	1
<b>Selected but not interviewed</b>		
Region Atlantico Norte	Waspan	5
	Bonanza	3
	Waslala	6
	Siuna	4
	Prinzapolka	1
	Rosita	1
Region Atlantico Sur	El Ayote	2

Immediately prior to the SM2015-Nicaragua Baseline Household Survey, the SM2015-Nicaragua Baseline Household Census was conducted in order to identify eligible women and children for the survey. The SM2015-Nicaragua Baseline Household Census was carried out in each of the randomly-selected segments. Using demographic data collected during the household listing exercise, households were then systematically selected for participation in the survey (i.e., if age-eligible women and children were listed as residents). All women aged 15-49 years who were residents of the selected household were eligible to be interviewed, and all children aged 0-59 months who were residents of the selected household were eligible for the physical measurement module. A schematic diagram of the survey implementation is shown in Figure 1.2.2.



**Figure 1.2.2 Schematic diagram of SM2015 survey implementation**

Additional details pertaining to eligibility and selection for the survey are summarized in Appendix A.

### **1.2.2 Instruments for data collection**

The baseline SM2015 Household Survey was used to generate a rapid assessment of current coverage rates of health interventions in the strategic areas of the Initiative (reproductive, maternal and neonatal health, immunization, and nutrition). Standardized questionnaires as well as surveys of health facilities and data from the health information systems were used to provide the information needed to establish the baseline.

There were three components to the SM2015-Nicaragua Baseline Household Survey (in addition to the SM2015 Household Census): the Household Characteristics Questionnaire, the Maternal and Child Health Questionnaire, and the Physical Measurements Module.

The content of the household questionnaires was developed to measure the coverage of key health interventions and indicators, and many items were adapted from existing Demographic and Health Surveys (DHS). The questionnaires were initially developed in English, and then translated to Spanish. To best reflect the issues most relevant to the region under study and the local language, the Spanish-language questionnaires were revised following input from key stakeholders and at the conclusion of the pilot study (described below). The revised Spanish-language surveys were then back-translated to English. Study areas included a substantial proportion of indigenous populations; many of them also Spanish speakers. Although it was expected that it would be possible to apply most surveys in Spanish, the household survey was also translated and back-translated to the most common indigenous languages in the study areas.

The SM2015-Nicaragua Household Census and Household Survey were conducted using a computer-assisted personal interview (CAPI). CAPI is programmed using DataStat Illume and installed into computer netbooks which are used by the surveyors at all times of the interview. CAPI supports skip patterns, inter-question answer consistency, and data entry ranges. The aim of introducing CAPI to the field is to reduce survey time by prompting only relevant questions, to maintain a logical answering pattern across different questions, and to decrease data entry errors. The use of CAPI also allows instantaneous data transfer via a secure link to IHME. Data can be continuously monitored, and modifications to the instrument can be updated remotely.

The SM2015 Household Census was used to capture the age and sex distribution of all of the usual members of all of the households in the selected segments. Basic information including relationship to the head of the household and marital status was also collected. Children aged 0-59 months who had one or more parent residing in the same household were linked to their mother and/or father by way of unique household member identification codes.

As previously mentioned, data from the SM2015 Household Census were then used to systematically select households for the detailed interviews and the physical measurements module (Figure 1.2.2). Selected households were re-visited typically within one month of the census and these questionnaires were completed during this visit.

The Household Characteristics Questionnaire collected information on the source of water, type of toilet facilities, exposure to secondhand smoke, ownership of various assets including durable goods, agricultural land, and livestock, and household expenses and sources of health care financing.

The Maternal and Child Health Questionnaire was used to collect information from all women of reproductive age (15-49 years). These women were asked questions on the following topics: background characteristics (including education, occupation, and exposure to media), access to health care, current health status, recent history of illness and associated medical expenses, birth history (including relevant questions about pregnancies that ended in miscarriage, stillbirth, or abortion), antenatal, delivery, and postpartum care, fertility preferences, knowledge and use of family planning methods (including barriers to use), exposure to health system interventions, and satisfaction with community health workers. Those with children aged 0-5 years were asked detailed questions in reference to each child born in the past five years on topics such as: birth spacing, antenatal care, labor and delivery, postpartum care, breastfeeding and infant feeding practices, child's current health status, recent history of illness including diarrhea, fever, and acute upper respiratory infection and associated medical expenses, child's exposure to health system interventions, immunization and supplementation history.

The Physical Measurements Module captured weight, height/length, and hemoglobin levels of children aged 0-59 months. Portable scales and stadiometers were used for the anthropometric measurements and hemoglobin levels were assessed in the field using a portable HemoCue™ machine. In addition, samples of capillary blood are collected using the dry blood spot (DBS) technique from children 12-23 months. Medically trained personnel (i.e., professional nurses) performed all assessments.

### **1.2.3 Training of data collectors**

A total of 26 people (male and female) were recruited and trained to serve as supervisors, interviewers or to conduct physical measures, and reserves for the household census and survey. All field staff were required to have formal education through high school and exhibited sufficient literacy and speaking abilities in the language of the survey, as well as basic arithmetic skills. Per-

sonnel in charge of physical measures were nurses, required to have previous medical training and experience.

A five-day training exercise was undertaken in December 2012 in Estelí, Nicaragua. The first three days were devoted to classroom training for all field staff, including application of questionnaires and physical measurement practices. The final two days were devoted to field training and pilot testing. Staff from El Colegio de la Frontera Sur (ECOSUR-Mexico) and the Centro de Investigación y Estudios en Salud of the University of Nicaragua (CIES-UNAN) the agencies in charge of data collection in Nicaragua, and invited experts from IHME led the training, which was conducted in Spanish and included a variety of lectures, presentations, demonstrations, and role-playing exercises. Nutrition experts from IHME led the training sessions on height and weight measurements and hemoglobin testing for the professional nurses who were hired to perform the physical assessments of children. A practice session took place with children attending a medical unit during the second day. These personnel were trained to perform standardized anthropometric and hemoglobin measurements using standard techniques.

During the classroom training sessions, supervisors and interviewers were briefed on the Salud Mesoamerica 2015 Initiative (SM2015) and the specific survey instruments developed for the Initiative. Supervisors and interviewers then received training on survey implementation using electronic devices (including the use of the CAPI and interviewing skills), and fieldwork procedures (including map reading for locating selected households), reviewed the content of the household questionnaires in close detail, and received basic instruction on the principles of, and strategies for, data quality monitoring, team communication and problem-solving. Household teams engaged in role-playing scenarios to practice administering the initial census survey and the full household questionnaire. A specialized team was trained in anthropometry and collection of a blood specimen. Trainers and supervisors provided feedback on the practice interviews. Specific issues noted during observation of the practice interviews were discussed with the whole group.

Field training and pilot sessions were initiated on day four of the training period in a popular neighborhood in Estelí. Household teams and anthropometry teams spent two days in the field collecting data. This field practice provided the interviewers with an opportunity to become aware of any issues with the survey that they did not previously understand. The field training sessions also provided an opportunity to conduct cognitive testing of the survey among target respondents. At the end of each day, the trainers and trainees reviewed the questionnaires and discussed any problems that arose. Minor revisions to the questionnaires were implemented based on feedback from the field training sessions.

All field staff were evaluated on survey concepts and procedures by means of short tests following completion of the classroom training sessions and field training sessions. In addition to these evaluations, all field staff were observed by the trainers in order to fully assess their ability to administer the questionnaires.

#### **1.2.4 Data collection**

The SM2015-Nicaragua Baseline Household Census, which captured basic demographic characteristics of all usual household occupants, was carried out between March 1, 2013 and August 29, 2013 in each of the randomly-selected segments. For quality assurance, the data collected during the SM2015 Baseline Census were compared to data from the 2005 Nicaragua Population Census on an on-going basis. When 20% fewer than expected households or people are captured on the SM2015 Baseline Census, or when more than 5% of households are classified as “absent”, field staff are instructed to return to segments and attempt to capture missing households.

Data collection for the SM2015-Nicaragua Baseline Household Survey began on May 1, 2013 and was completed on September 3, 2013. To assure completeness of the sample, field staff were instructed to return to selected households up to three times (on different days, and at different times during the day) in an attempt to complete the Household Characteristics Questionnaire, the Maternal and Child Health Questionnaire, and the Physical Measurements Module.

Six data collection teams, consisting of a total of five interviewers (male and female) were deployed to conduct the SM2015 Household Census and the SM2015 Household Survey. Supervisors were responsible for reviewing all questionnaires for quality and consistency prior to departing each segment. There were six supervisors overseeing the SM2015 Household Census and SM2015 Household Survey.

All data collection instruments and procedures were approved by the Ethics Committee of ECOSUR and CIES-UNAN.

The data collection process was complicated due to safety issues in the Department of Jinotega, and especially in the North Atlantic Region (RAAN). A very threatening event occurred in the RAAN, where interviewers were assaulted, threatened and tied. Although fortunately there were no personnel injured, this very salient event posed us as an easy target for future violent events in the regions, and forced us to stop activities in that region. We recalculated power estimates for the evaluation indicators, showing that with the attained sample we have enough power for this evaluation. In addition, analysis was conducted to assure that it did not affect the validity of our results. In the results sections we present the composition of the sample actually visited, and in Appendix A we include a comparison of the characteristics of visited and non-visited areas. This analysis shows no major differences between visited and non-visited areas, supporting that no bias was introduced because of this.

### **1.2.5 Data entry and data analysis**

Information that is collected by each survey component is monitored by both field supervisors and analysts at IHME to ensure data quality and adherence to survey protocols. Data files are uploaded to a secure FTP site where they can be accessed by the data analysis team at IHME. After census, household, and health facility data is received, data is rigorously reviewed for quality with regards to consistency, clarity, and completeness. Prompt evaluation of data quality allows for clarification from data collectors regarding inadequacies and irregularities, and rapid correction of procedural errors.

### **1.2.6 Final sample description**

Table 1.2.6 shows the total number of completed interviews with heads of households and women of reproductive age, and the total number of physical measurements of children aged 0-59 months performed, with corresponding response rates, by municipality. Response rates were calculated using the following formula:  $(\text{[# complete]} \div \text{[# eligible participants]})$ . High non-response may affect the reliability of the estimates.

According to the 2005 Nicaragua Population Census, we expected a total of 11,525 occupied households in the 90 selected segments. The SM2015 household listing exercise found 8,867 households that were occupied in the 68 segments that were ultimately interviewed. Of the 8,867 occupied households, 8,864 completed the SM2015 Household Census, yielding a response rate of essentially 100 percent for this portion of the survey.

Based on information collected during the SM2015 Household Census, a subset of households was visited for individual interviews. A total of 2,200 households were visited for the individual interviews. Of these, a total of 2,071 Household Characteristics Questionnaires were completed with heads of households, yielding a household response rate of just over 94 percent.

Using the household roster completed as part of the SM2015 Household Survey, 3,060 women of reproductive age (15-49 years) were identified from the sub-sample of interviewed households as eligible for the Maternal and Child Health Questionnaire. Of these, 2,823 successfully completed the questionnaire (92 percent). The household roster completed as part of the SM2015 Household Survey was also used to identify 2,265 children aged 0-59 months as eligible for the Physical Measurements Module among the interviewed households. 2,236 of these children were measured (99 percent).

Among those households that were occupied but did not complete the SM2015 Household Census, the majority of the non-response for households and individuals was due to household members refusing the interview or being absent.

Table 1.2.7 summarizes the differences between the number of originally designated sample of segments, households, women and children versus the number actually interviewed. While less households were interviewed than originally intended, more than 1.5 times the expected number of women and children were interviewed.

**Table 1.2.6 Number of households, number of eligible women, number of eligible children, and response rates by municipality**

Questionnaire type	Bocana de Patwas	El Cua	Jinotega	Matiguás	Mulukuku	Prinzapolka	Puerto Cabezas	Rancho Grande	Rosita	San Juan Río Coco	San Sebastián de Yalí	Santa María de Pantasma	Telpaneca	Terrabona	Tuma - La Dalia	Wiwilí
<b>Household census</b>																
No. of households	205	477	1617	427	251	108	1157	267	120	700	347	545	858	110	1258	428
No. of households occupied	205	477	1614	427	251	108	1156	267	120	700	347	545	855	110	1257	428
No. of households censused <sup>a</sup>	205	477	1612	427	251	108	1155	267	120	700	347	545	855	110	1257	428
Response rate <sup>b</sup> , %	100	100	99.9	100	100	100	99.9	100	100	100	100	100	100	100	100	100
<b>Household characteristics questionnaire</b>																
No. of households visited	61	93	422	96	64	38	281	60	35	192	94	127	189	30	320	98
No. of households interviewed <sup>a</sup>	60	90	407	91	60	31	242	60	31	183	91	122	181	30	302	90
Response rate <sup>b</sup> , %	98.4	96.8	96.4	94.8	93.8	81.6	86.1	100	88.6	95.3	96.8	96.1	95.8	100	94.4	91.8
<b>Women's questionnaire</b>																
No. of eligible women <sup>c</sup>	86	120	652	132	83	41	383	89	37	284	122	170	264	33	438	126
No. of eligible women interviewed <sup>a</sup>	85	115	592	122	81	36	327	87	35	268	114	156	243	33	411	118
Response rate <sup>b</sup> , %	98.8	95.8	90.8	92.4	97.6	87.8	85.4	97.8	94.6	94.4	93.4	91.8	92	100	93.8	93.7
<b>Child questionnaire and measurements</b>																
No. of eligible children <sup>d</sup>	70	102	443	86	64	27	250	75	30	204	96	144	195	34	347	98
No. of eligible children measured	70	101	434	86	64	26	245	75	30	198	96	143	193	34	344	97
Response rate <sup>b</sup> , %	100	99	98	100	100	96.3	98	100	100	97.1	100	99.3	99	100	99.1	99

<sup>a</sup>Includes only units with completed interviews <sup>b</sup>Number of completes out of total number of eligible units (i.e., occupied households or age-eligible women and children) <sup>c</sup>Women aged 15-49 years who reside in the interviewed households, based on the household roster completed as part of Household Characteristics Questionnaire <sup>d</sup>Children aged 0-59 months who reside in the interviewed households, based on the household roster completed as part of Household Characteristics Questionnaire

**Table 1.2.7 Number of households, women and children selected and interviewed**

	Designated sample	Interviewed	Coverage
Segments	90	68	76%
Households (total)	2464	2052	83%
Households (intervention)	1714	1292	75%
Women, 15-49 years	1136	1713	151%
Children, 0-23 months	378	590	156%
Children, 0-59 months	861	1403	163%

The subsequent chapters present characteristics of the surveyed SM2015-Nicaragua population from intervention areas, unless otherwise stated. Each table is additionally presented for overall (intervention and control segments) in Appendix D and control segments in Appendix E.

## CHAPTER 2: CHARACTERISTICS OF HOUSEHOLDS

This chapter provides a descriptive summary of the basic demographic, socioeconomic, and environmental characteristics of the households sampled for the SM2015-Nicaragua Baseline Household Survey. This represents only populations in the intervention segments. Results for the whole sample and for control areas will be presented in Appendix D and Appendix E, respectively.

### 2.1 Characteristics of Non-Participating Households

Data on selected households that were absent or declined to participate in the SM2015 Household Survey are drawn from the SM2015 Household Census. A total of 209 (10 percent) of the 1,429 households that were visited did not complete the SM2015 Household Survey. This non-response varies by municipality, from a low of 0 percent to a high of 18 percent non-response. Those households that did not complete the SM2015 Household Survey are hereafter referred to as “replaced” households because they were replaced by other households in the segment, when possible.

Replaced households consisted of 2 to 12 members (median 5 members). Fifty-eight percent of these households were headed by a man and the remaining households were headed by a woman. Nearly all replaced households (98 percent) had a woman of reproductive age as a usual member and most (90 percent) of households had a child under the age of five as a usual member.

### 2.2 Characteristics of Participating Households

A total of 1,300 households in Nicaragua completed the household characteristics questionnaire. The remainder of this chapter is dedicated to a summary of the basic demographic, socioeconomic, and environmental characteristics of the households completing the household characteristics questionnaire.

### 2.3 Household Composition

#### 2.3.1 Age and sex composition

The distribution of the de facto household population in the surveyed households in Nicaragua is shown in Table 2.3.1 by five-year age groups and by sex. Nicaragua has a larger proportion of its population in the younger age groups than in the older age groups. Table 2.3.1 indicates that 37 percent of the population is under age 15 years, 60 percent of the population is in the economically productive age range (15-64), and the remaining 3 percent is age 65 and above.

**Table 2.3.1 Household composition: age and sex**

Percent distribution of the de facto household population by five-year age groups based on the household roster completed as part of the SM2015 Household Survey			
Age	Male (%)	Female (%)	Total (%)
<5	12.7	12.1	12.4
5-9	11.7	11.5	11.6
10-14	13.1	12.6	12.9
15-19	12.2	12.5	12.4
20-24	11.2	10.4	10.8
25-29	7.9	8.2	8.1
30-34	7.3	7.3	7.3
35-39	5.5	5.8	5.6
40-44	4.6	4.7	4.7
45-49	3.4	3.9	3.7
50-54	3.1	3.2	3.2
55-59	2.1	2.3	2.2
60-64	1.7	1.7	1.7
65-69	1.1	1.2	1.2
70-74	0.9	1	0.9
75-79	0.8	0.7	0.7
80+	0.7	0.8	0.8
Total	100	100	100
N	13019	13685	26704

### 2.3.2 Housing composition

The number of households, women and children in the sample; and the percent distribution of households by sex of head of the household, number of usual members and marital status are shown in Table 2.3.2.

Males are the head of the household in 73 percent of surveyed households in Nicaragua, with females as the head of household in the remaining 27 percent. There were four households that did not list anyone on the household roster as the head of the household. The large majority of households (71 percent) have 3-6 members, with another 9 percent of households having nine or more members. Among household members age 15 years and older, the majority are married or partnered (63 percent), with the rest being single (32 percent) or widowed, divorced, or separated (5 percent).

**Table 2.3.2 Household composition**

Number of households, women and children; and percent distribution of households by sex of head of the household, number of usual members, and marital status of members 15+			
Household characteristic	N	%	SE
Number of households	1300		
Number of women	1720		
Number of children	1407		
Sex of the head of the household			
Male	951	73.2	1.2
Female	349	26.8	1.2
DK/DTR	0		
Missing	0		
Total	1300	100	
Number of usual members			
1	1	0.1	0.1
2	40	3.1	0.5
3	247	19	1.1
4	263	20.2	1.1
5	242	18.6	1.1
6	177	13.6	1
7	129	9.9	0.8
8	89	6.8	0.7
9+	112	8.6	0.8
DK/DTR	0		
Missing	0		
Total	1300	100	
Marital status of members of the household			
Single	1256	31.9	0.7
Married	1243	31.5	0.7
Open union / partnered	1237	31.4	0.7
Widow / divorced / separated	203	5.2	0.4
Other	1	0	0
DK/DTR	1		
Missing	0		
Total	3941	100	

## 2.4 Drinking Water Access and Treatment

### 2.4.1 Sanitation facilities and waste disposal

A household's source of drinking water is an important determinant of the health status of household members. Contaminated drinking water can spread waterborne diseases, such as diarrhea or dysentery. Piped water, protected wells, and protected springs are expected to be relatively free of these diseases; whereas other sources like unprotected wells, rainwater or surface water are more likely to carry disease-causing agents.

The percent distribution of households by source of drinking water and location of water source is shown in Table 2.4.1a. The majority of surveyed households (60 percent) use piped water and 21 percent of households have to go outside their home or yard to a water source.

Table 2.4.1b includes information about sanitation facilities. Seventy-six percent of surveyed households use a latrine or pit toilet, 11 percent use no toilet, and 10 percent use a flushing toilet.

**Table 2.4.1a Household characteristics: water source**

Percent distribution of households by source of drinking water, location of water source and round trip time to obtain drinking water			
Household characteristic	N	Weighted %	Weighted SE
<b>Source of drinking water</b>			
Pipes that lead to the house	568	42.6	5
Pipes that lead to the patio/yard	238	17.6	2.9
Public pump	24	2	0.6
Tube or drilled well	39	3.6	1.1
Protected dug well	161	14.4	3.1
Unprotected dug well	109	7.8	1.4
Protected spring	52	3.7	0.8
Unprotected spring	37	2.5	0.7
Rainwater	19	2	1.1
Water tank truck	0	0	
Car with a small tank	0	0	
Surface water	19	1.4	0.5
Bottled water	9	1	0.6
Water jug	2	0.3	0.2
Other	18	1.2	0.3
DK/DTR	0		
Missing	5		
Total	1300	100	
<b>Location of water source</b>			
In own house/home	653	50.7	4.4
In own patio/yard	367	28.8	3
Elsewhere	275	20.5	2.4
DK/DTR	0		
Missing	5		
Total	1300	100	
<b>Time to obtain drinking water (round trip)</b>			
Water on premises	1011	80.4	2.5
Less than 30 minutes	244	18.1	2.3
30 minutes or longer	22	1.5	0.4
DK/DTR	0		
Missing	23		
Total	1300	100	

**Table 2.4.1b Household characteristics: sanitation**

Percent distribution of households by sanitation facility type and if the facility is shared			
Household characteristic	N	Weighted %	Weighted SE
<b>Sanitation facility</b>			
Flushing toilet	127	10.3	2.1
Toilet with water poured from gourds	24	1.8	0.4
Latrine / pit toilet	974	76	2.2
Dry toilet	3	0.3	0.2
No toilet, bushes, field	163	11.2	1.9
Other	4	0.3	0.2
DK/DTR	0		
Missing	5		
Total	1300	100	
<b>Shared toilet/facilities, among households using any type of toilet</b>			
Yes	167	15.9	1.7
No	961	84.1	1.7
DK/DTR	0		
Missing	0		
Total	1128	100	

#### 2.4.2 Cooking fuel sources

Cooking fuel source and the location for cooking food are included in Table 2.4.2. The percentage of households with a separate kitchen is also shown. The two most commonly reported cooking fuel sources used in households are wood (78 percent) and gas tank (35 percent). Among those households with non-missing responses as to what cooking fuel sources they use, 68 percent report normally cooking food in the house, 29 percent normally cook food in a separate building, and 3 percent normally cook food outside the house. Seventy-one percent of households that cook in the home have a separate kitchen.

**Table 2.4.2 Household characteristics: cooking fuel**

Percent distribution of households by cooking fuel source and the location for cooking food; and percentage of households with a separate kitchen			
Household characteristic	N	Weighted %	Weighted SE
Cooking fuel source (the respondent was to select all sources that applied)			
Electricity	29	2.4	0.7
Gas tank	391	34.5	6
Coal	35	3.4	1.3
Wood	1057	78.1	5
Straw/twigs/grass	31	2.4	0.5
Agricultural crops	18	1.4	0.4
No food is cooked at home	2	0.2	0.1
Other	1	0.1	0.1
DK/DTR	0		
Missing	5		
Total	1300		
Location for cooking food, among those who reported a cooking fuel source			
In the house	877	68.4	2.3
In a separate building	376	28.7	2.3
Outside	39	2.9	0.5
Other	0	0	
DK/DTR	0		
Missing	1		
Total	1293	100	
Separate kitchen, among those who reported a cooking fuel source and cook in the home			
Yes	640	71.2	2.2
No	236	28.8	2.2
DK/DTR	1		
Missing	0		
Total	877	100	

### 2.4.3 Household wealth

The availability of durable consumer goods is a good indicator of a household's socioeconomic status. Table 2.4.3 shows the availability of selected consumer goods by household. Three-quarters of households have electricity, and the most commonly owned items are radios (67 percent), cell phones (67 percent), and televisions (56 percent). One-quarter of households own a bicycle and 9 percent own a motorcycle or scooter; less than 3 percent own a car or truck.

Most households have one (45 percent) or two (35 percent) rooms used for sleeping. Just under one-quarter of the households own agricultural land and 9 percent of households rent agricultural land. Five percent of households have a bank account.

**Table 2.4.3a Availability of assets: household effects**

Percent distribution of households with specific household effects							
Household characteristic	N	Weighted %	Weighted SE	Household characteristic	N	Weighted %	Weighted SE
<b>Electricity</b>				<b>Refrigerator</b>			
Yes	949	75.8	3.9	Yes	285	23	2.5
No	345	24.2	3.9	No	1009	77	2.5
DK/DTR	1			DK/DTR	1		
Missing	5			Missing	5		
Total	1300	100		Total	1300	100	
<b>Radio</b>				<b>Computer</b>			
Yes	881	67.2	1.7	Yes	60	5	1.4
No	413	32.8	1.7	No	1234	95	1.4
DK/DTR	1			DK/DTR	1		
Missing	5			Missing	5		
Total	1300	100		Total	1300	100	
<b>Television</b>				<b>Wristwatch</b>			
Yes	702	56.2	3.7	Yes	413	32.4	1.3
No	592	43.8	3.7	No	881	67.6	1.3
DK/DTR	1			DK/DTR	1		
Missing	5			Missing	5		
Total	1300	100		Total	1300	100	
<b>Cell phone</b>				<b>Guitar</b>			
Yes	848	66.7	2.7	Yes	42	3.1	0.5
No	446	33.3	2.7	No	1252	96.9	0.5
DK/DTR	1			DK/DTR	1		
Missing	5			Missing	5		
Total	1300	100		Total	1300	100	
<b>Telephone (landline)</b>							
Yes	15	1.2	0.4				
No	1278	98.8	0.4				
DK/DTR	2						
Missing	5						
Total	1300	100					

**Table 2.4.3b Availability of assets: means of transportation**

Percentage of households with specific means of transport			
Household characteristic	N	Weighted %	Weighted SE
<b>Bicycle</b>			
Yes	283	23.6	2.4
No	1011	76.4	2.4
DK/DTR	1		
Missing	5		
Total	1300	100	
<b>Motorcycle / scooter</b>			
Yes	123	9.1	1.1
No	1171	90.9	1.1
DK/DTR	1		
Missing	5		
Total	1300	100	
<b>Animal-driven cart</b>			
Yes	7	0.5	0.2
No	1287	99.5	0.2
DK/DTR	1		
Missing	5		
Total	1300	100	
<b>Car</b>			
Yes	37	2.6	0.6
No	1257	97.4	0.6
DK/DTR	1		
Missing	5		
Total	1300	100	
<b>Truck</b>			
Yes	8	0.5	0.3
No	1286	99.5	0.3
DK/DTR	1		
Missing	5		
Total	1300	100	

**Table 2.4.3c Availability of assets: other assets**

Percentage distribution of number of rooms used for sleeping, and percentage of households with ownership of bank account, agricultural land and animals			
Household characteristic	N	Weighted %	Weighted SE
<b>Rooms used for sleeping</b>			
Zero	22	1.6	0.5
One	599	45.2	2.4
Two	451	35.2	1.5
Three or more	223	18	1.8
DK/DTR	0		
Missing	5		
Total	1300	100	
<b>Ownership of bank account</b>			
Yes	60	5.2	1.1
No	1232	94.8	1.1
DK/DTR	3		
Missing	5		
Total	1300	100	
<b>Ownership of agricultural land</b>			
Yes, own	314	22.7	2.5
Yes, rent	123	8.6	1.4
Yes, share/community share	63	4.3	0.9
No	790	64.4	4
DK/DTR	5		
Missing	5		
Total	1300	100	
<b>Ownership of animals (bull or cow, mule, goat, chicken, or pig)</b>			
Yes	820	58.7	4.8
No	474	41.3	4.8
DK/DTR	1		
Missing	5		
Total	1300	100	

## 2.5 Household Expenditures

### 2.5.1 Total expenditures by type

Households were surveyed about the amount the family unit living in the household spent over the last month. Table 2.5.1a shows the monthly expenditures per person living in the household. All data are presented in córdobas. About one third of households (31 percent) spent under C\$400 per person over the last month. The median expenditures per person is C\$597 and the mean is C\$1010, which is affected by a few households with high expenditure.

After reporting total household expenditures, households are then asked how much was spent on specific categories (e.g. food, housing, education, and medical care) over the last four weeks. Table 2.5.1b shows the expenditures on each category as a percentage of the total household expenditures, and Table 2.5.1c shows the health care expenditures as a percentage of total household expenditures. For example, if a household spent C\$100 in the last month, and reported spending C\$20 on food, then that household would have spent 20 percent of their total household expenditures on food, and therefore fall into the 10-24 percent category.

Table 2.5.1b shows that 83 percent of households spend more than half of their monthly expenditures on food. The majority of households spend less than 10 percent of their monthly expenditure on education (89 percent of households). Table 2.5.1c shows that most households spent no money on medical care (79 percent), social security (96 percent), private insurance (over 99 percent), and other expenses for access to healthcare (such as transportation, housing, or childcare services needed to get healthcare) (over 99 percent of households).

**Table 2.5.1a Total household expenditures per person**

Percent distribution of households by monthly total expenditure per person			
Characteristic	N	Weighted %	Weighted SE
Monthly expenditure per person (córdobas)			
Less than C\$200	110	7.9	1.1
C\$200 - <400	305	21.8	1.9
C\$400 - <600	270	20.7	1.4
C\$600 - <800	174	13.6	0.9
C\$800 - <1000	112	8.7	0.9
C\$1000+	323	27.2	3.2
Missing	6		
Total	1300	100	

**Table 2.5.1b Household expenditures by type**

Percent distribution of households expenditures by type, as a proportion of total household monthly expenditure											
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
<b>Food</b>				<b>Housing, gas, electricity, and water</b>				<b>Transportation</b>			
0%	22	1.7	0.4	0%	356	24.7	3.8	0%	723	57.5	2.1
0.1% - 9%	3	0.2	0.1	0.1% - 9%	585	45	3.1	0.1% - 9%	390	30.2	1.7
10% - 24%	26	2.1	0.4	10% - 24%	271	24.1	3.8	10% - 24%	137	9.8	0.9
25% - 49%	171	13.5	1.2	25% - 49%	56	5	1.1	25% - 49%	28	2.1	0.4
50% - 74%	404	32.7	1.8	50% - 74%	10	0.8	0.3	50% - 74%	6	0.4	0.2
75% - 89%	371	28.6	1.5	75% - 89%	3	0.2	0.1	75% - 89%	0	0	
≥90%	281	21.2	2.1	≥90%	3	0.2	0.1	≥90%	0	0	
DK/DTR	15			DK/DTR	9			DK/DTR	7		
Missing	7			Missing	7			Missing	9		
Total	1300	100		Total	1300	100		Total	1300	100	
<b>Alcoholic beverages, tobacco, and narcotics</b>				<b>Clothing and footwear</b>				<b>Communication</b>			
0%	1085	84	1.4	0%	917	69.8	2.1	0%	722	56.1	2.5
0.1% - 9%	136	10.9	1.2	0.1% - 9%	112	9.6	1.2	0.1% - 9%	504	39.6	2.3
10% - 24%	55	4.3	0.6	10% - 24%	143	11.7	0.9	10% - 24%	54	4	0.5
25% - 49%	9	0.7	0.3	25% - 49%	96	7.4	0.9	25% - 49%	4	0.3	0.2
50% - 74%	0	0		50% - 74%	17	1.4	0.3	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	1	0.1	0.1	≥90%	0	0	
DK/DTR	5			DK/DTR	4			DK/DTR	7		
Missing	10			Missing	10			Missing	9		
Total	1300	100		Total	1300	100		Total	1300	100	
<b>Education tuition, fees and school supplies</b>				<b>Furniture, household equipment and routine household maintenance</b>				<b>Recreation, culture, restaurants and hotels</b>			
0%	519	40.2	2	0%	1215	94.5	0.7	0%	1243	97.1	0.6
0.1% - 9%	607	48.6	2.2	0.1% - 9%	48	3.9	0.6	0.1% - 9%	36	2.8	0.6
10% - 24%	121	8.5	1.1	10% - 24%	17	1.2	0.3	10% - 24%	1	0.1	0.1
25% - 49%	26	1.9	0.4	25% - 49%	6	0.4	0.2	25% - 49%	1	0.1	0.1
50% - 74%	4	0.4	0.2	50% - 74%	1	0.1	0.1	50% - 74%	0	0	
75% - 89%	2	0.2	0.2	75% - 89%	0	0		75% - 89%	0	0	
≥90%	3	0.2	0.1	≥90%	0	0		≥90%	0	0	
DK/DTR	8			DK/DTR	2			DK/DTR	8		
Missing	10			Missing	11			Missing	11		
Total	1300	100		Total	1300	100		Total	1300	100	

**Table 2.5.1c Household health care expenditures by type**

Percent distribution of households health care expenditures by type, as a proportion of total household monthly expenditure							
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
<b>Out-of-pocket health care</b>				<b>Private insurance premiums</b>			
0%	1016	78.8	1.7	0%	1287	99.9	0.1
0.1% - 9%	140	11.6	1.4	0.1% - 9%	1	0.1	0.1
10% - 24%	79	5.6	0.8	10% - 24%	0	0	
25% - 49%	45	3.3	0.5	25% - 49%	0	0	
50% - 74%	7	0.5	0.2	50% - 74%	0	0	
75% - 89%	1	0.1	0.1	75% - 89%	0	0	
≥90%	0	0		≥90%	0	0	
DK/DTR	2			DK/DTR	2		
Missing	10			Missing	10		
Total	1300	100		Total	1300	100	
<b>Social security premiums</b>				<b>Other costs associated with accessing health care</b>			
0%	1242	95.9	1	0%	1286	99.9	0.1
0.1% - 9%	32	3	0.7	0.1% - 9%	1	0	0
10% - 24%	10	1.1	0.4	10% - 24%	0	0	
25% - 49%	0	0		25% - 49%	1	0.1	0.1
50% - 74%	0	0		50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	0	0	
DK/DTR	7			DK/DTR	2		
Missing	9			Missing	10		
Total	1300	100		Total	1300	100	

### 2.5.2 Health expenditures

Of the 1,300 total households in the survey, 273 (21 percent) reported having health expenditures in the last four weeks. Among these households, health expenditures over the last four weeks ranged from a minimum of C\$11 to a maximum of C\$10,750. The weighted median expenditure was C\$538 and the weighted mean was C\$818, which was inflated by a few households that paid very high medical expenses.

Table 2.5.2 shows the expenditures on each category of medical care as a percentage of the total household monthly medical expenditures. Drugs and medicine represents the largest percentage of total medical spending for many households. Roughly one-third of all households with medical expenditures (36 percent) report spending 90 percent or more of their medical expenditures on prescribed drugs or medicines.

**Table 2.5.2 Household medical expenditures by type**

Percent distribution of household health expenditures by type of care as a proportion of total household monthly health expenditure, among households with any reported out-of-pocket health care expenses or health care access expenses															
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
Care that required overnight stay in a hospital or health facility				Care by traditional or alternative healers, or traditional birth attendants				Care by pharmacists or medications bought from a pharmacy without a prescription				Diagnostic and laboratory tests such as X-rays or blood tests			
0%	266	96.4	1.7	0%	271	99	0.7	0%	173	63.8	2.7	0%	250	92.6	1.7
0.1% - 9%	2	0.9	0.6	0.1% - 9%	0	0		0.1% - 9%	9	3	1	0.1% - 9%	1	0.3	0.3
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	7	2.5	1	10% - 24%	9	2.8	1
25% - 49%	0	0		25% - 49%	1	0.5	0.5	25% - 49%	8	3	0.9	25% - 49%	5	1.6	0.7
50% - 74%	1	0.7	0.7	50% - 74%	0	0		50% - 74%	7	2.5	0.9	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	1	0.4	0.4	75% - 89%	0	0	
≥90%	4	2.1	1.2	≥90%	1	0.5	0.5	≥90%	68	24.8	2.9	≥90%	8	2.7	0.9
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	273	100		Total	273	100		Total	273	100		Total	273	100	
Other costs associated with staying overnight in a hospital or health facility				Dentists				Health care products such prescription glasses, hearing aids, prosthetic devices, etc.				Other health care products or services			
0%	267	97	1.5	0%	264	96.5	1.1	0%	269	98.6	0.7	0%	271	99.4	0.4
0.1% - 9%	1	0.7	0.7	0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	1	0.3	0.3
10% - 24%	1	0.5	0.5	10% - 24%	2	1.1	0.8	10% - 24%	0	0		10% - 24%	1	0.3	0.3
25% - 49%	1	0.7	0.7	25% - 49%	3	0.9	0.5	25% - 49%	0	0		25% - 49%	0	0	
50% - 74%	0	0		50% - 74%	1	0.3	0.3	50% - 74%	1	0.4	0.4	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	1	0.3	0.3	75% - 89%	0	0	
≥90%	3	1.2	0.7	≥90%	3	1.1	0.7	≥90%	2	0.7	0.5	≥90%	0	0	
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	273	100		Total	273	100		Total	273	100		Total	273	100	
Care by doctors, nurses, or other health workers that did not require overnight stay				Medications prescribed by health personnel											
0%	266	97.7	0.9	0%	140	52.9	3.9								
0.1% - 9%	0	0		0.1% - 9%	4	1.4	0.7								
10% - 24%	4	1.3	0.6	10% - 24%	4	1.6	0.8								
25% - 49%	1	0.3	0.3	25% - 49%	9	3.2	1.1								
50% - 74%	1	0.4	0.4	50% - 74%	12	3.7	1								
75% - 89%	1	0.3	0.3	75% - 89%	4	1.7	0.8								
≥90%	0	0		≥90%	100	35.5	3.9								
DK/DTR	0			DK/DTR	0										
Missing	0			Missing	0										
Total	273	100		Total	273	100									

### **2.5.3 Source of health expenditure financing**

Of the 1,300 total households in the survey, 215 (17percent) reported that members of the household went to a hospital and stayed overnight at least once during the last 12 months. Of those 215 households with overnight stays, 125 reported a non-zero amount paid for all of the expenses associated with the overnight stays. Among these 125 households, the amount paid for overnight stays over the last 12 months ranged from a minimum of C\$12 to a maximum of C\$100,000. The weighted median amount paid was C\$1,000 and the weighted mean was C\$2,491, which was inflated by a few households that paid very high expenses. Overall, 90 percent of households with expenditures for overnight stays reported paying C\$3,500 or less.

Table 2.5.3 shows the source of financing for medical expenditures as a percentage of the total household medical expenditures for overnight hospital stays. More than half of all households (54 percent) use current income to fund a portion or all of the household's medical expenditures, with 48 percent of households using current income to fund 90 percent or more of the total medical expenses. Approximately 16 percent of households used savings, 16 percent used money from friends or family members, and 11 percent used money loaned from someone who is not a friend or family member. Fewer than 5 percent of households financed medical expenses through selling property, reducing household spending, health insurance plan payments, political donations or grants, remittances from family or friends abroad, or other alternative sources.

**Table 2.5.3 Household medical expenditures by source of financing**

Percent distribution of households by source of medical expenditures as a percentage of reported total household medical expenditures for overnight hospital stays in the last 12 months, among those households with overnight hospital stays															
Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE
Any of the household members' current income				Health insurance plan payment or reimbursement				Property sold				Political donations or grants			
0%	56	46.1	5.1	0%	125	100		0%	124	98.9	1	0%	125	100	
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0	
25% - 49%	4	3	1.4	25% - 49%	0	0		25% - 49%	0	0		25% - 49%	0	0	
50% - 74%	2	1.6	1.1	50% - 74%	0	0		50% - 74%	0	0		50% - 74%	0	0	
75% - 89%	1	0.9	0.9	75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	62	48.3	5.2	≥90%	0	0		≥90%	1	1.1	1	≥90%	0	0	
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	125	100		Total	125	100		Total	125	100		Total	125	100	
Savings (e.g. bank account)				Items sold (e.g., furniture, animals, or jewelry)				Money from relatives or friends who do not belong to the household				Another source			
0%	105	83.6	3.3	0%	114	91.5	2.7	0%	107	84.2	3	0%	121	97.8	1.3
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0	
25% - 49%	2	1.4	1	25% - 49%	1	0.9	0.9	25% - 49%	0	0		25% - 49%	0	0	
50% - 74%	0	0		50% - 74%	2	1.4	1	50% - 74%	6	4.8	1.8	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	18	15	3.3	≥90%	8	6.2	2.1	≥90%	12	10.9	2.7	≥90%	4	2.2	1.3
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	125	100		Total	125	100		Total	125	100		Total	125	100	
Reducing other household spending				Money loaned from someone who is not a friend of the family				Remittances from family members or friends abroad							
0%	123	97.1	2	0%	114	89.3	2.7	0%	123	98.2	1.3				
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0					
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0					
25% - 49%	0	0		25% - 49%	0	0		25% - 49%	0	0					
50% - 74%	0	0		50% - 74%	0	0		50% - 74%	0	0					
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0					
≥90%	2	2.9	2	≥90%	11	10.7	2.7	≥90%	2	1.8	1.3				
DK/DTR	0			DK/DTR	0			DK/DTR	0						
Missing	0			Missing	0			Missing	0						
Total	125	100		Total	125	100		Total	125	100					

## CHAPTER 3: GENERAL CHARACTERISTICS OF RESPONDENTS

This chapter summarizes the demographic characteristics, socioeconomic status, and health status of women of reproductive age (15-49 years) participating in the SM2015-Nicaragua Baseline Household Survey.

### 3.1 Demographic Characteristics

#### *3.1.1 Age, marital status, relation to head of household*

The age distribution of the de facto population of women of reproductive age residing in the surveyed households in Nicaragua is shown in Table 3.1.1 by five-year age groups. Sixty-two percent of all women participating in the baseline SM2015 Household Survey were younger than 30 years of age, 25 percent were between the ages of 30 and 39, and 13 percent were between the ages of 40 and 49. While the majority of women reported being married (30 percent) or partnered (35 percent), 30 percent indicated they were never married. Approximately 25 percent of women reported being the spouse/partner of the head of the sampled household, 24 percent reported being the biological daughter of the head of the household, 22 percent reported being the life partner of the head of the household, and 12 percent reported being the head of the household.

**Table 3.1.1 Demographic characteristics of respondents**

Percent distribution of the household population by age, marital status and respondent's relationship to the head of the household			
Background characteristic	N	%	SE
<b>Age</b>			
15-19 years	367	21.3	1
20-24 years	410	23.8	1
25-29 years	294	17.1	0.9
30-34 years	245	14.2	0.8
35-39 years	182	10.6	0.7
40-44 years	128	7.4	0.6
45-49 years	94	5.5	0.5
Missing	0		
Total	1720	100	
<b>Marital status</b>			
Single	510	29.7	1.1
Married	518	30.1	1.1
Open union / partnered	603	35.1	1.2
Divorced	2	0.1	0.1
Separated	68	4	0.5
Widowed	19	1.1	0.3
Other	0	0	
DK/DTR	0		
Missing	1720	100	
Total	5016	100	
<b>Respondent's relationship to the head of household</b>			
Head of the household	212	12.3	0.8
Spouse	423	24.6	1
Biological child	411	23.9	1
Adopted / step child	21	1.2	0.3
Grandchild	38	2.2	0.4
Niece / nephew	22	1.3	0.3
Mother / father	4	0.2	0.1
Sister / brother	28	1.6	0.3
Daughter-in-law / son-in-law	117	6.8	0.6
Sister-in-law / brother-in-law	14	0.8	0.2
Grandparent	0	0	
Mother-in-law / father-in-law	1	0.1	0.1
Other relative	4	0.2	0.1
Non-relative	37	2.2	0.3
Life partner	386	22.4	1
Other	2	0.1	0.1
Missing	0		
Total	1720	100	

### 3.1.2 Residence

Department and municipality of residence are summarized in Table 3.1.2 below. The original sampling scheme dictated that segments would be selected with probability proportional to size. The highest numbers of women were surveyed from the municipalities of Tuma-La Dalia and Puerto Cabezas. Fewer than 40 women were surveyed from the municipalities of Prinzapolka, Rosita, or Terrabona.

**Table 3.1.2 Department and municipality of residence of respondents**

Municipality	No. of women
Bocana de Paiwas	85
El Cua	115
Matiguás	122
Mulukuku	81
Prinzapolka	36
Puerto Cabezas	327
Rancho Grande	87
Rosita	35
San Sebastián de Yali	114
Santa Maria de Pantasma	156
Terrabona	33
Tuma - La Dalia	411
Wiwili	118

### 3.2 Educational Attainment and Literacy

Eighty-six percent of survey participants had attended school (Table 3.2.1). For the majority of these women (47 percent), the highest level of education completed was primary schooling. Literacy was assessed by asking respondents to read from a card the following sentence: “La salud del niño es muy importante para su desarrollo en la vida.” About 75 percent of women surveyed were able to read the whole sentence. Eleven percent of women could not read the sentence at all.

**Table 3.2.1 Educational attainment and literacy**

Percentage of women age 15-49 who attended school; percentage of women who attended a literacy course; percent distribution by highest level of education attended, among those who attended school; and literacy of women			
Education characteristic	N	Weighted %	Weighted SE
<b>Education</b>			
Attended school	1469	85.6	1.8
Did not attend school	243	14.4	1.8
DK/DTR	1		
Missing	7		
Total	1720	100	
<b>Literacy course</b>			
Attended literacy course	131	8	1.2
Did not attend literacy course	1582	92	1.2
DK/DTR	0		
Missing	7		
Total	1720	100	
<b>Highest level of education, among those who attended school</b>			
Primary	777	47.2	4.2
Secondary	485	35.9	2
Middle or high school	34	2.2	0.5
University	151	13	2.6
Technical school	21	1.6	0.5
DK/DTR	1		
Missing	0		
Total	1469	100	
<b>Literacy</b>			
Cannot read at all	190	10.8	1.4
Able to read parts of sentence	233	13.5	1.3
Able to read whole sentence	1281	75.4	2.2
Blind or visually impaired	7	0.3	0.1
DK/DTR	2		
Missing	7		
Total	1720	100	

### 3.3 Employment

As summarized in Table 3.3, the vast majority of respondents were homemakers (71 percent). Of the 171 women who reported being employed and working at the time of the interview, nearly all (96 percent) identified “employee” as their occupational role.

**Table 3.3 Employment**

Percent distribution of women age 15-49 by employment status and role			
Employment characteristic	N	Weighted %	Weighted SE
<b>Employment status</b>			
Employed and being paid for work	171	11.6	1.7
Employed but did not work in the last w	4	0.4	0.3
Employed by a family member without	2	0.2	0.2
Student	168	12.2	1.6
Homemaker	1300	70.6	3.1
Retired	1	0	0
Unable to work due to disability	7	0.3	0.1
DK/DTR	57	4.5	1.2
Missing	3	0.1	0.1
Total	0		
<b>Occupational role, among women employed and being paid for work</b>			
Employee	167	96	2.1
Employer	3	2.4	1.6
Owner	0	0	
Self-employed	1	1.6	1.5
DK/DTR	0		
Missing	0		
Total	171	100	

### 3.4 Exposure to Mass Media

Respondents were asked about their exposure to several common types of mass media: newspapers, radio, and television. As displayed in Table 3.4.1, below, among women who demonstrated full or partial literacy, half had weekly exposure to newspapers. About 72 percent of all women had weekly exposure to radio, and 65 percent had weekly exposure to television.

**Table 3.4.1 Exposure to mass media**

Percent distribution of women by exposure to newspapers, radio and television; percentage exposed to all three forms of media and to any form of media at least once a week			
Characteristic	N	Weighted %	Weighted SE
<b>Newspapers, among fully or partially literate women</b>			
≥1 time per week	727	49.2	2.6
<1 time per week	200	12.4	1.3
Never	583	38.4	2.4
Not applicable	1	0	0
DK/DTR	3		
Missing	0		
Total	1514	100	
<b>Radio</b>			
≥1 time per week	1241	71.5	2.4
<1 time per week	142	8.1	1.2
Never	308	19.3	2.2
Not applicable	21	1.1	0.4
DK/DTR	1		
Missing	7		
Total	1720	100	
<b>Television</b>			
≥1 time per week	989	64.6	3.3
<1 time per week	111	6.3	1
Not applicable	546	25.6	3.1
Never	63	3.4	1.2
DK/DTR	4		
Missing	7		
Total	1720	100	
<b>Exposed to all three forms of media at least once per week, among fully or partially literate women</b>			
Yes	424	31.4	2.8
No	1056	66.7	2.9
Not applicable	31	1.9	0.6
DK/DTR	3		
Missing	0		
Total	1514	100	
<b>Exposed to any form of media at least once per week</b>			
Yes	424	28.6	2.8
No	1195	68.8	2.8
Not applicable	44	2.6	0.9
DK/DTR	3		
Missing	54		
Total	1720	100	

### 3.5 Access to Health Services

#### 3.5.1 Proximity to health care facilities

Tables 3.5.1a-d display the responses to several survey questions that were used to assess proximity to health care facilities. Respondents were asked to estimate proximity to health care facilities in terms of distance (kilometers) and travel time. Not surprisingly, respondents typically had more difficulty estimating distance to health care facilities. As shown in the tables below, “Don’t know” responses to the distance questions were exceedingly common.

Not counting the 152 women who were unable to estimate the distance to the closest health facility, 67 percent of women reported living within 5 kilometers of a health facility (Table 3.5.1a). Approximately one quarter of the sample indicated that it took less than 30 minutes to reach this facility by the usual means of transportation. One quarter of women estimated the travel time from their household to the closest health facility to be an hour or more.

Women were also asked for the travel distance and time to their usual health facility, if they had a usual health facility. Excluding the 150 women who did not know the distance to the facility, 67 percent of women were within 5 kilometers and 51 percent of women could travel there in less than 30 minutes (Table 3.5.1b).

Women that had given birth during the past five years were asked about the proximity to the health facility used to deliver. Of these 580 women, 132 did not know the distance (Table 3.5.1c). Almost half of the women (47 percent) reported travelling more than 10 km. Over half of women (60 percent) travelled more than one hour to the facility to deliver.

Of the 1,552 women who reported a recent health facility visit for their child or themselves, most traveled less than 5 kilometers for care (65 percent). Nineteen percent travelled more than 10 kilometers for care. About half of women travelled for less than 30 minutes (49 percent), and 29 percent spend one hour or more travelling for care.

**Table 3.5.1a Proximity to health care facilities: nearest health facility**

Percent distribution of women according to distance and travel time to health care facility closest to household			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	191	15.7	3
1 to <5 km	803	52.9	3.8
5 to <10 km	311	17.6	3.1
≥10 km	256	13.7	2.9
DK/DTR	152		
Missing	7		
Total	1720	100	
<b>Travel time</b>			
<15 min	382	26.2	4.7
15 to <30 min	433	27	3.3
30 to <45 min	332	20.1	2.6
45 to <60 min	39	2.1	0.6
≥60 min	459	24.5	3.7
DK/DTR	8		
Missing	67		
Total	1720	100	

**Table 3.5.1b Proximity to health care facilities: usual health facility**

Percent distribution of women according to distance and travel time to health care facility that the head of household usually attends			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	165	13.4	2.7
1 to <5 km	748	53.7	4
5 to <10 km	280	16.8	3
≥10 km	270	16.1	3.2
DK/DTR	150		
Missing	0		
Total	1613	100	
<b>Travel time</b>			
<15 min	358	24	4.4
15 to <30 min	408	27	3.5
30 to <45 min	322	20.5	2.5
45 to <60 min	41	2.3	0.6
≥60 min	475	26.3	3.9
DK/DTR	6		
Missing	3		
Total	1613	100	

**Table 3.5.1c Proximity to health care facilities: health facility for delivery**

Percent distribution of women according to distance and travel time to health care facility attended for most recent delivery in the last two years			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	17	3.9	1.5
1 to <5 km	138	37.6	6.8
5 to <10 km	55	11.5	2.1
≥10 km	238	47	7
DK/DTR	132		
Missing	0		
Total	580	100	
<b>Travel time</b>			
<15 min	104	21.7	4
15 to <30 min	62	11.2	1.7
30 to <45 min	36	6.7	1.4
45 to <60 min	4	0.9	0.8
≥60 min	368	59.6	4.7
DK/DTR	6		
Missing	0		
Total	580	100	

**Table 3.5.1d Proximity to health care facilities: health facility for recent illness**

Percent distribution of women according to distance and travel time to health care facility attended for respondent's recent illness or child's recent illness			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	141	11.6	2.2
1 to <5 km	704	53.4	4.2
5 to <10 km	260	16.4	3
≥10 km	298	18.6	3
DK/DTR	149		
Missing	0		
Total	1552	100	
<b>Travel time</b>			
<15 min	325	22.4	3.7
15 to <30 min	385	26.4	3.3
30 to <45 min	303	19.9	2.4
45 to <60 min	36	2	0.5
≥60 min	495	29.3	4
DK/DTR	2		
Missing	6		
Total	1552	100	

### 3.6 Health Status

#### 3.6.1 Current health status

Table 3.6.1 shows the self-rated current health status of all women participating in the survey. When asked to evaluate their current health status relative to the past year, 47 percent reported that their health was “about the same”. While 45 percent reported that their health had improved, 8 percent reported worse health on the day of the interview, compared to last year. Eighty-seven percent could “easily” perform their daily activities (e.g., work, housework, and child care). About 13 percent of women reported at least some degree of difficulty performing these tasks that was related to their health status.

**Table 3.6.1 Current health status**

Percent distribution of women age 15-49 by self-rated current health status relative to the health status last year and percentage who can easily perform daily activities			
Characteristic	N	Weighted %	Weighted SE
<b>Current health relative to health last year</b>			
Better	707	44.5	1.5
Worse	174	8.4	0.7
About the same	831	47.1	1.5
DK/DTR	1		
Missing	7		
Total	1720	100	
<b>Ability to perform daily activities</b>			
Easily	1471	86.5	1.1
With some difficulty	217	12.4	1
With much difficulty	23	1	0.2
Unable to do	2	0.1	0.1
DK/DTR	0		
Missing	7		
Total	1720	100	

#### 3.6.2 Recent illness

Women were asked a series of questions about any illnesses or health problems they might have had in the two weeks preceding the interview. Approximately 23 percent of women reported being sick during that time (Table 3.6.2). Of the 413 women who reported a recent illness, headache (26 percent), fever (12 percent), and abdominal pain (9 percent) were the most commonly elicited specific complaints. Twenty-seven percent of women had an illness other than those on the list provided.

**Table 3.6.2 Recent illness**

Percentage of women age 15-49 who were sick in the last two weeks; and among those who were sick, percent distribution by type of recent illness			
Characteristic	N	Weighted %	Weighted SE
<b>Respondent was sick during the past two weeks</b>			
Yes	413	22.7	1.7
No	1298	77.3	1.7
DK/DTR	2		
Missing	7		
Total	1720	100	
<b>Type of illness, among those sick in the past two weeks</b>			
Fever	52	12.4	2.6
Malaria	1	0.2	0.2
Cough / chest infection	32	6	1.5
Tuberculosis	0	0	
Asthma	3	0.6	0.4
Bronchitis	1	0.3	0.2
Pneumonia	1	0.2	0.2
Diarrhea without blood	2	0.3	0.2
Diarrhea with blood	0	0	
Diarrhea with vomiting	2	0.4	0.3
Vomiting	4	1.9	1.4
Abdominal pain	41	9.1	2.3
Anemia	0	0	
Skin rash / infection	4	0.6	0.3
Eye / ear infection	4	0.9	0.4
Measles	0	0	
Jaundice	1	0.1	0.1
Headache	98	25.6	3.3
Toothache	11	1.5	0.5
Stroke	0	0	
Hypertension	11	6.3	2.5
Diabetes	2	2	1.5
HIV/AIDS	0	0	
Paralysis	0	0	
Gynecologic problems	17	4.1	1.2
Obstetric problems	1	0.2	0.2
Other	125	27.3	3.5
DK/DTR	0		
Missing	0		
Total	413	100	

### **3.6.3 Utilization of health services**

Table 3.6.3 summarizes data regarding the utilization of health services among the 413 women who reported an illness in the two weeks preceding the interview. Among these women, 166 (43 percent) sought care at a health care facility. Many of these women attended a public health center/clinic (34 percent); another 32 percent attended a public hospital, and 23 percent attended a public health unit. Only 4 percent women of women who sought care were admitted to a hospital for their recent illness.

**Table 3.6.3 Utilization of health services**

Among women who reported sick in the last two weeks, percentage of women who sought care for the illness; and among women who sought care, percent distribution by timing of care-seeking after onset of illness			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for recent illness</b>			
Yes	166	43.4	4.1
No	247	56.6	4.1
DK/DTR	0		
Missing	0		
Total	413	100	
<b>Type of health facility where care was sought</b>			
Public hospital	50	31.5	7.6
Public health unit	50	23.1	4.4
Public health center / clinic	53	33.7	6.9
Public mobile clinic	1	0.7	0.7
Other public health facility	0	0	
Private hospital	1	0.6	0.6
Private health center / clinic	2	1.4	1
Private office	5	4.7	3.4
Private mobile clinic	0	0	
Other private health facility	1	0.3	0.3
Pharmacy	1	0.5	0.5
Community health worker	0	0	
Traditional healer	0	0	
Other	2	3.6	3.2
DK/DTR	0		
Missing	0		
Total	166	100	
<b>Admitted to hospital for care, among women who sought care at a public or private: hospital, health center / clinic, mobile clinic, or other health facility; public health unit; private office; or pharmacy</b>			
Yes	8	4.1	1.4
No	156	95.9	1.4
DK/DTR	0		
Missing	0		
Total	164	100	

#### **3.6.4 Insurance coverage**

Most women are covered by health insurance (Table 3.6.4). Most women are not insured. Less than five percent of women have insurance from each of: INSS, government/military.

**Table 3.6.4 Insurance coverage**

Percentage distribution of insurance status among all women, women who reported sick in the last two weeks, and women who reported sick in the last two weeks but did not seek care			
Insurance status	N	Weighted %	Weighted SE
<b>Insurance among all women</b>			
MINSA	0	0	
INSS	66	5.4	1.6
Government / military	3	0.1	0.1
Private insurance	0	0	
Other	0	0	
None	1644	94.4	1.6
DK/DTR	0		
Missing	7		
Total	1720	100	
<b>Insurance among women who were sick in the past two weeks</b>			
MINSA	0	0	
INSS	13	4.6	1.6
Government / military	1	0.2	0.2
Private insurance	0	0	
Other	0	0	
None	399	95.2	1.6
DK/DTR	0		
Missing	0		
Total	413	100	
<b>Insurance among women who were sick in the past two weeks but did not seek care</b>			
MINSA	0	0	
INSS	9	6.6	2.8
Government / military	1	0.3	0.3
Private insurance	0	0	
Other	0	0	
None	237	93.1	2.8
DK/DTR	0		
Missing	0		
Total	247	100	

### **3.6.5 Other barriers to health care access**

There are many other barriers to accessing health care. Women were presented with 20 specific factors that might have prevented themselves or their family from receiving health care when it was needed. Table 3.6.5 summarizes the responses to this section. The most commonly cited factor influencing health care access is that women had a preference for treatment at home (45 percent). About 18 percent of women said the health center did not have enough drugs, and 16 percent did not believe they were ill enough to seek treatment.

**Table 3.6.5 Other barriers to health care utilization**

Percentage of women according to perceived barriers to health care utilization, among among women who reported being sick in the last two weeks but did not seek care							
Reason for not seeking care	N	Weighted %	Weighted SE	Reason for not seeking care	N	Weighted %	Weighted SE
<b>Not sick enough to seek treatment</b>				<b>The health center's staff is not knowledgeable</b>			
Yes	33	15.6	3.8	Yes	2	0.6	0.4
No	214	84.4	3.8	No	245	99.4	0.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
<b>Treated self at home</b>				<b>Do not trust the staff</b>			
Yes	92	44.5	5.9	Yes	3	3.5	2.4
No	155	55.5	5.9	No	244	96.5	2.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
<b>Care is too expensive</b>				<b>Was previously mistreated</b>			
Yes	10	3.4	1.1	Yes	10	3.3	1.2
No	237	96.6	1.1	No	237	96.7	1.2
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
<b>Health center is too far away</b>				<b>Tried, but was refused care</b>			
Yes	10	4	1.9	Yes	9	3.8	1.6
No	237	96	1.9	No	238	96.2	1.6
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
<b>Could not find transportation</b>				<b>Did not get permission to go to the doctor</b>			
Yes	7	1.9	0.7	Yes	1	0.3	0.3
No	240	98.1	0.7	No	246	99.7	0.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
<b>Could not afford transportation</b>				<b>Did not want to go alone</b>			
Yes	33	10.4	3.3	Yes	3	0.9	0.6
No	214	89.6	3.3	No	244	99.1	0.6
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	

Table 3.6.5 continued

Reason for not seeking care	N	Weighted %	Weighted SE	Reason for not seeking care	N	Weighted %	Weighted SE
Did not know where to go				Too busy with work, children, and other commitments			
Yes	0	0		Yes	21	8.5	2.9
No	247	100		No	226	91.5	2.9
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
Health center infrastructure is poor				Religious / cultural beliefs			
Yes	5	1.6	0.9	Yes	3	0.8	0.4
No	242	98.4	0.9	No	244	99.2	0.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
Health center does not have enough drugs				No one present at the center when visited			
Yes	58	17.7	2.7	Yes	2	0.5	0.4
No	189	82.3	2.7	No	245	99.5	0.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
Health center is not well equipped				Other			
Yes	9	2.7	1	Yes	18	5.3	1.3
No	238	97.3	1	No	229	94.7	1.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	247	100		Total	247	100	
It is difficult to deal with health center personnel							
Yes	15	5.3	1.8				
No	232	94.7	1.8				
DK/DTR	0						
Missing	0						
Total	247	100					

## CHAPTER 4: FERTILITY

This chapter summarizes several indicators related to fertility based on self-reported data from women of reproductive age (15-49 years) participating in the SM2015-Nicaragua Baseline Household Survey.

### 4.1 Fertility Rates

The fertility rates summarized below were derived from the United Nations Population Division-generated time series for Nicaragua.

#### 4.1.1 Age-specific fertility rates

Age-specific fertility rates (ASFR) are calculated for each five-year age group from 15-19 to 45-49, presented as an annual rate. Births to women at ages less than 15 years, or greater than 49, at the time of the birth are not included. Table 4.1.1 summarizes the five-year age-specific fertility rates in Nicaragua since 1990, at the national level.

**Table 4.1.1 Age-specific fertility rates**

Number of births per 1,000 women, 1990-2010, from World Population Prospects: The 2012 Revision, United Nations Population Division				
Age group, years	Year			
	1990-1995	1995-2000	2000-2005	2005-2010
15-19	156.6	132.6	119.4	112.7
20-24	229.9	198.4	158.9	145.6
25-29	197.1	161.6	139.3	126.7
30-34	154.3	120.4	98.5	89.4
35-39	100.4	71.4	56.4	51.3
40-44	48.6	29.0	21.4	19.6
45-49	13.1	6.6	6.2	5.7

#### 4.1.2 Total fertility rate

The total fertility rate (TFR) is an age-period fertility rate for a synthetic cohort of women surviving from birth through the end of their reproductive period. It measures the average number of births a group of women would have by the time they reach age 50 if they were to give birth at the current age-specific fertility rates (for women aged 15-49) and survive to age 50. The TFR is expressed as the average number of births per woman, and is a better indicator of population fertility because it does not depend on the age structure of the population. However, since this indicator is based on a synthetic cohort of women, it does not necessarily reflect the average number of children women currently aged 15-49 will have, since fertility rates may change in the future. Table 4.1.2 displays the total fertility rates in Nicaragua since 1990, at the national level.

**Table 4.1.2 Total fertility rate**

Average number of births per woman, 1990-2010, from World Population Prospects: The 2012 Revision, United Nations Population Division				
	Year			
	1990-1995	1995-2000	2000-2005	2005-2010
Total fertility rate	4.50	3.60	3.00	2.76

## 4.2 Age at first birth

### 4.2.1 Age at first birth

Seventy percent of respondents had ever given birth (Table 4.2.1). Of these, 70 percent were between 12 and 19 years old when their first child was born. Only 7 percent of women were 25 years old or older when their first child was born. Approximately 9 percent of women reported a history of stillbirth, miscarriage, and/or abortion.

**Table 4.2.1 Parity and age at first birth**

Percent of women age 15-49 who have ever given birth, their age at first birth, and the percent of women who have had a miscarriage, stillbirth, or abortion			
Characteristic	N	Weighted %	Weighted SE
<b>Ever given birth</b>			
Yes	1403	75	1.6
No	310	25	1.6
DK/DTR	0		
Missing	7		
Total	1720	100	
<b>Age at first birth, among parous women</b>			
12-14 years	83	5.1	0.7
15-19 years	900	64.6	2.4
20-24 years	338	23.6	2.3
25-29 years	66	6	1
30-34 years	10	0.6	0.2
35-39 years	2	0.1	0.1
40-44 years	0	0	
45-49 years	0	0	
DK/DTR	0		
Missing	4		
Total	1403	100	
<b>Ever had a stillbirth, miscarriage, or abortion</b>			
Yes	162	8.7	1
No	1550	91.3	1
DK/DTR	1		
Missing	7		
Total	1720	100	

### 4.3 Birth Intervals

#### 4.3.1 Intervals between births

Intervals between births (defined as the number of months between successive births) were calculated using the reported ages of all live births. Reported intervals of less than 9 months were reclassified as missing. Mean birth intervals were then calculated by averaging the derived birth intervals for each woman. Table 4.3.1 displays the distribution of birth intervals, stratified by number of live births.

**Table 4.3.1 Intervals between births**

Among women with two or more children, percent distribution by duration of the birth intervals			
Mean birth interval	N	Weighted %	Weighted SE
<b>Among women with more than one child</b>			
9-11 months	1	0.1	0.1
12-23 months	42	5.7	1.2
24-35 months	199	27.1	2.6
36-47 months	213	20.7	1.7
48-59 months	167	14.9	1.6
≥60 months	295	31.6	2.3
Missing	30		
Total	947	100	
<b>Among women with two children</b>			
9-11 months	1	0.2	0.2
12-23 months	18	7.5	2.6
24-35 months	43	18.9	3.6
36-47 months	36	10.9	1.9
48-59 months	41	10.2	1.8
≥60 months	151	52.3	4.4
Missing	18		
Total	308	100	
<b>Among women with three or four children</b>			
9-11 months	0	0	
12-23 months	13	5.6	2
24-35 months	54	20.5	3.7
36-47 months	75	19.9	3.1
48-59 months	92	20.3	3
≥60 months	132	33.7	2.9
Missing	5		
Total	371	100	
<b>Among women with five or more children</b>			
9-11 months	0	0	
12-23 months	11	3.8	1.3
24-35 months	102	47.5	4
36-47 months	102	33.2	3.7
48-59 months	34	11.2	2.1
≥60 months	12	4.3	1.7
Missing	7		
Total	268	100	

## 4.4 Fertility Preferences

### 4.4.1 Desire for more children

Desire for more children was captured in several places on the Maternal and Child Health Questionnaire. With respect to each live birth in the last five years and with respect to the current pregnancy (among 51 women who reported being pregnant on the day of the interview), women were asked to report whether or not they wanted to become pregnant at that time. Lastly, all women participating in the survey were asked if they wanted more children in the future. Responses to these questions are summarized in Table 4.4.1.

With respect to the most recent pregnancy in the last two years, approximately one third of parous women reported that they did not want to become pregnant. Eight percent did not want more or any children, and 24 percent would have preferred to wait longer before becoming pregnant. The prevalence of these preferences was similar when women were asked to think about their current pregnancy: 9 percent of these women did not want to become pregnant and 22 percent would have preferred to wait longer before becoming pregnant.

**Table 4.4.1 Desire for more children**

Among women with a pregnancy in the two years preceding the interview, percent distribution by desire of the most recent pregnancy in the last two years; and among all women, percentage who desire more children			
Characteristic	N	Weighted %	Weighted SE
<b>Respondent desired their most recent pregnancy in the past two years</b>			
Yes	485	68.8	2
No, wanted to wait	148	23.6	2.2
No, did not want (more) children	59	7.7	1.2
DK/DTR	0		
Missing	10		
Total	702	100	
<b>Respondent desires current pregnancy</b>			
Yes	34	68.6	10.8
No, wanted to wait	14	22.1	7.2
No, did not want (more) children	2	9.3	7.7
DK/DTR	1		
Missing	0		
Total	51	100	

#### **4.4.2 Ideal birth interval**

Women who indicated that they would have preferred to wait before becoming pregnant with their most recent birth in the last five years were asked to report how long they would have wanted to wait. The preferred birth intervals were calculated by adding the desired length of time mothers would have preferred to wait to the actual birth interval. Table 4.4.2 displays the distribution of ideal birth intervals for the most recent birth in the last five years, stratified by the total number of live births reported by the mother.

**Table 4.4.2 Ideal interval for most recent birth**

Percent distribution of women with 2 or more children by ideal interval for most recent birth, according to the number of children			
Characteristic	N	Weighted %	Weighted SE
<b>Among women with more than one child</b>			
9-11 months	0	0	
12-23 months	18	3	0.7
24-35 months	41	6.4	0.9
36-47 months	53	8.3	1.1
48-59 months	78	11.4	1.1
≥60 months	380	57.4	2.4
Did not want to have another child	94	13.4	1.8
Missing	25		
Total	689	100	
<b>Among women with two children</b>			
9-11 months	0	0	
12-23 months	5	1.8	0.8
24-35 months	19	8.6	1.8
36-47 months	20	8.4	2.1
48-59 months	37	14	2.5
≥60 months	151	62.8	3.2
Did not want to have another child	12	4.4	1.4
Missing	16		
Total	260	100	
<b>Among women with three or four children</b>			
9-11 months	0	0	
12-23 months	5	2.6	1.3
24-35 months	12	4.4	1.4
36-47 months	21	9	2.1
48-59 months	29	11.2	2
≥60 months	159	60.5	3.3
Did not want to have another child	33	12.3	1.9
Missing	4		
Total	263	100	
<b>Among women with five or more children</b>			
9-11 months	0	0	
12-23 months	8	5.6	1.8
24-35 months	10	6.1	2.1
36-47 months	12	7.1	2.1
48-59 months	12	7.8	2.2
≥60 months	70	44.1	4.2
Did not want to have another child	49	29.3	4.5
Missing	5		
Total	166	100	

## CHAPTER 5: FAMILY PLANNING

This chapter summarizes key indicators related to the knowledge of, access to, need for, and use of family planning methods among women of reproductive age (15-49 years) participating in the SM2015-Nicaragua Baseline Household Survey.

### 5.1 Knowledge of the Fertile Period

The successful use of family planning methods depends on an understanding of when during the menstrual cycle a woman is most likely to conceive. This is especially true for traditional methods such as the rhythm method (i.e., periodic abstinence), and the withdrawal method. To assess knowledge of the fertile period, women were asked if there were certain days when a woman is more likely to become pregnant, and when during the menstrual cycle those days occurred. Responses to these questions are summarized in Table 5.1.1. Three quarters of women indicated that there were certain days when a woman is more likely to become pregnant, and of these women, 18 percent identified the correct timing of the fertile period (halfway between two periods).

**Table 5.1.1 Knowledge of the fertile period**

Percentage of all currently married or partnered women age 15-49 who know the timing of the fertile period			
Characteristic	N	Weighted %	Weighted SE
Are there certain days when a woman is more likely to become pregnant?			
Yes	778	77.6	2.1
No	230	22.4	2.1
DK/DTR	107		
Missing	6		
Total	1121	100	
Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?			
Just before her period begins	186	24.7	2.8
During her period	44	6.6	1.3
Right after her period has ended	389	49.4	3.7
Halfway between two periods	138	18.4	2.6
Other	6	0.9	0.3
DK/DTR	15		
Missing	0		
Total	778	100	

### 5.2 Use of Family Planning Methods

#### 5.2.1 Current use

The level of current use of contraceptive methods is one of the indicators most frequently used to assess the success of family planning program activities. It is also widely used as a determinant of

fertility. Women who said they had heard of a family planning method were then asked if they were currently using that method. Table 5.2.1a displays the percentage of all women using at least one family planning method, as well as the percentage of women reporting use of more than one family planning method at the time of the interview. Nearly 70 percent of all survey respondents reported current use of at least one family planning method.

**Table 5.2.1a Current use of family planning methods**

Percentage of all currently married or partnered women age 15-49 using family planning methods			
Characteristic or method	N	Weighted %	Weighted SE
<b>Current use of any method</b>			
Yes	825	69	2.2
No	290	31	2.2
DK/DTR	0		
Missing	6		
Total	1121	100	
<b>Current use of any method, among women in need of contraceptives</b>			
Yes	815	82.1	1.8
No	148	17.9	1.8
DK/DTR	0		
Missing	0		
Total	963	100	
<b>Current use of more than one method</b>			
Yes	4	0.5	0.3
No	1111	99.5	0.3
DK/DTR	0		
Missing	6		
Total	1121	100	
<b>Number of methods the respondent is currently using</b>			
0 methods	290	31	2.2
1 method	821	68.5	2.3
2 methods	4	0.5	0.3
3 or more methods	6	0	
DK/DTR	0		
Missing	0		
Total	1121	100	

Table 5.2.1b displays the percentage of all women using specific family planning methods. The methods most commonly in use are injectables (42 percent) and female sterilization (17 percent).

**Table 5.2.1b Current use of family planning methods, by type of method**

Percentage of all currently married or partnered women age 15-49 using specified family planning methods											
Method	N	Weighted %	Weighted SE	Method	N	Weighted %	Weighted SE	Method	N	Weighted %	Weighted SE
Female sterilization				Condom				Rhythm method			
Yes	167	16.8	1.6	Yes	24	1.9	0.5	Yes	3	0.2	0.2
No	947	83.2	1.6	No	1090	98.1	0.5	No	1112	99.8	0.2
DK/DTR	1			DK/DTR	1			DK/DTR	0		
Missing	6			Missing	6			Missing	6		
Total	1121	100		Total	1121	100		Total	1121	100	
Male sterilization				Female condom				Withdrawal method			
Yes	0	0		Yes	0	0		Yes	3	0.2	0.1
No	1115	100		No	1115	100		No	1111	99.8	0.1
DK/DTR	0			DK/DTR	0			DK/DTR	1		
Missing	6			Missing	6			Missing	6		
Total	1121	100		Total	1121	100		Total	1121	100	
IUD				Diaphragm				Emergency contraception			
Yes	21	1.9	0.6	Yes	0	0		Yes	0	0	
No	1093	98.1	0.6	No	1115	100		No	1113	100	
DK/DTR	1			DK/DTR	0			DK/DTR	2		
Missing	6			Missing	6			Missing	6		
Total	1121	100		Total	1121	100		Total	1121	100	
Injectables				Sponge, spermicide				Other modern method			
Yes	523	41.6	2.1	Yes	0	0		Yes	0	0	
No	592	58.4	2.1	No	1115	100		No	1115	100	
DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	6			Missing	6			Missing	6		
Total	1121	100		Total	1121	100		Total	1121	100	
Implants				Lactational amenorrhea method				Other traditional method			
Yes	0	0		Yes	1	0.1	0.1	Yes	0	0	
No	1114	100		No	1113	99.9	0.1	No	1113	100	
DK/DTR	1			DK/DTR	1			DK/DTR	1		
Missing	6			Missing	6			Missing	7		
Total	1121	100		Total	1121	100		Total	1121	100	
Pill											
Yes	87	6.9	1.2								
No	1026	93.1	1.2								
DK/DTR	2										
Missing	6										
Total	1121	100									

Women considered “in need” of family planning methods are those who report the following characteristics: does not have sexual relations, virgin, menopausal, hysterectomy, pregnant, or wants to become pregnant. Table 5.2.1c shows the uptake of modern family planning methods among all women (67 percent), and among women considered “in need” of contraception (82 percent).

**Table 5.2.1c Current use of modern family planning methods**

Percentage of all currently married or partnered women age 15-49 using modern methods of family planning			
Characteristic	N	Weighted %	Weighted SE
<b>Among all women</b>			
Yes	819	68.6	2.2
No	296	31.4	2.2
DK/DTR	0		
Missing	6		
Total	1121	100	
<b>Among women in need of contraceptives</b>			
Yes	809	81.6	1.8
No	154	18.4	1.8
DK/DTR	0		
Missing	0		
Total	963	100	

### 5.3 Sources of Family Planning Methods

Information on where women obtain contraceptive methods is important for family planning program managers. The places where the currently-used family planning methods were acquired (both initially, and most recently, if applicable) are summarized in Tables 5.3.1a-d.

The public sector is the source most commonly reported by users of most modern family planning methods, including female sterilization and injectables. Pharmacies are important sources for the pill and male condoms.

**Table 5.3.1a Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Female sterilization</b>				<b>IUD</b>			
Public hospital	141	86.2	3.7	Public hospital	13	40.9	14.4
Public health unit	11	4.8	2	Public health unit	7	54.8	16.2
Public health center / clinic	7	3.7	1.8	Public health center / clinic	1	4.2	4.3
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	0	0	
Private hospital	0	0		Private hospital	0	0	
Private health center / clinic	5	2.3	1	Private health center / clinic	0	0	
Private office	2	2.7	2.3	Private office	0	0	
Private mobile clinic	1	0.3	0.3	Private mobile clinic	0	0	
Other private health facility	0	0		Other private health facility	0	0	
Pharmacy	0	0		Pharmacy	0	0	
Community health worker	0	0		Community health worker	0	0	
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	0	0	
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	0	0	
Other	0	0		Other	0	0	
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	167	100		Total	21	100	
<b>Male sterilization</b>				<b>Injectables</b>			
Public hospital	0	0	0	Public hospital	130	24.8	3.5
Public health unit	0	0	0	Public health unit	179	35.2	3.7
Public health center / clinic	0	0	0	Public health center / clinic	112	19.9	2.7
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	2	0.2	0.2
Private hospital	0	0	0	Private hospital	1	0.2	0.2
Private health center / clinic	0	0	0	Private health center / clinic	5	1.1	0.8
Private office	0	0	0	Private office	3	0.9	0.6
Private mobile clinic	0	0	0	Private mobile clinic	1	0.1	0.1
Other private health facility	0	0	0	Other private health facility	1	0.1	0.1
Pharmacy	0	0	0	Pharmacy	48	11.2	2.7
Community health worker	0	0	0	Community health worker	34	5.2	1.4
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	1	0.2	0.2
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	3	0.4	0.2
Other	0	0	0	Other	3	0.5	0.3
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	523	100	

**Table 5.3.1b Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Implants</b>				<b>Condom</b>			
Public hospital	0	0	0	Public hospital	3	23	12.8
Public health unit	0	0	0	Public health unit	7	20.8	7.6
Public health center / clinic	0	0	0	Public health center / clinic	8	30	10.3
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	1	3.7	3.8
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	5	22.6	9.9
Community health worker	0	0	0	Community health worker	0	0	
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	0	0	
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	24	100	
<b>Pill</b>				<b>Female condom</b>			
Public hospital	11	10.6	3.9	Public hospital	0	0	0
Public health unit	34	28.7	6.5	Public health unit	0	0	0
Public health center / clinic	18	16.6	4.6	Public health center / clinic	0	0	0
Public mobile clinic	0	0		Public mobile clinic	0	0	0
Other public health facility	1	0.7	0.7	Other public health facility	0	0	0
Private hospital	0	0		Private hospital	0	0	0
Private health center / clinic	1	1.4	1.4	Private health center / clinic	0	0	0
Private office	0	0		Private office	0	0	0
Private mobile clinic	0	0		Private mobile clinic	0	0	0
Other private health facility	0	0		Other private health facility	0	0	0
Pharmacy	17	37.8	10.1	Pharmacy	0	0	0
Community health worker	4	3.6	1.8	Community health worker	0	0	0
Traditional healer	0	0		Traditional healer	0	0	0
Store	0	0		Store	0	0	0
Market	0	0		Market	0	0	0
Church	0	0		Church	0	0	0
Friend / relative	0	0		Friend / relative	0	0	0
Other	1	0.6	0.6	Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0	0	
Total	87	100		Total	0	0	

**Table 5.3.1c Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Diaphragm</b>				<b>Lactational amenorrhea method</b>			
Public hospital	0	0	0	Public hospital	1	100	
Public health unit	0	0	0	Public health unit	0	0	
Public health center / clinic	0	0	0	Public health center / clinic	0	0	
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	0	0	
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	0	0	
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	1	100	
<b>Sponge, spermicide</b>				<b>Rhythm method</b>			
Public hospital	0	0	0	Public hospital	0	0	
Public health unit	0	0	0	Public health unit	0	0	
Public health center / clinic	0	0	0	Public health center / clinic	0	0	
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	0	0	
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	1	25	37.5
Friend / relative	0	0	0	Friend / relative	2	75	37.5
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	3	100	

**Table 5.3.1d Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Withdrawal method</b>				<b>Other modern method</b>			
Public hospital	0	0		Public hospital	0	0	0
Public health unit	1	34.6	34	Public health unit	0	0	0
Public health center / clinic	0	0		Public health center / clinic	0	0	0
Public mobile clinic	0	0		Public mobile clinic	0	0	0
Other public health facility	0	0		Other public health facility	0	0	0
Private hospital	0	0		Private hospital	0	0	0
Private health center / clinic	0	0		Private health center / clinic	0	0	0
Private office	1	35.8	34.5	Private office	0	0	0
Private mobile clinic	0	0		Private mobile clinic	0	0	0
Other private health facility	0	0		Other private health facility	0	0	0
Pharmacy	0	0		Pharmacy	0	0	0
Community health worker	0	0		Community health worker	0	0	0
Traditional healer	0	0		Traditional healer	0	0	0
Store	0	0		Store	0	0	0
Market	0	0		Market	0	0	0
Church	0	0		Church	0	0	0
Friend / relative	0	0		Friend / relative	0	0	0
Other	1	29.6	31.3	Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0	0	
Total	3	100		Total	0	0	
<b>Emergency contraception</b>				<b>Other traditional method</b>			
Public hospital	0	0	0	Public hospital	0	0	0
Public health unit	0	0	0	Public health unit	0	0	0
Public health center / clinic	0	0	0	Public health center / clinic	0	0	0
Public mobile clinic	0	0	0	Public mobile clinic	0	0	0
Other public health facility	0	0	0	Other public health facility	0	0	0
Private hospital	0	0	0	Private hospital	0	0	0
Private health center / clinic	0	0	0	Private health center / clinic	0	0	0
Private office	0	0	0	Private office	0	0	0
Private mobile clinic	0	0	0	Private mobile clinic	0	0	0
Other private health facility	0	0	0	Other private health facility	0	0	0
Pharmacy	0	0	0	Pharmacy	0	0	0
Community health worker	0	0	0	Community health worker	0	0	0
Traditional healer	0	0	0	Traditional healer	0	0	0
Store	0	0	0	Store	0	0	0
Market	0	0	0	Market	0	0	0
Church	0	0	0	Church	0	0	0
Friend / relative	0	0	0	Friend / relative	0	0	0
Other	0	0	0	Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0	0	
Total	0	0		Total	0	0	

## 5.4 Non-Use and Interruption of Use of Family Planning Methods

Non-use and interruption of use of family planning methods are major concerns for family planning program managers.

### 5.4.1 Prevalence

The prevalence of interruption and non-use of family planning methods is summarized in Table 5.4.1. Of women participating in this survey, 83 percent are considered “in need” of contraception (i.e., they did not report any of the following: does not have sexual relations, virgin, menopausal, hysterectomy, pregnant, or wants to become pregnant). Among these women in need, 3 percent reported any interruption in the use of family planning methods in the previous year, and 18 percent reported not using any modern methods at the time of the interview.

**Table 5.4.1 Interruption and non-use of family planning methods**

Percentage of women with interruptions last year in the use of contraception, percentage not using contraception, and percentage in need of contraception			
Characteristic	N	Weighted %	Weighted SE
<b>Currently in need of contraceptives</b>			
Yes	963	82.8	1.9
No	152	17.2	1.9
DK/DTR	0		
Missing	6		
Total	1121	100	
<b>Discontinuation rate: any interruption in use during the last year, among women in need of contraceptives</b>			
Yes	32	3.4	0.8
No	931	96.6	0.8
DK/DTR	0		
Missing	0		
Total	963	100	
<b>Number of interruptions in use during the last year, among women in need of contraceptives</b>			
0	931	96.6	0.8
1	32	3.4	0.8
2-6	0	0	
7-12	0	0	
13 or more	0	0	
DK/DTR	0		
Missing	0		
Total	963	100	
<b>Not currently using any modern method</b>			
Yes	296	31.4	2.2
No	819	68.6	2.2
DK/DTR	0		
Missing	6		
Total	1121	100	
<b>Unmet need: Not currently using any modern method, among women "in need" of contraceptives</b>			
Yes	154	18.4	1.8
No	809	81.6	1.8
DK/DTR	0		
Missing	0		
Total	963	100	

#### **5.4.2 Reasons**

Women who interrupted use of family planning methods in the year preceding the interview, and those who indicated they were not using any methods on the day of the interview were asked to identify reasons for interruption and/or non-use from a list of 30 different options (Tables 5.4.2a-b). The most commonly cited reasons for non-use at the time of the interview were: method affects respondent's health (27 percent), and the respondent wanted to become pregnant (22 percent).

**Table 5.4.2a Reasons for interruption and non-use of family planning methods**

Percent distribution of women who are not using family planning methods by reason for non-use							
Reason	N	Weighted %	Weighted SE	Reason	N	Weighted %	Weighted SE
<b>Unmarried</b>				<b>Did not have a menstrual period since last birth</b>			
Yes	7	2.1	0.9	Yes	5	1.6	0.7
No	238	97.9	0.9	No	240	98.4	0.7
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Married</b>				<b>Was breastfeeding</b>			
Yes	1	0.4	0.4	Yes	10	2.4	0.7
No	244	99.6	0.4	No	235	97.6	0.7
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Does not have sexual relations</b>				<b>Goes against religion</b>			
Yes	20	7.4	2	Yes	4	5.4	2.9
No	225	92.6	2	No	241	94.6	2.9
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Virgin</b>				<b>Respondent is opposed to use</b>			
Yes	1	0.2	0.2	Yes	8	1.9	0.7
No	244	99.8	0.2	No	237	98.1	0.7
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Has sexual relations infrequently</b>				<b>Husband / partner is opposed to use</b>			
Yes	11	5.7	2.4	Yes	6	1.5	0.7
No	234	94.3	2.4	No	239	98.5	0.7
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Menopausal</b>				<b>Others are opposed to use</b>			
Yes	12	3.9	1.6	Yes	0	0	
No	233	96.1	1.6	No	245	100	
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Hysterectomy/surgery on the uterus</b>				<b>Knows no method</b>			
Yes	3	0.8	0.5	Yes	2	0.8	0.6
No	242	99.2	0.5	No	243	99.2	0.6
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Cannot become pregnant</b>				<b>Knows no source for getting method</b>			
Yes	14	8.5	3	Yes	0	0	
No	231	91.5	3	No	245	100	
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	

**Table 5.4.2b Reasons for interruption and non-use of family planning methods**

Percent distribution of women who are not using family planning methods by reason for non-use							
Reason	N	Weighted %	Weighted SE	Reason	N	Weighted %	Weighted SE
<b>Concerned about side effects</b>				<b>No trust in health facility staff</b>			
Yes	9	2.3	1	Yes	0	0	
No	236	97.7	1	No	245	100	
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Facility is too far</b>				<b>Uncomfortable to use</b>			
Yes	1	0.2	0.2	Yes	1	0.2	0.2
No	244	99.8	0.2	No	244	99.8	0.2
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Could not find transportation to a facility</b>				<b>Interferes with normal body processes</b>			
Yes	0	0		Yes	17	5.4	1.5
No	245	100		No	228	94.6	1.5
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Could not afford transportation</b>				<b>Affects health / does not like them</b>			
Yes	3	0.9	0.5	Yes	59	27	4.6
No	242	99.1	0.5	No	186	73	4.6
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Costs too much</b>				<b>Was pregnant</b>			
Yes	2	0.6	0.6	Yes	15	6.7	2.3
No	243	99.4	0.6	No	230	93.3	2.3
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Preferred method is not available</b>				<b>Wanted to become pregnant</b>			
Yes	1	0.4	0.4	Yes	41	22.4	4
No	244	99.6	0.4	No	204	77.6	4
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>No method is available</b>				<b>Other</b>			
Yes	0	0		Yes	25	7.7	1.9
No	245	100		No	220	92.3	1.9
DK/DTR	2			DK/DTR	2		
Missing	40			Missing	40		
Total	287	100		Total	287	100	
<b>Health facility has staff that are hard to deal with</b>							
Yes	2	0.5	0.4				
No	243	99.5	0.4				
DK/DTR	2						
Missing	40						
Total	287	100					

## 5.5 Family Planning Intentions and Decision-Making

### 5.5.1 Participation in family planning decision

In this setting, most women (74 percent) report that decisions about family planning methods are jointly made by the respondent and her partner. In a minority of cases (6 percent), the decision to use family planning methods is up to the respondent's partner.

**Table 5.5.1 Participation in family planning decision-making**

Percent distribution of women currently using family planning methods according to who makes the decision to use family planning			
Characteristic	N	Weighted %	Weighted SE
Who makes the decision to use family planning methods?			
Mostly the respondent	143	19.4	2.2
Mostly the husband / partner	59	6	1
Joint decision	619	74.2	2.2
Other	3	0.3	0.2
DK/DTR/NA	1		
Missing	0		
Total	825	100	

### 5.5.2 Informed choice

With respect to use of family planning methods, “informed choice” refers to whether or not health care workers described other options for family planning methods, possible side effects associated with the method of choice, and how to respond to side effects if they occur. This information can be used to help women select an appropriate contraceptive method, and to assist users in coping with side effects (thus decreasing discontinuation rates for non-permanent methods).

Table 5.5.2a shows the percent of women currently using family planning methods who were told about other options for contraception (65 percent).

**Table 5.5.2a Family planning decision-making - informed choice**

Percentage of all women currently using family planning methods to whom a health care worker described other methods that can be used			
Characteristic	N	Weighted %	Weighted SE
Did a doctor, nurse, or community health worker ever tell you about other methods of family planning that you could use?			
Yes	530	65	3.2
No	294	35	3.2
DK/DTR	1		
Missing	0		
Total	825	100	

## 5.6 Exposure to Family Planning Information

### 5.6.1 Family planning messages delivered by health care providers

Respondents were asked about their exposure to family planning messages delivered by health care providers (Table 5.6.1). Approximately one-third of women reported being advised about family planning at the health care facility they attend during the past 12 months. Eight percent of respondents indicated that they had been visited by a health promoter who provided information about family planning in the last 12 months. Six percent of respondents who had not attended a health facility in the last 12 months were visited by a health promoter who provided information about family planning.

**Table 5.6.1 Family planning messages delivered by health care providers**

Percentage of married or partnered women exposed to family planning messages delivered by health care providers at a health care facility or at home, ever and in the last 12 months			
Characteristic	N	Weighted %	Weighted SE
In the last 12 months, did any staff member at a health facility speak to you about family planning methods?			
Yes	417	35.9	2.6
No	698	64.1	2.6
DK/DTR	0		
Missing	6		
Total	1121	100	
In the last 12 months, did a health promoter visit you to speak to you about family planning methods?			
Yes	99	7.5	1
No	1011	92.5	1
DK/DTR	5		
Missing	6		
Total	1121	100	
Among respondents who had not visited a health facility seeking care for themselves or their children in the last 12 months: In the last 12 months, did a health promoter visit you to speak to you about family planning methods?			
Yes	23	5.7	1.7
No	340	94.3	1.7
DK/DTR	0		
Missing	0		
Total	363	100	

## CHAPTER 6: MATERNAL HEALTH CARE

This chapter summarizes key indicators pertaining to antenatal care, delivery care, and postpartum care for the most recent birth in the last two years as reported by women of reproductive age (15-49 years) participating in the SM2015-Nicaragua Baseline Household Survey.

### 6.1 Antenatal Care

To reduce recall bias, data pertaining to antenatal care are summarized for a woman's most recent birth in the last two years.

#### 6.1.1 Antenatal care coverage

Early and regular checkups by trained medical providers are very important in assessing the physical status of women during pregnancy. These visits provide an opportunity to intervene in a timely manner if any problems are detected. The Maternal and Child Health Questionnaire captured information from women on both overall coverage of antenatal care, and the content of care received. To obtain information on source of antenatal care, interviewers recorded all persons a woman consulted for care. Timing of antenatal care was assessed by asking women how many weeks or months pregnant they were when they attended their first antenatal care visit.

The percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth, and the percent distribution of timing of care among those who received any antenatal care are presented in Table 6.1.1a. The antenatal care received from specific antenatal care providers is detailed in Table 6.1.1b and the type of facility where antenatal care was sought is detailed in Table 6.1.1c.

Among women with a child under the age of two, 97 percent attended at least one antenatal care visit and 96 percent with a doctor or professional nurse. However, less than half of women had an antenatal care visit during the first trimester (first 12 weeks) with a doctor or professional nurse.

As can be seen in Table 6.1.1b, 64 percent of women with a birth in the last two years attended at least one antenatal care visit with a medical doctor for the most recent birth. No women reported visits with a midwife.

Regarding the type of facility where antenatal care was sought (Table 6.1.1c), most women who attended antenatal care for their most recent delivery in the last two years sought care in a public health unit (38 percent), public health center/clinic (29 percent), or public hospital (27 percent). Only 5 percent of women sought antenatal care in a private facility.

**Table 6.1.1a Antenatal care coverage for the most recent birth in the last two years**

Percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth; and among those who received any antenatal care, percent distribution by timing of care			
Characteristic	N	Weighted %	Weighted SE
<b>Attended at least one antenatal care visit</b>			
Yes	632	97	0.8
No	22	3	0.8
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Attended at least one antenatal care visit with doctor or professional nurse</b>			
Yes	625	96.1	0.8
No	29	3.9	0.8
DK/DTR	0		
Missing	21		
Total	675	100	
<b>First trimester (first 12 weeks) antenatal care visit with doctor or professional nurse</b>			
Yes	278	44.1	2.7
No	373	55.9	2.7
DK/DTR	0		
Missing	24		
Total	675	100	
<b>Month of gestation of first ANC visit, among women who received any antenatal care</b>			
1	132	21.9	2.8
2	151	24.1	1.8
3	145	21.8	2.1
4	98	15.6	1.9
5	51	7.6	1.2
6	31	5.1	1.1
7	16	2.6	0.6
8	7	1.4	0.5
9	0	0	
DK/DTR	1		
Missing	0		
Total	632	100	

**Table 6.1.1b Antenatal care coverage for the most recent birth in the last two years**

Percentage distribution of attendants at antenatal care, for women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadróna</b>				<b>Relative</b>			
0 visits	230	36	3.5	0 visits	632	100		0 visits	632	100	
1 visit	86	13.5	1.6	1 visit	0	0		1 visit	0	0	
2 visits	47	9	2	2 visits	0	0		2 visits	0	0	
3 visits	41	5.8	1.1	3 visits	0	0		3 visits	0	0	
4 visits	41	6.6	1.1	4 visits	0	0		4 visits	0	0	
5 visits	47	6.9	1.1	5 visits	0	0		5 visits	0	0	
6 visits	48	7.1	1.3	6 visits	0	0		6 visits	0	0	
7 visits	39	6.4	1.1	7 visits	0	0		7 visits	0	0	
8 visits	53	8.5	1.5	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	632	100		Total	632	100		Total	632	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	258	40.8	3.7	0 visits	632	100		0 visits	632	100	
1 visit	32	5	0.8	1 visit	0	0		1 visit	0	0	
2 visits	28	4	0.8	2 visits	0	0		2 visits	0	0	
3 visits	41	6.3	1.1	3 visits	0	0		3 visits	0	0	
4 visits	61	9.7	1.7	4 visits	0	0		4 visits	0	0	
5 visits	61	8.3	1.2	5 visits	0	0		5 visits	0	0	
6 visits	55	9.8	1.6	6 visits	0	0		6 visits	0	0	
7 visits	57	9.7	1.3	7 visits	0	0		7 visits	0	0	
8 visits	39	6.4	1.3	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	632	100		Total	632	100		Total	632	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	605	96	0.8	0 visits	632	100		0 visits	631	99.9	0.1
1 visit	11	1.7	0.5	1 visit	0	0		1 visit	1	0.1	0.1
2 visits	4	0.6	0.3	2 visits	0	0		2 visits	0	0	
3 visits	1	0.1	0.1	3 visits	0	0		3 visits	0	0	
4 visits	5	0.8	0.3	4 visits	0	0		4 visits	0	0	
5 visits	1	0.1	0.1	5 visits	0	0		5 visits	0	0	
6 visits	3	0.4	0.2	6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	2	0.3	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	632	100		Total	632	100		Total	632	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	631	99.8	0.2	0 visits	632	100					
1 visit	1	0.2	0.2	1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	632	100		Total	632	100					

**Table 6.1.1c Antenatal care coverage for the most recent birth in the last two years**

Percentage distribution of usual location of antenatal care for women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth			
Location	N	Weighted %	Weighted SE
Usual location for antenatal care visits			
Public hospital	159	27.1	4.7
Public health unit	248	38.3	4.1
Public health center / clinic	184	28.6	3.7
Public mobile clinic	1	0.1	0.1
Other public health facility	3	0.3	0.2
Private hospital	3	0.5	0.3
Private health center / clinic	14	2.6	0.9
Private office	16	1.9	0.6
Private mobile clinic	1	0.1	0.1
Other private health facility	0	0	
Pharmacy	0	0	
Community health worker	0	0	
Traditional healer	1	0.2	0.2
Other	2	0.3	0.2
DK/DTR	0		
Missing	0		
Total	632	100	

### 6.1.2 Frequency of antenatal care visits

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues to delivery. Under normal circumstances, the World Health Organization recommends that pregnant women have at least four antenatal care visits to provide sufficient care. The frequency of antenatal care visits are summarized in Table 6.1.2. The table also includes the percentage of women with four or more visits with at least one with a professional and according to best practices.

More than three-quarters of women reported having four or more antenatal care visits during their most recent pregnancy in the last two years. Over one-third of women reported having seven or more antenatal care visits during their most recent pregnancy.

The content of antenatal care is as crucial as the frequency of visits. Approximately 41 percent of all women had four or more antenatal care visits, including at least one visit with a doctor or professional nurse, and with each of ten defined best practices performed at least once during pregnancy (i.e., measurement of blood type, test for anemia, test for syphilis, test for HIV, test for proteinuria, measurement of maternal blood pressure, measurement of maternal weight, measurement of fundal height, measurement of fetal heartbeat).

**Table 6.1.2 Frequency of antenatal care visits**

Percent distribution of women with a birth in the last two years by number of antenatal care visits for the most recent birth and percentage of women with four or more visits with at least one with a professional			
Characteristic	N	Weighted %	Weighted SE
<b>Number of antenatal care visits</b>			
None	22	3	0.8
1-3 visits	90	13.8	1.2
4-6 visits	303	45.3	2.3
7-9 visits	238	37.7	2.4
10+ visits	1	0.1	0.1
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Attended at least four antenatal care visits</b>			
Yes	542	83.2	1.5
No	112	16.8	1.5
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Attended at least four antenatal care visits with doctor or professional nurse</b>			
Yes	528	81.4	1.5
No	126	18.6	1.5
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Attended at least four antenatal care visits with doctor or professional nurse according to best practices (measuring blood type, anemia, syphilis, HIV, proteinuria, blood pressure, weight, fundal height, fetal heartbeat)</b>			
Yes	255	40.8	2.7
No	399	59.2	2.7
DK/DTR	0		
Missing	21		
Total	675	100	

### 6.1.3 Content of antenatal care

The content of antenatal care is an important indicator of quality of care. The coverage of key procedures was assessed among women who received any antenatal care for a birth in the last two years (Table 6.1.3a and Table 6.1.3b). It is important to remember that the validity of these data hinge on the respondent's understanding of the question and her ability to recall events that may have occurred several years prior to the interview.

There was variation in performance of the nine “best practice” procedures: measurement of blood type (79 percent), test for anemia (83 percent), test for syphilis (62 percent), test for HIV (75 percent), test for proteinuria (79 percent), measurement of maternal blood pressure (99 percent), measurement of maternal weight (99 percent), measurement of fundal height (95 percent), and measurement of fetal heartbeat (95 percent).

Most women had a blood specimen (91 percent) or a urine specimen (93 percent) collected during their antenatal care visits for the most recent birth during the past two years. Half of women recall being tested for diabetes.

**Table 6.1.3a Content of antenatal care visits - best practices**

Percentage distribution of content during antenatal visit among women with a birth in the last two years with at least one antenatal care visit							
Procedure	N	Weighted %	Weighted SE	Procedure	N	Weighted %	Weighted SE
Measured blood type				Tested for proteinuria			
Yes	492	79.2	2.4	Yes	478	79.4	2.4
No	129	20.8	2.4	No	129	20.6	2.4
DK/DTR	11			DK/DTR	25		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
Tested for anemia				Measured maternal blood pressure			
Yes	516	83.2	2.2	Yes	622	98.7	0.4
No	100	16.8	2.2	No	9	1.3	0.4
DK/DTR	16			DK/DTR	1		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
Tested for syphilis				Measured maternal weight			
Yes	368	61.8	3.4	Yes	625	99	0.4
No	242	38.2	3.4	No	7	1	0.4
DK/DTR	22			DK/DTR	0		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
Tested for HIV				Measured fundal height			
Yes	467	75.1	2.6	Yes	598	94.7	1.1
No	161	24.9	2.6	No	32	5.3	1.1
DK/DTR	4			DK/DTR	2		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
				Measured fetal heartbeat			
				Yes	598	95.3	1
				No	34	4.7	1
				DK/DTR	0		
				Missing	0		
				Total	632	100	

**Table 6.1.3b Content of antenatal care visits - other services provided**

Percentage distribution of content during antenatal visit among women with a birth in the last two years with at least one antenatal care visit							
Procedure	N	Weighted %	Weighted SE	Procedure	N	Weighted %	Weighted SE
Collected blood specimen				Tested for diabetes			
Yes	582	90.7	1.9	Yes	309	51.2	2.6
No	50	9.3	1.9	No	304	48.8	2.6
DK/DTR	0			DK/DTR	19		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
Collected urine specimen				Performed an ultrasound			
Yes	585	93.1	1.3	Yes	520	82	1.6
No	47	6.9	1.3	No	112	18	1.6
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
Measured blood glucose							
Yes	407	73.5	2.2				
No	156	26.5	2.2				
DK/DTR	19						
Missing	50						
Total	632	100					

#### 6.1.4 Coverage of tetanus toxoid vaccinations during pregnancy

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus. To prevent transmission of this potentially fatal infection, all women should be vaccinated with tetanus toxoid when they become pregnant. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated previously, she only requires one dose during the current pregnancy. Five doses are considered adequate to confer lifetime immunity. To assess the coverage of tetanus toxoid vaccination, women who reported receiving any antenatal care during their most recent pregnancy were asked if they received tetanus toxoid injections.

Among women with prenatal care for a birth in the last two years, the percentage of women with prenatal care for a birth in the last two years who received a tetanus vaccinations during pregnancy and the percent distribution by number of vaccinations received and by time since last tetanus vaccination are included in Table 6.1.4.

As shown in table 6.1.4, the coverage of tetanus toxoid vaccinations during pregnancy was 90 percent among women who received antenatal care. Two-thirds of women had received one vaccination and 21 percent had received two. Among women with prenatal care, 56 percent have never been vaccinated before and 38 percent had received a vaccine in the last 10 years. Among women who were not vaccinated during prenatal care visits, approximately half had never been vaccinated.

**Table 6.1.4 Coverage of tetanus toxoid vaccinations during pregnancy**

Among women with prenatal care for a birth in the last two years, percentage who received a tetanus vaccinations during pregnancy and percent distribution by number of vaccinations received and by time since last tetanus vaccination			
Characteristic	N	Weighted %	Weighted SE
<b>Received tetanus injection during pregnancy</b>			
Yes	577	90.2	1.5
No	75	9.8	1.5
DK/DTR	2		
Missing	21		
Total	675	100	
<b>Number of tetanus vaccinations during pregnancy</b>			
None	82	11.1	1.7
1	423	65.5	2.3
2	114	20.6	2.5
3	15	2.4	0.6
4	2	0.2	0.1
5	1	0.2	0.2
DK/DTR	17		
Missing	21		
Total	675	100	
<b>Time since last tetanus vaccination</b>			
Never vaccinated	261	55.8	3
<10 years ago	188	38.3	3
≥10 years ago	28	5.9	1.4
DK/DTR	177		
Missing	21		
Total	675	100	
<b>Time since last tetanus vaccination, among women who were not vaccinated during pregnancy</b>			
Never vaccinated	30	51.7	8.2
<10 years ago	24	45.7	8.5
≥10 years ago	1	2.6	2.5
DK/DTR	20		
Missing	0		
Total	75	100	

### **6.1.5 Exposure to safe pregnancy messages**

Women who received antenatal care were asked about a series of topics for which they might have received counseling or advice during their pregnancy (Table 6.1.5).

Table 6.1.5 shows that 79 percent of women were offered an HIV test. At least eighty percent of women were exposed to the following messages: counseled about pregnancy (94 percent); told about signs to watch out for what could indicate a problem with the pregnancy (93 percent); counseled about nutrition during pregnancy (89 percent); advised to deliver in a facility (88 percent); given information about in-facility delivery (88 percent); given information about the proper ways to breastfeed (86 percent); counseled about contraception after delivery (85 percent); counseled about child care (80 percent).

Thirty-nine percent of women were advised to have a Caesarian section. Less than one-quarter of women were counseled about making a transportation plan for the delivery.

**Table 6.1.5 Exposure to safe pregnancy messages**

Among women who received prenatal care for a birth in the last two years, percentage exposed to specific safe pregnancy messages							
Characteristic	N	Weighted %	Weighted SE	Characteristic	N	Weighted %	Weighted SE
<b>Counseled about pregnancy</b>				<b>Advised to have a Caesarean section</b>			
Yes	593	94.3	1	Yes	236	39	3.2
No	39	5.7	1	No	396	61	3.2
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
<b>Told about signs to watch out for that could indicate a problem with the pregnancy</b>				<b>Counseled about making a transportation plan for the delivery</b>			
Yes	587	92.5	1.4	Yes	138	22.7	2.3
No	45	7.5	1.4	No	494	77.3	2.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
<b>Offered an HIV test</b>				<b>Counseled about contraception after delivery</b>			
Yes	492	78.9	2.9	Yes	532	84.5	2.1
No	136	21.1	2.9	No	100	15.5	2.1
DK/DTR	4			DK/DTR	0		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
<b>Counseled about nutrition during pregnancy</b>				<b>Counseled about child care</b>			
Yes	554	88.9	1.3	Yes	496	80.1	2.6
No	76	11.1	1.3	No	136	19.9	2.6
DK/DTR	2			DK/DTR	0		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
<b>Given information about in-facility delivery</b>				<b>Given information about proper ways to breast feed</b>			
Yes	543	87.6	1.7	Yes	544	86.3	2.1
No	87	12.4	1.7	No	85	13.7	2.1
DK/DTR	2			DK/DTR	3		
Missing	0			Missing	0		
Total	632	100		Total	632	100	
<b>Advised to delivery in a facility</b>							
Yes	551	88.4	1.7				
No	81	11.6	1.7				
DK/DTR	0						
Missing	0						
Total	632	100					

## 6.2 Delivery Care

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications, infections, and even death for the mother and newborn baby. Characteristics of the delivery, including place of delivery and assistance at delivery were captured for all children born in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery within the last two years are summarized.

### **6.2.1 Place of delivery**

The location of the most recent birth and the means of transportation used to get to the facility are shown in Table 6.2.1. The majority of births occurred in public hospitals (76 percent). Ten percent of women reported giving at home. Deliveries in private sector facilities were rare (less than 5 percent). Among women who delivered in a facility, 45 percent indicated that they used a public vehicle for transport.

**Table 6.2.1 Place of delivery**

Percent distribution of women with a birth in the last two years by location of most recent birth and percent distribution of women with in-facility deliveries by means of transportation used to get to the facility for delivery							
Characteristic	N	Weighted %	Weighted SE	Mode of transportation	N	Weighted %	Weighted SE
Delivery location for most recent birth				On foot			
Respondent's house	66	10.5	2.2	Yes	78	15.2	2.7
Another person's house	5	0.7	0.3	No	501	84.8	2.7
Public hospital	486	76	3.1	DK/DTR	1		
Public health center / clinic	72	8.9	1.7	Missing	0		
Public medical ward	0	0		Total	580	100	
Other public health facility	7	0.7	0.3	Private vehicle			
Private hospital	5	0.6	0.3	Yes	130	22	2.1
Private health center / clinic	10	2	0.7	No	449	78	2.1
Private medical ward	0	0		DK/DTR	1		
Other private health facility	0	0		Missing	0		
Other	3	0.7	0.4	Total	580	100	
DK/DTR	0			Ambulance			
Missing	20			Yes	133	20.6	2.5
Total	674	100		No	446	79.4	2.5
In-hospital delivery				DK/DTR			
Yes	491	76.6	3.1	Missing	0		
No	163	23.4	3.1	Total	580	100	
DK/DTR	0			Other public vehicle			
Missing	20			Yes	254	45.3	3.2
Total	674	100		No	325	54.7	3.2
In-facility delivery				DK/DTR			
Yes	580	88.2	2.4	Missing	0		
No	74	11.8	2.4	Total	580	100	
DK/DTR	0						
Missing	20						
Total	674	100					

### **6.2.2 Assistance at delivery**

The assistance a woman receives during childbirth has important health consequences for both mother and child. For women who did not deliver alone in the last two years (99 percent of all births), the percentage by type of delivery attendant is detailed in Table 6.2.2a. Among women who did not report being alone for delivery, several categories of personnel may have been in attendance. As can be seen in Table 6.2.2a, most in-facility deliveries were accompanied by a doctor (86 percent) or professional nurse (79 percent). Fewer deliveries were attended by an auxiliary nurse (18 percent) or midwife (7 percent). For 10 percent of the deliveries a relative was an attendant.

Eighteen percent of women delivered with one attendant, 63 percent with two attendants, and 19 percent with three or more attendants (Table 6.2.2b). For women's most recent live birth in the past two years, 87 percent of deliveries had a skilled attendant present and 76 percent delivered with a skilled attendant in a health facility (Table 6.2.2c).

**Table 6.2.2a Assistance at delivery: type of attendants**

For women's most recent birth in the past two years, percentage by type of delivery attendants							
Characteristic	N	Weighted %	Weighted SE	Characteristic	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Community health worker</b>			
Yes	561	85.6	2.3	Yes	1	0.2	0.2
No	93	14.4	2.3	No	652	99.8	0.2
DK/DTR	0			DK/DTR	1		
Missing	22			Missing	22		
Total	676	100		Total	676	100	
<b>Professional nurse</b>				<b>Pharmacist</b>			
Yes	526	79.4	2.2	Yes	3	0.7	0.4
No	128	20.6	2.2	No	650	99.3	0.4
DK/DTR	0			DK/DTR	1		
Missing	22			Missing	22		
Total	676	100		Total	676	100	
<b>Auxiliary nurse</b>				<b>Traditional healer</b>			
Yes	112	18.4	2.3	Yes	1	0.2	0.2
No	539	81.6	2.3	No	651	99.8	0.2
DK/DTR	3			DK/DTR	2		
Missing	22			Missing	22		
Total	676	100		Total	676	100	
<b>Laboratory technician</b>				<b>Relative</b>			
Yes	11	2	0.6	Yes	66	10.4	1.4
No	627	98	0.6	No	586	89.6	1.4
DK/DTR	16			DK/DTR	2		
Missing	22			Missing	22		
Total	676	100		Total	676	100	
<b>Midwife / Comadrona</b>				<b>Other</b>			
Yes	49	7.2	1.7	Yes	5	2.1	1.2
No	595	92.8	1.7	No	646	97.9	1.2
DK/DTR	10			DK/DTR	3		
Missing	22			Missing	22		
Total	676	100		Total	676	100	

**Table 6.2.2b Assistance at delivery: number of attendants**

For women's most recent live birth in the past two years, the number of attendants during delivery and the presence of skilled attendants			
Characteristic	N	Weighted %	Weighted SE
<b>Delivered alone</b>			
Yes	3	0.8	0.5
No	651	99.2	0.5
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Number of categories of personnel in attendance at delivery</b>			
None	3	0.8	0.5
One	112	17.5	2.1
Two	426	62.8	2.7
Three	87	14.4	1.9
Four or more	26	4.4	0.9
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Delivery with a skilled birth attendant</b>			
Yes	582	88.3	2.3
No	72	11.7	2.3
DK/DTR	0		
Missing	21		
Total	675	100	

**Table 6.2.2c Assistance at delivery: in-facility delivery with skilled birth attendant**

For women's most recent live birth in the past two years, the presence of skilled attendants at delivery in a health facility or hospital			
Characteristic	N	Weighted %	Weighted SE
<b>In-facility delivery with a skilled birth attendant</b>			
Yes	577	87.3	2.4
No	77	12.7	2.4
DK/DTR	0		
Missing	21		
Total	675	100	
<b>In-hospital delivery with a skilled birth attendant</b>			
Yes	488	75.8	3
No	166	24.2	3
DK/DTR	0		
Missing	21		
Total	675	100	

### 6.2.3 Complications

Pregnancy complications are an important source of maternal and child morbidity and mortality. The type of delivery (vaginal or Caesarian section) among women with births in the last two years are detailed in Table 6.2.3. The table also includes the percentage of women with specific complications and the percentage of women with an in-facility delivery for whom the delivery at the facility was planned.

As previously described, most births occurred in institutional settings. In 62 percent of these cases, women indicated that they attended the facility for emergency care. Few women reported seizures prior to delivery (3 percent). Approximately 6 percent of infants were transferred to an intensive care unit after delivery, and 16 percent of women reported excessive bleeding after delivery (more than 1 cup over a 2 day period of time).

**Table 6.2.3 Mode of delivery and complications**

For women's most recent live birth in the past two years, the mode of delivery and complications during delivery			
Characteristic	N	Weighted %	Weighted SE
<b>Mode of delivery</b>			
Vaginal	540	82.3	1.9
Planned Caesarean section	35	5.6	0.9
Emergency Caesarean section	79	12.1	1.8
DK/DTR	0		
Missing	21		
Total	675	100	
<b>Reason for attending a health facility for delivery, among in-facility births</b>			
Planned	228	38	2.4
Emergency	351	61.8	2.4
Other	1	0.2	0.2
DK/DTR	0		
Missing	0		
Total	580	100	
<b>Respondent had seizures prior to delivery</b>			
Yes	19	2.8	0.6
No	633	97.2	0.6
DK/DTR	2		
Missing	21		
Total	675	100	
<b>Child entered neonatal intensive care unit after delivery</b>			
Yes	43	5.8	1
No	610	94.2	1
DK/DTR	1		
Missing	21		
Total	675	100	
<b>Respondent had excessive bleeding in the first day following the delivery</b>			
Yes	116	16.4	1.8
No	538	83.6	1.8
DK/DTR	0		
Missing	21		
Total	675	100	

#### 6.2.4 Birth size and weight

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth: very large, larger than average, smaller than average or very small. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. To reduce recall bias, only data from the most recent birth within the last two years are summarized below (Table 6.2.4).

Most women perceived their infant to be average in size (84 percent). Most newborns (90 percent) were weighed at birth. Among those who were weighed, 12 percent were classified as low birth weight (<2.5 kilograms).

**Table 6.2.4 Birth size and weight**

For women's most recent live birth in the past two years, the size and weight of the child at birth			
Characteristic	N	Weighted %	Weighted SE
<b>Mother's estimate of the size of the child at birth</b>			
Very large	10	1.6	0.6
Larger than average	44	7.1	1.2
Average	545	83.5	2
Smaller than average	38	6.8	1.8
Very small	6	0.9	0.4
DK/DTR	11		
Missing	22		
Total	676	100	
<b>Child's weight was measured at birth</b>			
Yes	575	90	2
No	68	10	2
DK/DTR	11		
Missing	22		
Total	676	100	
<b>Child's birth weight, among those who were weighed</b>			
<2.5 kg (low birth weight)	60	12	2.1
≥2.5 kg	482	88	2.1
DK/DTR	28		
Missing	5		
Total	575	100	

### 6.3 Postnatal Care

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (6 weeks) following the delivery. The timing of postnatal care is important. The first two days after delivery are critical, because most maternal and neonatal deaths occur during this period.

Characteristics of postnatal care, including timing, location, and personnel providing care were captured for all births in the five years preceding the survey. To reduce recall bias, only data from the most recent delivery in the last two years are summarized in the tables below.

#### **6.3.1 Postnatal Checkup for the Mother**

Data on postnatal care for the mother are summarized in Table 6.3.1a and Table 6.3.1b. Table 6.3.1a shows the percentage of women with a birth in the last two years who were checked at any time after delivery and within one week after delivery; and percentage by timing of the check for women with an in-facility delivery.

About two-thirds of women recalled being checked after delivery, and 58 percent reported being checked one week after delivery by a health care provider. Only 25 percent of women with an institutional birth recalled being checked every 15 minutes for the first hour post-partum.

Table 6.3.1b shows the percent distribution of women who were checked at any time after delivery by type of personnel. Among women with postnatal care visits, most received care from a medical doctor (82 percent) or professional nurse (19 percent).

**Table 6.3.1a Postnatal checkup for the mother**

For women's most recent live birth in the past two years, postpartum care received by the respondent			
Characteristic	N	Weighted %	Weighted SE
Respondent was checked after delivery			
Yes	426	62.9	3
No	228	37.1	3
DK/DTR	0		
Missing	22		
Total	676	100	
Respondent was checked every 15 minutes during the first hour after delivery while still at health facility, among in-facility births			
Yes	149	25.2	2.2
No	431	74.8	2.2
DK/DTR	0		
Missing	0		
Total	580	100	
Respondent was checked within one week after delivery by a health provider			
Yes	394	57.8	2.9
No	260	42.2	2.9
DK/DTR	0		
Missing	22		
Total	676	100	

**Table 6.3.1b Postnatal checkup for the mother: providers**

Percentage distribution of attendants at postnatal care, for women with a birth in the last two years who attended at least one postnatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	76	18.1	1.9	0 visits	424	99.6	0.3	0 visits	426	100	
1 visit	239	56.7	2.5	1 visit	2	0.4	0.3	1 visit	0	0	
2 visits	85	19.3	2.1	2 visits	0	0		2 visits	0	0	
3 visits	21	4.7	1.1	3 visits	0	0		3 visits	0	0	
4 visits	3	0.7	0.4	4 visits	0	0		4 visits	0	0	
5 visits	1	0.2	0.2	5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	1	0.2	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	426	100		Total	426	100		Total	426	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	345	81	2.1	0 visits	426	100		0 visits	426	100	
1 visit	57	14.2	2	1 visit	0	0		1 visit	0	0	
2 visits	19	3.7	0.9	2 visits	0	0		2 visits	0	0	
3 visits	3	0.6	0.4	3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	1	0.2	0.2	6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	1	0.2	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	426	100		Total	426	100		Total	426	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	421	98.9	0.5	0 visits	426	100		0 visits	424	99.4	0.4
1 visit	4	0.9	0.4	1 visit	0	0		1 visit	2	0.6	0.4
2 visits	1	0.3	0.3	2 visits	0	0		2 visits	0	0	
3 visits	0	0		3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	426	100		Total	426	100		Total	426	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	425	99.7	0.3	0 visits	426	100					
1 visit	1	0.3	0.3	1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	426	100		Total	426	100					

### 6.3.2 Postnatal Checkup for the Baby

The results regarding postnatal care for the neonate are shown in Table 6.3.2a: percentage of women with a birth in the last two years whose infants were checked after delivery; percent distributions of infants who were checked by skilled personnel within 24 hours of delivery; and percent distributions of infants who were checked by skilled personnel within one week of delivery.

Approximately 84 percent of women reported that their infant was checked at any time after delivery. Among all deliveries, 35 percent of women reported that a qualified medical professional checked on their infant within 24 hours of delivery. Table 6.3.2b shows the attendants for neonatal postnatal care. Most women indicated that a medical doctor performed a checkup (85 percent). Professional nurses were also reported, though much less frequently.

**Table 6.3.2a Postnatal checkup for the neonate**

For women's most recent live birth in the past two years, postpartum care received by the baby			
Characteristic	N	Weighted %	Weighted SE
<b>Baby was checked after delivery</b>			
Yes	550	83.7	2.4
No	102	16.3	2.4
DK/DTR	2		
Missing	21		
Total	675	100	
<b>Baby was checked within 24 hours after delivery by a health provider</b>			
Yes	226	34.9	2.7
No	383	65.1	2.7
DK/DTR	2		
Missing	64		
Total	675	100	
<b>Baby was checked within one week after delivery by a health provider</b>			
Yes	459	75.3	3.2
No	150	24.7	3.2
DK/DTR	2		
Missing	64		
Total	675	100	

**Table 6.3.2b Postnatal checkup for the neonate: providers**

Percentage distribution of attendants at postnatal care, for women with a birth in the last two years who attended at least one postnatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	83	14.9	2.2	0 visits	550	100		0 visits	550	100	
1 visit	327	61.2	2.6	1 visit	0	0		1 visit	0	0	
2 visits	110	18.7	1.6	2 visits	0	0		2 visits	0	0	
3 visits	22	4.1	0.9	3 visits	0	0		3 visits	0	0	
4 visits	4	0.6	0.3	4 visits	0	0		4 visits	0	0	
5 visits	1	0.1	0.1	5 visits	0	0		5 visits	0	0	
6 visits	1	0.1	0.1	6 visits	0	0		6 visits	0	0	
7 visits	1	0.2	0.2	7 visits	0	0		7 visits	0	0	
8 visits	1	0.2	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	550	100		Total	550	100		Total	550	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	459	82	2	0 visits	549	99.9	0.1	0 visits	550	100	
1 visit	76	14.7	2.1	1 visit	1	0.1	0.1	1 visit	0	0	
2 visits	10	2.4	0.9	2 visits	0	0		2 visits	0	0	
3 visits	2	0.3	0.2	3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	1	0.1	0.1	5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	1	0.1	0.1	7 visits	0	0		7 visits	0	0	
8 visits	1	0.2	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	550	100		Total	550	100		Total	550	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	544	99	0.4	0 visits	550	100		0 visits	549	99.8	0.2
1 visit	4	0.6	0.3	1 visit	0	0		1 visit	1	0.2	0.2
2 visits	1	0.2	0.2	2 visits	0	0		2 visits	0	0	
3 visits	0	0		3 visits	0	0		3 visits	0	0	
4 visits	1	0.2	0.2	4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	550	100		Total	550	100		Total	550	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	550	100		0 visits	549	99.9	0.1				
1 visit	0	0		1 visit	1	0.1	0.1				
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	550	100		Total	550	100					

## CHAPTER 7: CHILD HEALTH

This chapter summarizes the health status of children aged 0-59 months whose mothers participated in the SM2015-Nicaragua Baseline Household Survey. All data summarized in this chapter are based on the mother's report.

### 7.1 Health Status

The age and sex distribution of the de facto population of children aged 0-59 months whose mothers resided in the surveyed households in Nicaragua is shown in Table 7.1 by 6 or 12 month age groups. Twenty percent of these children were under one year of age at the time of the interview. The age distributions of female and male children are similar.

**Table 7.1 Age and sex of children**

Percent distribution of the de facto population of children aged 0-59 months in the SM2015 baseline survey						
	Female		Male		Total	
	N	%	N	%	N	%
Age, in months						
0-5 months	72	10.3	62	8.7	134	9.5
6-11 months	81	11.6	79	11.1	160	11.3
12-23 months	154	22.1	144	20.3	298	21.1
24-35 months	122	17.5	143	20.2	266	18.9
36-47 months	137	19.6	143	20.2	282	20
48-59 months	132	18.9	138	19.5	271	19.2
Total	698	100	709	100	1411	100

#### 7.1.1 Current health status

Table 7.1.1 shows the current health status of all children aged 0-59 months, as reported by their mothers. The table also includes mother's evaluation of current health relative to health the previous year; and the percentage of children who can easily perform daily activities. Approximately 72 percent of mothers considered their children's health to be "good", "very good", or "excellent".

When asked to evaluate their children's current health status relative to the past year, 39 percent reported that their children's health was "about the same". While 56 percent reported that their children's health had improved, 5 percent reported worse health on the day of the interview, compared to last year. Ninety-three percent could "easily" perform their daily activities (e.g., playing and going to school). Seven percent of mothers reported that their children had at least some degree of difficulty performing these activities.

**Table 7.1.1 Current health status**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Current health</b>			
Excellent	217	16.4	1.8
Very good	321	22.5	1.8
Good	464	32.8	1.7
Fair	343	24.6	1.8
Poor	53	3.7	0.7
DK/NR	1		
Missing	12		
Total	1411	100	
<b>Current health relative to health last year</b>			
Better	598	55.8	2.1
Worse	50	5.3	0.9
About the same	423	38.9	2
DK/NR	0		
Missing	12		
Total	1083	100	
<b>Ability to perform daily activities</b>			
Easily	1306	92.8	1
With some difficulty	61	4.7	0.7
With much difficulty	4	0.3	0.2
Unable to do	26	2.1	0.4
DK/NR	2		
Missing	12		
Total	1411	100	

### **7.1.2 Recent illness**

Mothers were asked a series of questions about any illnesses or health problems that their children might have had in the two weeks preceding the interview. Approximately one-third of children were reported as sick during that time (Table 7.1.2). Of the 467 children who were recently ill, fever (27 percent), cough / chest infection (27 percent), diarrhea without blood (20 percent), and a problem other than one on the provided list (14 percent), were the most commonly elicited specific complaints.

It is interesting to note that although the health status of these young children, as reported by their mothers (Table 7.1.1), tended to be somewhat better than the health status of women participating in the survey (Table 3.6.1), a larger proportion of children were sick immediately prior to the interview (Table 7.1.2) compared to the proportion of women who were sick (Table 3.6.2).

**Table 7.1.2 Recent illness**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Child was sick recently (in the last two weeks)			
Yes	467	32.8	1.9
No	934	66.6	1.9
DK/NR	0		
Missing	2		
Total	1403	100	
Recent illness			
Fever	125	27.2	2.1
Malaria	0	0	
Cough/chest infection	130	26.9	2.4
Tuberculosis	0	0	
Asthma	7	1.9	0.9
Bronchitis	2	0.5	0.4
Pneumonia	14	3.4	0.9
Diarrhea without blood	92	19.9	1.9
Diarrhea with blood	5	0.9	0.4
Vomiting	4	0.9	0.4
Abdominal pain	1	0.2	0.2
Anemia	1	0.3	0.3
Skin rash/infection	13	2.6	0.7
Eye/ear infection	3	0.6	0.4
Measles	1	0.3	0.3
Jaundice	0	0	
Headache	3	0.5	0.3
Stroke	0	0	
Diabetes	0	0	
HIV/AIDS	0	0	
Paralysis	0	0	
Other	66	13.9	1.7
DK/NR	0		
Missing	0		
Total	467	100	

### **7.1.3 Utilization of health services for recent illness**

Table 7.1.3 summarizes data regarding the utilization of health services among the 467 children who were sick in the two weeks preceding the interview. The table shows the percentage of children 0-59 months who were sick in the last two weeks for whom care was sought for recent illness and among these, the percent distribution by type of medical facility where care was sought and whether the child was hospitalized.

Care was sought for 55 percent of these cases. Care was typically sought at a public health center / clinic (26 percent), public hospital (25 percent), or public health unit (23 percent); approximately 10 percent attended private health centers. Only 13 children were hospitalized for their recent illness (approximately 4 percent of those who sought care).

**Table 7.1.3 Utilization of health services for recent illness**

Percent distribution of children 0-59 months who were sick in the last two weeks			
Utilization of health services	N	Weighted %	Weighted SE
<b>Sought care for recent illness</b>			
Yes	259	54.9	3.3
No	208	45.1	3.3
DK/NR	0		
Missing	0		
Total	467	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	59	25.3	4.7
Public health unit	62	23.2	2.9
Public clinic/health center	69	26.4	3.7
Public mobile clinic	0	0	
Other public health center	0	0	
Private hospital	2	0.8	0.5
Private clinic/health center	4	1.8	1.1
Private office	18	6.9	1.5
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	32	11.1	2.5
Community health worker	2	0.5	0.4
Traditional healer	1	0.5	0.6
Other	10	3.6	1.3
DK/NR	0		
Missing	0		
Total	259	100	
<b>Child was hospitalized for recent illness</b>			
Yes	13	3.5	1.1
No	454	96.5	1.1
DK/NR	0		
Missing	0		
Total	467	100	

## 7.2 Acute Respiratory Infection

Acute respiratory infection is a leading cause of morbidity and mortality among children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths resulting from pneumonia, a common acute respiratory disease. The prevalence of acute respiratory infection was estimated by asking mothers whether their children aged 0-59 months had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the interview. If the child had had symptoms of an acute respiratory infection, the mother was asked about what was done to treat the symptoms and feeding practices during the illness.

### ***7.2.1 Prevalence of acute respiratory infection and fever***

The prevalence of cough, acute respiratory infection, and fever among children aged 0-59 months, as reported by their mothers, is displayed in Table 7.2.1. Twenty percent of children experienced cough, 10 percent had symptoms of an acute respiratory infection, and 19 percent had a fever in the two weeks preceding the interview.

**Table 7.2.1 Prevalence of acute respiratory infection and fever**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Child had cough in the last two weeks</b>			
Yes	294	20.1	1.7
No	1107	79.9	1.7
DK/NR	2		
Missing	8		
Total	1411	100	
<b>Child had cough in the last two weeks, by type</b>			
Cough with difficulty breathing due to chest problem	50	3.2	0.6
Cough with difficulty breathing due to congested or runny nose	53	3.6	0.6
Cough with difficulty breathing due to chest problem and congested or runny nose	48	3.4	0.6
Cough with difficulty breathing due to other reason	0	0	
Cough without difficulty breathing	143	9.9	1
No cough	1107	79.9	1.7
DK/NR	2		
Missing	8		
Total	1411	100	
<b>Child had acute respiratory infection in the last two weeks</b>			
Yes	151	10.2	1.1
No	1250	89.8	1.1
DK/NR	2		
Missing	8		
Total	1411	100	
<b>Child had fever in the last two weeks</b>			
Yes	263	18.5	1.3
No	1139	81.5	1.3
DK/NR	1		
Missing	8		
Total	1411	100	

### 7.2.2 Utilization of health services for acute respiratory infection

Fifty-five percent of children with symptoms of acute respiratory infection were taken somewhere for evaluation and/or treatment of their condition (Table 7.2.2). Care for these children was most often sought in the public sector or at a pharmacy.

**Table 7.2.2 Utilization of health services for acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for acute respiratory infection</b>			
Yes	83	55.4	4.6
No	68	44.6	4.6
DK/NR	0		
Missing	0		
Total	151	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	18	23.8	6.8
Public health unit	21	23.8	4.9
Public clinic/health center	25	30	5.1
Public mobile clinic	0	0	
Other public health center	0	0	
Private hospital	0	0	
Private clinic/health center	0	0	
Private office	6	6.9	2.3
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	9	10.3	3.8
Community health worker	0	0	
Traditional healer	1	1.7	1.8
Other	3	3.5	2
DK/NR	0		
Missing	0		
Total	83	100	

### ***7.2.3 Utilization of medications for acute respiratory infection***

Eighty-two percent of children with symptoms of acute respiratory infection were given some type of medication for their condition (Table 7.2.3a). Antibiotic syrups were given to 48 percent of these cases, antibiotic pills to 9 percent, and antibiotic injections to 5 percent. Acetaminophen, ibuprofen, and aspirin were also administered. Twenty percent of children received a treatment other than those listed.

**Table 7.2.3a Utilization of medications for acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Medication	N	Weighted %	Weighted SE
<b>Any treatment</b>			
Yes	125	81.7	3.7
No	26	18.3	3.7
DK/NR	0		
Missing	0		
Total	151	100	
<b>Antibiotic injection</b>			
Yes	5	4.8	2.3
No	119	95.2	2.3
DK/NR	1		
Missing	26		
Total	151	100	
<b>Antibiotic pill</b>			
Yes	11	9.1	2.7
No	113	90.9	2.7
DK/NR	1		
Missing	26		
Total	151	100	
<b>Antibiotic syrup</b>			
Yes	61	48	4.5
No	63	52	4.5
DK/NR	1		
Missing	26		
Total	151	100	
<b>Aspirin</b>			
Yes	2	2	1.5
No	122	98	1.5
DK/NR	1		
Missing	26		
Total	151	100	

**Table 7.2.3a continued**

	N	Weighted %	Weighted SE
<b>Acetaminofen</b>			
Yes	71	57.8	4.1
No	53	42.2	4.1
DK/NR	1		
Missing	26		
Total	151	100	
<b>Ibuprofen</b>			
Yes	4	2.3	1.4
No	120	97.7	1.4
DK/NR	1		
Missing	26		
Total	151	100	
<b>Oral rehydration therapy</b>			
Yes	5	4.5	2
No	119	95.5	2
DK/NR	1		
Missing	26		
Total	151	100	
<b>Other</b>			
Yes	24	19.5	3.9
No	100	80.5	3.9
DK/NR	1		
Missing	26		
Total	151	100	

#### **7.2.4 Feeding practices during acute respiratory infection**

Data on feeding practices during the recent episode of acute respiratory infection are summarized in Table 7.2.4. The table shows the volume of fluids and the volume of solids given during the illness. Only 1 percent of children were given more fluids than usual. Over three-quarters of children were offered less fluid than usual (or none at all). Twenty percent of children were offered the same volume of solid food as usual during their illness. Approximately three-quarters of children were given less than the usual amount of solid food (or none at all).

**Table 7.2.4 Feeding practices during acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Amount given	N	Weighted %	Weighted SE
<b>Volume of fluids (including breast milk) given during illness</b>			
No fluids	6	4.5	1.9
Much less	28	18.8	3.4
Somewhat less	84	55.9	4.3
About the same	30	19.5	3.2
More	2	1.2	0.9
DK/NR	1		
Missing	0		
Total	151	100	
<b>Volume of solid foods given during illness</b>			
No solids	5	2.9	1.3
Much less	22	15.5	3.6
Somewhat less	91	61.3	4.1
About the same	32	20.2	3.3
More	0	0	
DK/NR	1		
Missing	0		
Total	151	100	

### 7.3 Diarrhea

Dehydration caused by severe diarrhea in a major cause of morbidity and mortality among children. Exposure to diarrheal disease-causing agents is frequently a result of use of contaminated water and unhygienic practices related to food preparation and disposal of feces. The prevalence of diarrhea was estimated by asking mothers whether their children aged 0-59 months had had diarrhea in the two weeks preceding the interview. If the child had had diarrhea, the mother was asked about what was done to treat the diarrhea and feeding practices during the diarrheal episode.

#### 7.3.1 Prevalence

Table 7.3.1 shows the proportion of children aged 0-59 months with diarrhea in the two weeks preceding the interview, as reported by their mothers (13 percent). Less than one percent of children had bloody diarrhea.

**Table 7.3.1 Prevalence of diarrhea**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Child had diarrhea in the last two weeks			
Yes	175	12.7	1.3
No	1223	87.3	1.3
DK/NR	1		
Missing	4		
Total	1403	100	
Child had diarrhea in the last two weeks, by type			
Diarrhea with blood	9	0.6	0.2
Diarrhea without blood	166	12.1	1.2
No diarrhea	1223	87.3	1.3
DK/NR	1		
Missing	4		
Total	1403	100	

### 7.3.2 Utilization of health services for diarrhea

Over half of children with diarrhea were taken somewhere for evaluation and/or treatment of their condition (Table 7.3.2). Care for these children was most often sought in the public sector or pharmacies.

**Table 7.3.2 Utilization of health services for diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for diarrhea</b>			
Yes	100	51.2	4.6
No	97	48.8	4.6
DK/NR	0		
Missing	0		
Total	197	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	25	27.9	6.2
Public health unit	12	10.5	3.3
Public clinic/health center	32	31.1	4.9
Public mobile clinic	0	0	
Other public health center	0	0	
Private hospital	0	0	
Private clinic/health center	2	2	1.4
Private office	8	8.9	2.7
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	13	11.9	3.8
Community health worker	1	0.7	0.7
Traditional healer	0	0	
Other	7	7	2.9
DK/NR	0		
Missing	0		
Total	100	100	

### 7.3.3 Utilization of treatments for diarrhea

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy. Oral rehydration therapy may include the use of a solution prepared from commercially-produced packets of powdered oral rehydration salts, commercially-produced bottled oral serums, or homemade fluids usually prepared from sugar, salt and water. Other treatments may be administered as well.

Although care was sought in only 51 percent of cases, over 80 percent of cases were given some form of treatment. Oral serums prepared from commercially-available powders were the most common form oral rehydration therapy (44 percent). Less than 5 percent of children were given zinc pills or zinc syrup.

**Table 7.3.3a Utilization of treatments for diarrhea**

Percent distribution of children age 0-59 months who had diarrhea in the last two weeks, as reported by their mother			
Treatment given	N	Weighted %	Weighted SE
<b>Any treatment given</b>			
Yes	142	82.1	3
No	33	17.9	3
DK/NR	0		
Missing	0		
Total	175	100	
<b>Powdered oral serum</b>			
Yes	75	43.7	4.3
No	100	56.3	4.3
DK/NR	0		
Missing	0		
Total	175	100	
<b>Bottled oral serum</b>			
Yes	16	10.4	3
No	159	89.6	3
DK/NR	0		
Missing	0		
Total	175	100	
<b>Homemade fluid recommended by health authorities</b>			
Yes	9	5.9	2.5
No	166	94.1	2.5
DK/NR	0		
Missing	0		
Total	175	100	
<b>Antibiotic pill</b>			
Yes	20	12.1	3.3
No	155	87.9	3.3
DK/NR	0		
Missing	0		
Total	175	100	

**Table 7.3.3a continued**

<b>Treatment given</b>	<b>N</b>	<b>Weighted %</b>	<b>Weighted SE</b>
<b>Antidiarrheal pill</b>			
Yes	12	7.2	2.4
No	163	92.8	2.4
DK/NR	0		
Missing	0		
Total	175	100	
<b>Zinc pill</b>			
Yes	1	0.7	0.7
No	174	99.3	0.7
DK/NR	0		
Missing	0		
Total	175	100	
<b>Other type of pill</b>			
Yes	9	5.8	1.7
No	166	94.2	1.7
DK/NR	0		
Missing	0		
Total	175	100	
<b>Unknown pill</b>			
Yes	20	11.6	2.7
No	155	88.4	2.7
DK/NR	0		
Missing	0		
Total	175	100	
<b>Antibiotic injection</b>			
Yes	2	0.9	0.6
No	173	99.1	0.6
DK/NR	0		
Missing	0		
Total	175	100	

**Table 7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Non-antibiotic injection</b>			
Yes	0	0	
No	174	100	
DK/NR	1		
Missing	0		
Total	175	100	
<b>Unknown injection</b>			
Yes	1	0.5	0.5
No	173	99.5	0.5
DK/NR	1		
Missing	0		
Total	175	100	
<b>Intravenous therapy</b>			
Yes	1	0.5	0.5
No	173	99.5	0.5
DK/NR	1		
Missing	0		
Total	175	100	
<b>Home remedy / herbal medicine</b>			
Yes	32	17.2	3.5
No	142	82.8	3.5
DK/NR	1		
Missing	0		
Total	175	100	
<b>Antibiotic syrup</b>			
Yes	45	25.5	4
No	129	74.5	4
DK/NR	1		
Missing	0		
Total	175	100	
<b>Antidiarrheal syrup</b>			
Yes	9	4.7	1.4
No	164	95.3	1.4
DK/NR	2		
Missing	0		
Total	175	100	

**Table 7.3.3a continued**

<b>Treatment given</b>	<b>N</b>	<b>Weighted %</b>	<b>Weighted SE</b>
<b>Zinc syrup</b>			
Yes	4	2.3	1.1
No	171	97.7	1.1
DK/NR	0		
Missing	0		
Total	175	100	
<b>Other syrup</b>			
Yes	10	5.6	1.5
No	165	94.4	1.5
DK/NR	0		
Missing	0		
Total	175	100	
<b>Unknown syrup</b>			
Yes	2	1.5	1.1
No	173	98.5	1.1
DK/NR	0		
Missing	0		
Total	175	100	

The use of oral rehydration solution with zinc was given to less than 2 percent of the children with diarrhea (Table 7.3.3b).

**Table 7.3.3b Utilization of oral rehydration solution and zinc for diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Treatment given	N	Weighted %	Weighted SE
Oral rehydration solution and zinc, among all children with diarrhea			
Yes	3	1.4	0.8
No	194	98.6	0.8
DK/NR	0		
Missing	0		
Total	197	100	
Oral rehydration solution and zinc, among those given any treatment			
Yes	3	1.8	1
No	157	98.2	1
DK/NR	0		
Missing	37		
Total	197	100	

### 7.3.4 Feeding practices during diarrhea

Mothers are encouraged to continue feeding children normally when they suffer from diarrheal diseases and to increase the fluids they are given. These practices help to prevent dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status.

Data on feeding practices during the recent diarrheal episode are summarized in Table 7.3.4. The table shows the volume of fluids and the volume of solids given during the illness. Only 3 percent of children were given more fluids than usual. Just over 70 percent of children were offered less fluid than usual (or none at all). Approximately 30 percent of children were offered the same volume of solid food as usual during their illness. Approximately two-thirds of children were given less than the usual amount of solid food (or none at all).

**Table 7.3.4 Feeding practices during diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Amount given	N	Weighted %	Weighted SE
<b>Volume of fluids (including breastmilk) given during illness</b>			
No fluids	4	2.5	1.2
Much less	34	17.1	2.6
Somewhat less	98	50.6	2.6
About the same	55	27.2	2.6
More	6	2.7	1.1
DK/NR	0		
Missing	0		
Total	197	100	
<b>Volume of solid foods given during illness</b>			
No solids	10	5.2	1.5
Much less	28	14.4	2.8
Somewhat less	98	50.1	2.9
About the same	58	29.6	2.8
More	2	0.8	0.6
DK/NR	1		
Missing	0		
Total	197	100	

## 7.4 Immunization against common childhood illnesses

Information on immunization coverage was collected for all children aged 0-59 months whose mothers were participating in the survey. Both mother's report and review of vaccination card (if present) were used to determine coverage. A vaccination card was available for review for 1,099 children (78 percent of the sample, unweighted). In Table 7.4a, coverage estimates based on recall are summarized for the full sample, and coverage estimates based on vaccination card data are summarized among the subset with a vaccination card available for review at the time of the interview.

**Table 7.4a Immunization against common childhood illnesses**

Percent distribution of children aged 0-59 months, as reported by their mothers						
Immunization	Recall			Vaccination card		
	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE
<b>BCG vaccine (tuberculosis), among children 0-59 months</b>						
None recalled/recorded	42	3.4	0.9	73	7.2	1.3
1 dose	1196	95.8	0.9	1026	92.8	1.3
2+ doses	11	0.8	0.3	0	0	
DK/NR, missing	162			312		
Total	1411	100		1411	100	
<b>Oral polio vaccine, among children 6-59 months</b>						
None recalled/recorded	42	3.7	1	58	6.5	1.4
1 dose	135	12.6	1.1	35	4.2	0.9
2 doses	115	9.7	1.1	50	5.1	1
3+ doses	822	74	2	834	84.1	2.2
DK/NR, missing	163			300		
Total	1277	100		1277	100	
<b>Pentavalent vaccine (DPT, HepB, HiB), among children 6-59 months</b>						
None recalled/recorded	45	4.2	0.8	64	7.1	1.2
1 dose	98	9.6	1.6	33	3.6	0.8
2 doses	91	7.9	1.1	71	7.1	1.3
3+ doses	889	78.3	2.3	810	82.2	2.1
DK/NR, missing	154			299		
Total	1277	100		1277	100	
<b>Pneumoccal conjugate vaccine, among children 6+ months who were born 2012 or later</b>						
None recalled/recorded	35	11.9	2.3	16	5.7	1.8
1 dose	36	12.7	2.2	19	7.2	2.3
2 doses	21	7	1.6	25	8.4	1.8
3+ doses	203	68.4	3.5	240	78.6	3.1
DK/NR, missing	72			67		
Total	367	100		367	100	
<b>Rotavirus vaccine, among children 6-59 months</b>						
None recalled/recorded	126	11.9	1.4	106	11.3	1.5
1 dose	114	11.4	1.3	52	5.9	1.2
2 doses	87	8.6	1.1	98	10.9	1.4
3+ doses	734	68.1	2.6	720	71.9	2.8
DK/NR, missing	216			301		
Total	1277	100		1277	100	
<b>Diphtheria, tetanus and pertussis (DPT) vaccine, among children 18-59 months</b>						
None recalled/recorded	135	16.7	2	153	22.9	2.4
1 dose	642	77.4	2	567	77.1	2.4
2+ doses	52	5.9	1.1	0	0	
DK/NR, missing	145			254		
Total	974	100		974	100	
<b>Measles, mumps, and rubella (MMR) vaccine, among children 12-59 months</b>						
None recalled/recorded	133	14.2	2	113	14.2	2
1 dose	683	73	2.3	723	85.8	2
2+ doses	129	12.8	1.4	0	0	
DK/NR, missing	172			281		
Total	1117	100		1117	100	

The coverage of two key vaccine indicators was calculated according to age groups (Table 7.4b). Based on maternal recall, 83 percent of children aged 12-23 months had received at least one dose of the measles, mumps, and rubella (MMR) vaccine. Among children in this age group with a vaccine card available for review, coverage of this indicator was 71 percent. When vaccine card data was supplemented by maternal recall, estimated coverage of one dose of MMR vaccine was 86 percent among children aged 12-23 months.

Based on maternal recall, only 54 percent of children aged 18-59 were classified as fully immunized. Among the subset with a vaccine card available for review, full immunization coverage in this age group was 42 percent. When vaccine card data was supplemented by maternal recall, 64 percent of children 12-59 were estimated to be “fully” immunized for age. Rates of complete vaccination for age are higher when including all children 0-59 months. When considering only mothers’ recall, 59 percent of children are fully immunized for age. Card-based coverage is 48 percent, and when combined with recall-based information, the estimate of full vaccination for age among children 0-59 months is 67 percent.

**Table 7.4b Immunization against common childhood illnesses, according to age group**

Percent distribution of children, as reported by their mothers									
Immunization	Recall			Vaccination card <sup>a</sup>			Vaccination card <sup>a</sup> plus recall		
	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE
Measles, mumps, and rubella (MMR) vaccine, at least 1 dose among children 12-23 months									
Yes	209	82.9	2.8	213	70.9	3.8	242	86	2.7
No	43	17.1	2.8	83	29.1	3.8	39	14	2.7
DK/NR, missing	46			2			17		
Total	298	100		298	100		298	100	
Fully immunized <sup>b</sup> , among children 18-59 months									
Yes	435	54.1	2.9	422	41.7	3.1	590	63.6	3.1
No	355	45.9	2.9	536	58.3	3.1	317	36.4	3.1
DK/NR, missing	184			16			67		
Total	974	100		974	100		974	100	
Fully immunized <sup>b</sup> , among children 0-59 months									
Yes	682	58.6	2.6	704	48	3.2	910	67.4	2.9
No	463	41.4	2.6	690	52	3.2	411	32.6	2.9
DK/NR, missing	266			17			90		
Total	1411	100		1411	100		1411	100	
<sup>a</sup> Among 1,778 children aged 0-59 months who had a vaccine card available for review (80 percent of the sample, unweighted)									
<sup>b</sup> Full immunization for age is defined as follows: 0-2 months (BCG x1); >2-4 months (BCG x1, OPV x1, Penta x1, Pneum x1, Rota x1); >4-6 months (BCG x1, OPV x2, Penta x2, Pneum x2, Rota x2); >6-12 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3); >12-18 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3, MMR x1); >18-59 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3, MMR x1, DPT x1). All Pneum compliance is calculated among children born 2012 or later.									

## 7.5 De-worming treatment

Administration of de-worming treatment every six months has been shown to reduce the prevalence of anemia in children. Only 32 percent of children aged 12-59 months had received at least two doses of de-worming treatment in the year preceding the interview (Table 7.5).

**Table 7.5 De-worming treatment**

Percent distribution of children, as reported by their mothers			
Treatment given	N	Weighted %	Weighted SE
De-worming treatment given at least two times in the last 12 months, among children age 12-59 months			
Yes	346	31.9	1.3
No	724	68.1	1.3
DK/NR	1		
Missing	12		
Total	1083	100	

## CHAPTER 8: INFANT AND YOUNG CHILDREN FEEDING PRACTICES

This chapter summarizes the feeding practices of infants and children aged 0-59 months whose mothers participated in the SM2015-Nicaragua Baseline Household Survey. All data summarized in this chapter are based on the mother's report.

### 8.1 Breastfeeding

#### *8.1.1 Early initiation of breastfeeding*

Early initiation of breastfeeding is defined as the percentage of children born in the 24 months prior to the survey (<24 months old) who were put to the breast within one hour of birth. In Nicaragua, 821 children are in the specified age range (<24 months old) and 811 have adequate responses to determine their breastfeeding status. Table 8.1 shows that 82 percent of children are breastfed within one hour after birth.

#### *8.1.2 Exclusive breastfeeding*

Exclusive breastfeeding is defined as the percentage of infants born in the 6 months prior to the survey who received only breast milk during the previous day. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 134 children are in the specified age range and all have sufficiently complete dietary recall information to determine whether they are exclusively breastfed. Table 8.1 shows that 60 percent of children are exclusively breastfed.

#### *8.1.3 Continued breastfeeding at 1 year*

Continued breastfeeding at 1 year is defined as the percentage of children 12-15 months old who received breast milk during the previous day. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 95 children are in the specified age range and all have adequate responses to determine their breastfeeding status. Table 8.1 shows that 57 percent of children continue to receive breast milk at 1 year.

**Table 8.1 Breastfeeding**

Percentage of children			
Characteristic	N	Weighted %	Weighted SE
Early initiation of breastfeeding (among children <24 months)			
Yes	667	82.4	1.7
No	144	17.6	1.7
Missing, DK/NR	10		
Total	821	100	
Exclusive breastfeeding (among children 0-5 months)			
Yes	78	59.5	5.6
No	56	40.5	5.6
Missing, DK/NR	0		
Total	134	100	
Continued breastfeeding at 1 year (among children 12-15 months)			
Yes	57	56.5	6.1
No	38	43.5	6.1
Missing, DK/NR	0		
Total	95	100	

## 8.2 Solid Foods

### **8.2.1 Introduction of solid, semi-solid or soft foods**

The introduction of solid foods is measured as the percentage of infants 6-8 months of age who received solid or semi-soft foods during the previous day. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 59 children are in the specified age range and all have sufficiently complete dietary recall information. Table 8.2 shows that 80 percent of children consume solid or semi-soft foods.

### **8.2.2 Dietary diversity**

The minimum dietary diversity is measured as the percentage of children 6-23 months of age who received foods from at least four food groups during the previous day. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 458 children are in the specified age range and 456 have sufficiently complete dietary recall information. Table 8.2 shows that 43 percent of children achieved the minimum dietary diversity during the previous day.

### **8.2.3 Meal frequency**

The minimum meal frequency is measured as the percentage of children 6-23 months of age who received solid foods at least the minimum number of times the previous day, based on age and breastfeeding status. For breastfed children, the minimum number of times is two times for children 6-8 months of age and three times for children 9-23 months of age. For non-breastfed children, the minimum number of times is four times for all children 6-23 months of age. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 458 children are in the specified age range and 437 have sufficiently complete dietary recall information. Table 8.2 shows that 49 percent of children achieved the minimum meal frequency during the previous day.

### **8.2.4 Minimum acceptable diet**

The minimum acceptable diet is measured for children 6-23 months of age. For breastfed children to meet the minimum acceptable diet they must have had at least the minimum dietary diversity and the minimum meal frequency during the previous day. For non-breastfed children to meet the minimum acceptable diet they must have had at least two milk feedings, as well as at least the minimum dietary diversity (not including milk feedings) and the minimum meal frequency during the previous day. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 458 children are in the specified age range and 450 have sufficiently complete dietary recall information. Table 8.2 shows that 22 percent of children achieved the minimum acceptable diet during the previous day.

### **8.2.5 Consumption of iron-rich or iron-fortified foods**

Consumption of iron-rich foods is measured as the percentage of children 6-23 months of age who receive an iron-rich food (e.g., liver, beef, or fish) or a food that is specially designed for infants and young children, or that is fortified in the home with a product that included iron during the previous day. This information is obtained through a 24-hour dietary recall which asks the mother what the child consumed during the previous day or night. In Nicaragua, 458 children

are in the specified age range and 456 have sufficiently complete dietary recall information. Table 8.2 shows that 35 percent of children consumed an iron-rich food during the previous day.

**Table 8.2 Solid foods**

Percentage of children			
Characteristic	N	Weighted %	Weighted SE
<b>Introduction of solid foods (among children 6-8 months)</b>			
Yes	49	80.4	6.1
No	10	19.6	6.1
Missing, DK/NR	0		
Total	59	100	
<b>Minimum dietary diversity (among children 6-23 months)</b>			
Yes	204	43.1	3.1
No	252	56.9	3.1
Missing, DK/NR	2		
Total	458	100	
<b>Minimum meal frequency (among children 6-23 months)</b>			
Yes	221	48.6	2.8
No	216	51.4	2.8
Missing, DK/NR	21		
Total	458	100	
<b>Minimum acceptable diet (among children 6-23 months)</b>			
Yes	103	21.6	2.3
No	347	78.4	2.3
Missing, DK/NR	8		
Total	458	100	
<b>Consumption of iron-rich foods (among children 6-23 months)</b>			
Yes	157	34.8	3.1
No	299	65.2	3.1
Missing, DK/NR	2		
Total	458	100	

## 8.3 Micronutrient Supplementation

### 8.3.1 Vitamin A

Interviewers showed the woman being interviewed common types of bottles, capsules, or syrups and asked if their child received a dose of vitamin A in the last six months. Table 8.3 shows that 37 percent of children 0-59 months of age received a dose of vitamin A in the last six months.

### 8.3.2 Iron

Interviewers showed the woman being interviewed common types of bottles, powders, or syrups and asked if their child received iron pills, powder, or syrup in the last day. Table 8.3 shows that 5 percent of children 0-59 months of age received a dose of iron in the last day.

### 8.3.3 Packets of micronutrients

Interviewers showed the woman being interviewed a card with packets of micronutrient (“chispitas”) and asked how many packets their child has received and consumed in the last six months. Table 8.3 shows that nearly all children 6-23 months of age received no packets of micronutrients in the last six months.

**Table 8.3 Micronutrient supplements**

Percentage of children who received the supplement			
Type of supplement	N	Weighted %	Weighted SE
Vitamin A in the last six months (among children aged 0-59 months)			
Yes	499	36.5	2.4
No	893	63.5	2.4
DK/NR	7		
Missing	12		
Total	1411	100	
Iron in the last day (among children aged 0-59 months)			
Yes	74	5.3	0.9
No	1323	94.7	0.9
DK/NR	2		
Missing	12		
Total	1411	100	
Packets of micronutrients in the last six months (among children aged 6-23 months)			
0 times	453	99.8	0.2
1-10 times	0	0	
11-20 times	0	0	
21-30 times	0	0	
31-40 times	0	0	
41-50 times	0	0	
51-59 times	0	0	
60+ times	1	0.2	0.2
DK/NR	1		
Missing	2		
Total	457	100	

## CHAPTER 9: NUTRITIONAL STATUS IN CHILDREN

The nutritional status of children aged 0-59 months is an important outcome measure of children's health. The SM2015-Nicaragua Baseline Household Survey collected data on the nutritional status of children by measuring the height and weight of all children aged 0-59 months residing in surveyed households, using standard procedures. Hemoglobin levels of these children were also assessed in the field, using a portable HemoCue™ machine, and these data were used to estimate anemia prevalence. As described in Chapter 1, medically trained personnel, who were specifically trained to standardize the anthropometric and hemoglobin measurements, conducted the testing. This evaluation allows identification of subgroups of the child population that are at increased risk of malnutrition. The parents of anemic children (hemoglobin level <11.0 g/dL) were informed of this result in real-time and were referred for treatment to the appropriate health service.

Three indicators were calculated using the weight and height data – weight-for-age, height-for-age, and weight-for-height. For this report, indicators of the children's nutritional status were calculated using growth standards published by the World Health Organization (WHO) in 2006. The growth standards were generated using data collected in the WHO Multicenter Growth Reference Study. The findings of the study, whose sample included children in six countries (Brazil, Ghana, India, Norway, Oman and the United States), describe how children should grow under optimal conditions. As such, the WHO Child Growth Standards can be used to assess children all over the world, regardless of ethnicity, social and economic influences and feeding practices. The three indicators are expressed in standard deviation units from the median in the Multicenter Growth Reference Study.

According to the household roster data collected as part of the SM2015 Household Characteristics Questionnaire, a total of 1,411 children aged 0-59 months were eligible to be weighed, measured, and tested for anemia. In practice, 1,407 children aged 0-59 months underwent the physical measurement module. Height and weight data are presented for 96.9 percent (1,363) of these children: 44 children had invalid values for height or weight. Hemoglobin was measured in 1,218 children (86.6 percent): less than four percent were not measured or had invalid measurements, parental consent was refused for one percent and about nine percent had other reasons (couldn't extract enough blood, other). The age and sex distribution of children participating in the physical measurement module is displayed in Table 9.

**Table 9 Age and sex of children measured**

Percent distribution of the de facto population of children age 0-59 months who underwent the Physical Measurement Module, by sex and type of measurement, unweighted data			
Measurement	Female (%)	Male (%)	Total (%)
<b>Height and weight</b>			
0-5	10.7	9	9.8
6-11	11.7	11.2	11.4
12-23	21.9	20.5	21.2
24-35	17.2	19.9	18.6
36-47	19.7	19.8	19.7
48-59	18.8	19.6	19.2
Total	100	100	100
Number of children	675	688	1363
<b>Anemia</b>			
0-5	0.7	0.5	0.6
6-11	12.8	12.1	12.5
12-23	24.5	22	23.2
24-35	19.2	22.2	20.7
36-47	21.8	21.7	21.8
48-59	21	21.5	21.3
Total	100	100	100
Number of children	600	618	1218

## 9.1 Weight-for-Age

Weight-for-age is a good overall indicator of a population's general health, as it reflects the effects of both acute and chronic undernutrition. The weight-for-age indicator does not distinguish between chronic malnutrition (stunting) and acute malnutrition (wasting); a child can be underweight because of stunting, wasting or both. Children with weight-for-age below minus two standard deviations (-2 SD) are classified as underweight. Children with weight-for-age below minus three standard deviations (-3 SD) are considered severely underweight.

### 9.1.1 Distribution of weight-for-age z-scores

Figure 9.1.1 shows the distribution of weight-for-age z-scores among all children aged 0-59 months whose measurements were taken. Overall, 5 percent of measured children are underweight (have low weight-for-age) and 1 percent are severely underweight.

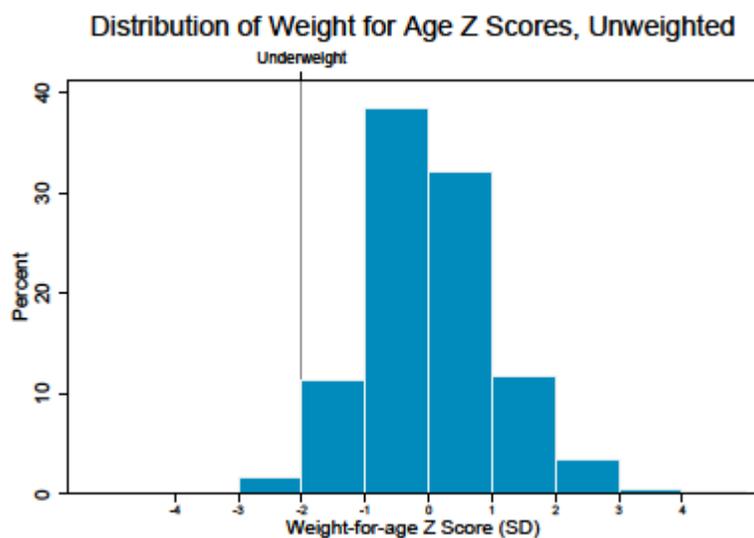


Figure 9.1.1 Distribution of weight-for-age z-scores among children aged 0-59 months

### 9.1.2 Prevalence of underweight

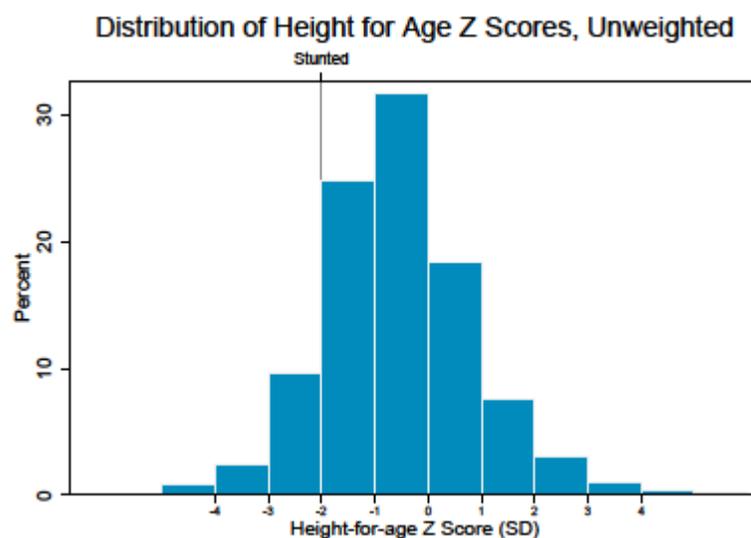
As shown in Table 9.2, 4.5 percent of children aged 0-59 months are underweight (have low weight-for-age) and 1 percent are severely underweight. The proportion of underweight children is highest (6.2 percent) in the age groups 24 to 59 months and lowest (1.5 percent) among those 6-23 months old, a significant result ( $P=0.004$ ). Female children (5 percent) are slightly more likely to be underweight than male children (4 percent), but the difference is not statistically significant ( $P=0.30$ ).

## 9.2 Height-for-Age

Height-for-age is an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted), or chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

### 9.2.1 Distribution of height-for-age z-scores

Figure 9.2.1 presents the distribution of height-for-age z-scores among all children aged 0-59 months whose measurements were taken. Overall, 13 percent of measured children are stunted, and the proportion of severely stunted children is 4 percent.



**Figure 9.2.1** Distribution of height-for-age z-scores among children aged 0-59 months

### 9.2.2 Prevalence of stunting

Table 9.2 presents the prevalence of stunting in children aged 0-59 months as measured by height-for-age. Overall, 13 percent of children under age five are stunted and 4 percent are severely stunted. Analysis of the indicator by age group shows that stunting is highest (18 percent) in children 24-59 months and lowest (1 percent) in children aged 0-5 months ( $P < 0.001$ ). Severe stunting shows a similar pattern ( $P = 0.009$ ), where the age group of children 24-59 months old has the highest proportion of severely stunted children (6 percent) while the youngest age group (0-5 months) has the lowest proportion (0 percent). Female children slightly less likely to be stunted (12 percent) than male children (15 percent) but this difference was not statistically significant ( $P = 0.08$ ).

## 9.3 Weight-for-Height

The weight-for-height indicator measures body mass in relation to body height or length and describes current nutritional status. Children with z-scores below minus two standard deviations ( $-2$  SD) are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations ( $-3$  SD) are considered severely wasted. This weight-for-height indicator also provides data on overweight and obesity. Children more than two standard deviations ( $+2$  SD) above the median weight-for-height are considered overweight, or obese.

### 9.3.1 Distribution of weight-for-height z-scores

Figure 9.3.1 shows the distribution of weight-for-height z-scores among all children aged 0-59 months whose measurements were taken. Overall, 2 percent of children are wasted and less than 1 percent of children are severely wasted. Overweight and obesity affect a greater proportion of children in Nicaragua than wasting. In this sample representative of the poorest areas, 6 percent of children are shown to be overweight or obese (weight-for-height more than  $+2$  SD).

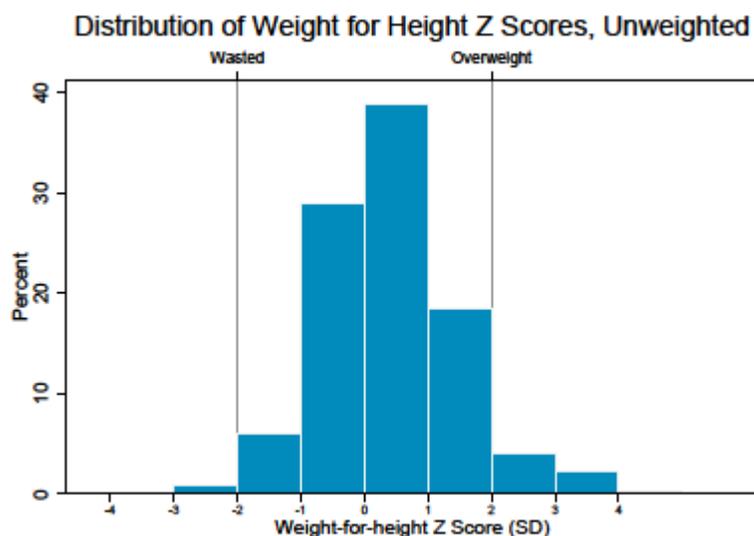


Figure 9.3.1 Distribution of weight-for-height z-scores among children aged 0-59 months

### 9.3.2 Prevalence of wasting

Table 9.2 shows the breakdown of nutritional status of children aged 0-59 months as measured by weight-for-height by age groups and sex. Overall, 2 percent of children are wasted and less than 1 percent of children are severely wasted. Analysis of the indicator by age group shows that wasting is highest (over 4 percent) in children 0-5 months old and lowest (less than 1 percent) in children aged 6-23 months, a statistically significant difference ( $P=0.04$ ). Male children are less likely to be wasted than female children (1.4 percent versus less than 1.6 percent; this is not significant,  $P=0.79$ ). Likewise, male children are slightly less likely to be severely wasted (less than half of 1 percent) than females (just under 1 percent), but the difference is not significant ( $P=0.79$ ).

Overweight and obesity affect a greater proportion of children in Nicaragua than wasting. In this sample of poorest areas of Nicaragua, 6 percent of children are overweight or obese (weight-for-height more than +2 SD). The coexistence of both growth retardation and obesity reveals the burden of malnutrition in Nicaragua.

**Table 9.2 Prevalence of underweight in children aged 0-59 months**

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: weight-for-height, height-for-age, and weight-for-age, by age and sex									
Characteristic	Weight for age (underweight)			Height-for-age (stunting)		Weight-for-height (wasting)			Number of children
	Percent < -3 SD	Percent < -2 SD	Percent > +2 SD	Percent < -3 SD	Percent < -2 SD	Percent < -3 SD	Percent < -2 SD	Percent > +2 SD	
Total	1	4.5	3.8	3.9	13.3	0.6	1.5	6.1	1411
Sex									
Male	0.8	3.7	4	5	15	0.4	1.4	7.5	709
Female	1.2	5.4	3.5	2.7	11.6	0.8	1.6	4.7	698
Age in months									
0-5	1.3	2.6	9.6	0	0.6	2.3	4.2	5.9	134
6-23	1.1	1.5	6.9	1.1	4.5	0	0.5	8.3	160
12-23	0	2.5	5.4	2.1	12	0	1.2	7.8	298
24-59	1.2	6.2	1.6	5.9	18.1	0.6	1.2	5.1	786

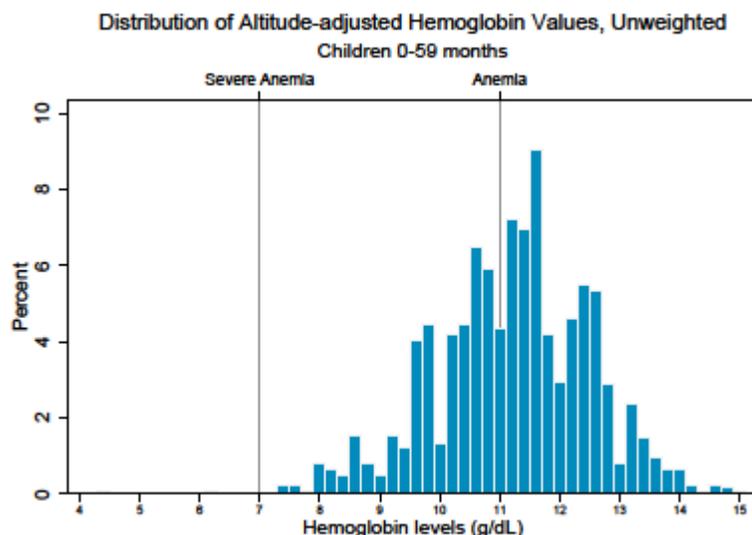
### 9.4 Anemia

Anemia is a condition characterized by a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for most of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. It is of concern in children because anemia is associated with impaired mental and motor development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

Common causes of anemia include inadequate intake of iron, folate, vitamin B12 or other nutrients. This form of anemia is commonly referred to as iron-deficiency anemia and is the most widespread form of anemia in the world. Anemia can also be the result of thalassemia, sickle cell disease, malaria or intestinal worm infestation.

### 9.4.1 Distribution of hemoglobin values

Figure 9.4.1 shows the distribution of hemoglobin values (in g/dL) among children 0-59 months of age.



**Figure 9.4.1** Distribution of hemoglobin values among children aged 0-59 months

### 9.4.2 Prevalence of anemia

Levels of anemia were classified as severe (<7.0 g/dL) and any (<11.0 g/dL) based on the hemoglobin concentration in the blood. The cutpoints for anemia should be adjusted (raised) in settings where altitude is >1,000 meters above sea level, to account for lower oxygen partial pressure, a reduction in oxygen saturation of blood, and an increase in red blood cell production. There is large variation in the altitudes in Nicaragua. The lowest elevation of a surveyed household was 10 meters and the highest elevation was 1,341 meters. Correction for elevation was applied to hemoglobin measurements taken over 1,000 meters.

Children whose hemoglobin levels are below 11 g/dL are considered anemic and children who have hemoglobin levels below 7 g/dL are considered severely anemic. Table 9.4.2 indicates that 39 percent of children under age five in Nicaragua are anemic. Overall, the anemia prevalence is mostly mild to moderate, with 0.2 percent of children under five years presenting as severely anemic. Anemia prevalence is highest among children aged 0-5 months (71 percent) compared with the other children. More than half of all children aged 6-23 months, our targeted population for anemia intervention, were found to be anemic (54 percent). For all children under five years of age, male children are about as likely to be anemic as female children (both about 39 percent), and the difference is not statistically significant (P=0.64).

**Table 9.4.2 Prevalence of anemia in children aged 0-59 month**

Characteristic	N	Weighted Anemia Prevalence	
		< 7 g/dL	< 11g/dL
Age in months			
0-5	134	0	70.6
6-11	160	0.6	67.4
12-23	298	0.3	46.9
24-59	819	0	30
0-59	1411	0.2	38.8
Sex			
Male	709	0.2	39
Female	698	0.2	38.7

## CHAPTER 10: EXPOSURE TO HEALTH SYSTEM INTERVENTIONS

This chapter summarizes data regarding the exposure of women to four health system interventions: community health workers, breastfeeding interventions, child nutrition interventions, and child health interventions.

### 10.1 Exposure to Community Health Workers

Respondents were asked about their exposure to community health workers. Less than 2 percent of women reported meeting with a community health worker in the month preceding the interview (Table 10.1.1).

**Table 10.1.1 Exposure to community health workers**

Percent distribution of women			
Characteristic	N	Weighted %	Weighted SE
Met with a community health worker in the last month			
Yes	29	1.5	0.4
No	1683	98.5	0.4
DK/NR	1		
Missing	7		
Total	1720	100	
Number of times respondent met with a community health worker in the last month			
Did not meet	1683	98.5	0.4
One time	20	1	0.4
Two times	6	0.3	0.1
Three times	2	0.1	0.1
Four or more times	1	0.1	0.1
DK/NR	1		
Missing	7		
Total	1720	100	

Referral and advice services provided by community health workers are summarized in Table 10.1.2. Among women who met with a community health worker in the last month, advice about family planning and contraception was the most frequently reported (79 percent). Advice about child nutrition (55 percent) and child vaccination (51 percent) were also frequently reported.

**Table 10.1.2 Services provided by community health workers**

Percent distribution of women who met with a community health worker in the last month			
Type of service	N	Weighted %	Weighted SE
<b>Referral for prenatal care</b>			
Yes	13	35.4	9.9
No	16	64.6	9.9
DK/NR	0		
Missing	0		
Total	29	100	
<b>Referral for in-facility delivery</b>			
Yes	9	27	9.4
No	20	73	9.4
DK/NR	0		
Missing	0		
Total	29	100	
<b>Referral for postnatal care</b>			
Yes	10	28.8	9.2
No	19	71.2	9.2
DK/NR	0		
Missing	0		
Total	29	100	
<b>Referral for voluntary counseling and testing for the prevention of HIV/syphilis transmission from mother to child</b>			
Yes	9	26.6	8.9
No	20	73.4	8.9
DK/NR	0		
Missing	0		
Total	29	100	
<b>Advice about family planning and contraception</b>			
Yes	23	78.9	9
No	6	21.1	9
DK/NR	0		
Missing	0		
Total	29	100	
<b>Child vaccination</b>			
Yes	19	50.6	13.6
No	10	49.4	13.6
DK/NR	0		
Missing	0		
Total	29	100	

Percent distribution of women who met with a community health worker in the last month			
Type of service	N	Weighted %	Weighted SE
<b>Advice about child nutrition</b>			
Yes	21	55.3	13.8
No	8	44.7	13.8
DK/NR	0		
Missing	0		
Total	29	100	
<b>Information, education, and communication sessions</b>			
Yes	11	34.2	11
No	18	65.8	11
DK/NR	0		
Missing	0		
Total	29	100	
<b>Other</b>			
Yes	8	26.9	9.7
No	21	73.1	9.7
DK/NR	0		
Missing	0		
Total	29	100	

## 10.2 Exposure to Breastfeeding Interventions

Respondents were asked about their exposure to breastfeeding interventions. Approximately 26 percent of women reported receiving guidance or advice about breastfeeding in the 12 months preceding the interview (Table 10.4.1).

## 10.3 Exposure to Child Nutrition Interventions

Respondents were asked about their exposure to child nutrition interventions. Approximately 24 percent of women reported receiving guidance or advice about child nutrition in the 12 months preceding the interview (Table 10.4.1).

## 10.4 Exposure to Child Health Interventions

Respondents were asked about their exposure to child health interventions. Approximately 25 percent of women reported receiving guidance or advice about danger signs for children's health in the 12 months preceding the interview (Table 10.4.1).

**Table 10.4.1 Exposure to breastfeeding, child nutrition, and child health interventions**

Percent distribution among women with children under 5			
Characteristic	N	Weighted %	Weighted SE
Received guidance or advice about breastfeeding in the last 12 months			
Yes	286	25.8	2
No	869	72.5	2
DK/NR	1		
Missing	7		
Total	1163	100	
Received guidance or advice about child nutrition in the last 12 months			
Yes	267	23.8	1.8
No	888	74.5	1.8
DK/NR	1		
Missing	7		
Total	1163	100	
Received guidance or advice about danger signs for children's health in the last 12 months			
Yes	272	24.6	1.9
No	883	73.7	1.9
DK/NR	1		
Missing	7		
Total	1163	100	

Most of women receiving guidance or advice about breastfeeding (97 percent), child nutrition (95 percent), or danger signs for children's health (95 percent) indicated that this occurred at a public hospital, public health unit, or public health center / clinic (Table 10.4.2). Less than one percent of women received guidance from a community health worker.

**Table 10.4.2 Exposure to child health interventions, by source**

Percentage of women with children under 5 who received guidance or advice about breastfeeding, child nutrition and danger signs for children's health in the last 12 months, and among them, the percentage of women with guidance or advice from specific sources			
Characteristic	Intervention type		
	Breast-feeding	Child nutrition	Child health
Received guidance or advice about interventions for children's health in the last 12 months (%)	26.3	24.2	25
<i>Number of women</i>	1164	1164	1164
Source of advice (%)			
Public hospital	31.2	27.7	26.7
Public health unit	48.5	48.4	50.8
Public health center/clinic	17	19.2	17.7
Public mobile clinic	0	0	0.4
Other public health center	0.4	0.5	0.5
Private hospital	1.3	0.9	0.8
Private health center/clinic	2.3	2.2	2.4
Private office	1.2	0.9	0.5
Private mobile clinic	0	0	0
Other private health center	0.3	0.3	0.3
Pharmacy	0	0	0
Community health worker	0.5	0	0
Traditional healer	0	0	0
Other	0.6	0.9	1.3
DK/NR, missing	0	0	0
<i>Number of women</i>	286	267	272

### 10.5 Satisfaction with community health workers

Women who met with a community health worker in the month preceding the interview were asked to assess their satisfaction with the following: number of visits received from community health workers, knowledge and training of community health workers, information provided by community health workers, and respectfulness of community health workers. Results are displayed in Table 10.5.

**Table 10.5 Satisfaction with community health workers**

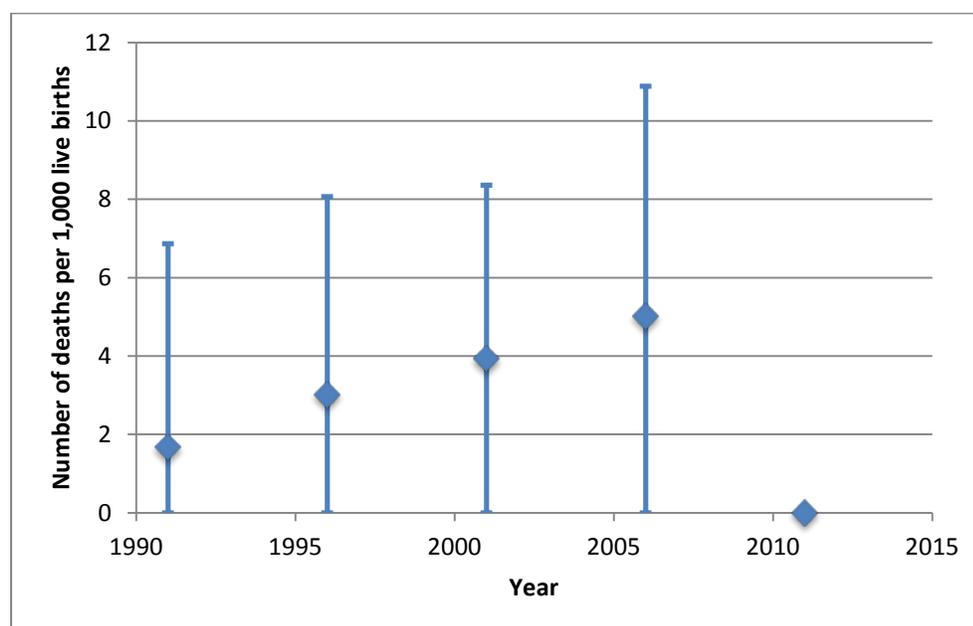
Percent distribution of women who met with a community health worker in the last month by level of satisfaction in different fields					
Field of satisfaction	Level of satisfaction				Total
	Very dis-satisfied	Dis-satisfied	Satisfied	Very satisfied	
Number of visits received from community health workers	2.5	4.2	80.6	12.7	100
Knowledge and training of community health workers	2.6	4.3	83.4	9.8	100
Information provided by community health workers	5.6	2.1	76.9	15.4	100
Respectfulness shown by community health workers	5.6	2.1	82.8	9.5	100

## CHAPTER 11: NEONATAL, INFANT, AND CHILD MORTALITY

This chapter summarizes estimates of neonatal, infant, and child mortality within the target area for the initiative in Nicaragua. The complete birth histories of women of reproductive age (15-49 years) captured in the SM2015-Nicaragua Baseline Household Survey provided the requisite data necessary to calculate probability of death using direct methods: date of birth of children, their survival status, and the dates of death or ages at death of deceased children. For the sake of comparison, at the end of this chapter national-level estimates of neonatal, infant, and child mortality in Nicaragua, produced by IHME are included.

### 11.1 Neonatal Mortality

Neonatal mortality is defined as the number of deaths during the first 28 completed days of life per 1,000 live births in a given year or period. Figure 11.1 displays the weighted point estimates and 95% confidence intervals for neonatal mortality in the intervention areas of the initiative during all 5-year periods preceding the survey for which data were reported.



**Figure 11.1 Neonatal mortality estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013**

### 11.2 Infant Mortality

Infant mortality is defined as the number of deaths during the first year of life per 1,000 live births in a given year or period. Figure 11.2 displays the weighted point estimates and 95% confidence intervals for infant mortality in the intervention areas of the initiative during all 5-year periods preceding the survey for which data were reported.

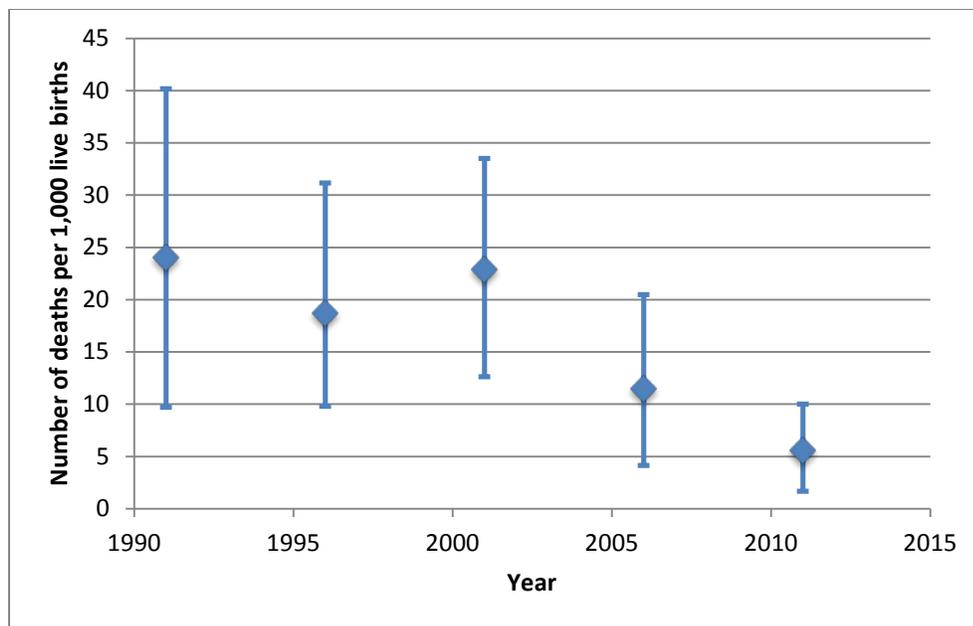


Figure 11.2 Infant mortality estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

### 11.3 Mortality in Children Under Five Years of Age

Mortality in children under five years of age is defined as the number of deaths during the first five years of life per 1,000 live births in a given year or period. Figure 11.3 displays the weighted point estimates and 95% confidence intervals for under-five child mortality in the intervention areas of the initiative during all 5-year periods preceding the survey for which data were reported.

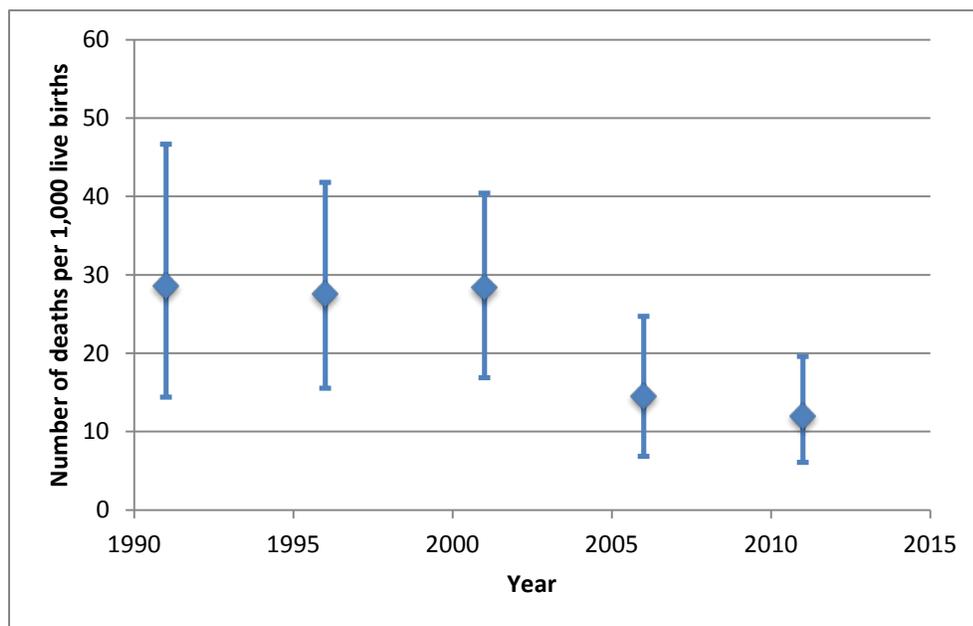


Figure 11.3 Mortality in children under five years of age estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

A summary of the most recent five year period estimates for neonatal, infant, and under-five child mortality in the target area based on complete birth history data from the SM2015 Household Survey is shown in Table 11.3a.

**Table 11.3a Mortality in children under 5 years of age in the target area of the initiative**

Based on complete birth history data from the five years preceding the interview, among study areas, Mexico 2013		
Child mortality indicator	Deaths per 1,000 live births	95% CI
Neonatal mortality	0.0	(0.0-0.0)
Infant mortality	5.6	(1.7-10.0)
Under-5 mortality	12.0	(6.1-19.6)

The estimates produced from the complete birth histories displayed above are compared to the IHME-generated time series of national-level estimates in Table 11.3b.

**Table 11.3b Mortality in children under 5 years of age at the national-level**

Based on IHME-generated time series, Global Burden of Disease		
Child mortality indicator	Deaths per 1,000 live births	95% CI
Neonatal mortality		
2007	12.0	(9.5-14.5)
2008	12.3	(9.9-14.6)
2009	12.7	(10.4-15.0)
2010	13.1	(10.9-15.4)
2011	13.5	(11.3-15.7)
Infant mortality		
2007	21.5	(17.4-26.1)
2008	22.1	(18.0-26.6)
2009	23.1	(19.1-27.2)
2010	24.1	(20.3-28.1)
2011	25.2	(21.8-28.7)
Under-5 mortality		
2007	25.8	(21.0-31.4)
2008	26.6	(21.9-31.8)
2009	27.8	(23.2-32.9)
2010	29.0	(24.8-33.6)
2011	30.3	(26.6-34.2)

To calculate the IHME-generated time series for mortality in children younger than five years of age, data were derived from a range of sources, including vital registration systems, sample registration systems, summary birth histories in censuses and surveys, and complete birth histories. We compiled a database of measurements for 187 countries (excluding those countries with populations of less than 50,000) from 1970 to 2011.

For each country, we generated a time series of estimates of under-5 mortality by synthesizing the empirical data estimates with an analytical technique called Gaussian process regression (GPR). Details of the implementation of this technique can be found in: Rajaratnam JK et al. Neonatal, postneonatal, childhood, and under-5 mortality for 187 countries, 1970–2010: a systematic analysis of progress towards Millennium Development Goal 4. *Lancet*. 2010;375:1988-2008. A subsequent update to the 2010 publication, including updated data, methods, and new estimates from 1990 to 2011 can be found in: Lozano R, Wang H, Foreman KJ, Rajaratnam JK, Naghavi M, Marcus JR, Dwyer-Lindgren L, Lofgren KT, Phillips D, Atkinson C, Lopez AD, Murray CJL. Progress towards Millennium Development Goals 4 and 5 on maternal and child mortality: an updated systematic analysis. *The Lancet*. 2011; 378:1139-1165 and in Wang H\*, Dwyer-Lindgren L, Lofgren KT, Rajaratnam JK, Marcus JR, Levin-Rector A, Levitz C, Lopez AD, Murray CJL. Age-specific and sex-specific mortality in 187 countries, 1970–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet*. 2012; 380: 2071–2094.

Briefly, we applied Loess regression of the log of under-5 mortality in a country as a function of time and an indicator variable for measurements from vital registration data to allow for under-registration of child deaths. This predicted series was then updated by the data within each country by use of GPR. Our GPR model has better out-of-sample predictive validity than do previous methods for measuring child mortality and captures uncertainty caused by sampling and non-sampling error across data types. We computed yearly rates of change in under-5 mortality and examined rates over time for each country.

We divided the estimates of under-5 mortality generated by GPR into estimates of neonatal (the probability of death before age 1 month), postneonatal (the probability of death before age 1 year conditional on surviving to age 1 month), and childhood (the probability of death from age 1 year to age 5 years conditional on surviving to age 1 year) risks of death by use of a two-step modeling process in which we first predicted sex-specific under-5 mortality and then predicted the sex-specific neonatal, postneonatal, and childhood risks of death.

To compute aggregate numbers of deaths, we combined estimates of neonatal and postneonatal mortality to obtain an estimate of the infant mortality rate. We obtained deaths in infants younger than 1 year by applying the infant mortality rate (the probability of death from birth to age 1 year) to the number of births in the current and previous years. We used a similar method to estimate deaths in children aged between 1 year and 5 years. Deaths in children younger than 5 years were the sum of deaths in infants younger than 1 year and deaths in children aged between 1 year and 5 years.

## APPENDIX A. SAMPLING DESIGN AND METHODOLOGY

### A.1 Sample Size and Statistical Power Calculations

Sample size and power calculations were determined based on IDB's pre-specified plan to complete a full census of the sampled segments (described in section A.2 "Sampling Procedures", below), followed by a survey of 1,714 selected eligible households in treatment areas, and 750 selected eligible households in control areas. Households were eligible if they had at least one child aged 0-59 months or one woman aged 15-49 years.

Please note that the sample size and statistical power calculations described in this Appendix are for the comparison of baseline and follow-up percentages of indicators in the treatment population. The power calculations do not pertain to control group comparisons.

#### *A.1.1 Sample sizes*

Using the 2005 Nicaragua Population Census for reference, we assumed that among the 1,714 households there would be 517 children under 2 years, 1,320 children under 5 years, 2,023 women aged 15-49 years, and 388 women aged 15-49 years with live births in the last 2 years. This sample size is necessary to attain 80% power, with an alpha value of 0.05, to detect a change from 50% to 59% in the indicator proportion of women delivering in a health facility with a skilled attendant in the last two years. The indicator definition and baseline value are in accordance with the payment indicator matrix provided by IDB. Of the payment indicators relying on the household survey, the skilled institutional delivery indicator is the most restrictive and hence, drives the sample size. We sampled an additional 10%, or 1,886 total households, to account for non-response.

In order to achieve the desired sample size of 1,714 households, we sought to complete interviews with residents of 30 randomly-selected households in each of the 63 randomly selected segments in intervention areas (28 segments in control areas). More specifically, we drew a sample of 30 randomly-selected households with age-eligible children as residents and 10 randomly-selected backup households with age-eligible women as residents. To do so, listings of all households with age-eligible women or children were assembled in random-order for each segment. Naturally, there was a substantial degree of overlap between houses listed on the "woman-resident" list and houses listed on the "child-resident" list. Interviewers sought to interview the 30 households with children first. In some cases, selected households were absent or declined to participate in the SM2015 Household Survey. These households were replaced by other households from the backup list of households with age-eligible women from the same segment. When selected households were visited, the survey was applied to all present and eligible women and children. Because multiple interviewers worked the sample simultaneously, in a handful of instances more than 30 surveys were completed. This occurred in 10 segments in intervention areas and 11 segments in control areas, where between 31 and 36 households completed surveys.

As previously explained, data collection was carried out in 1,300 households (43 segments) in intervention areas and 771 households (25 segments) in control areas due to safety concerns and an early termination of data collection. 5 municipalities in intervention areas and 1 municipality in control areas were not visited at all. Tables 1.2.1 and 1.2.7 in chapter 1 summarize these differences. We compared the characteristics of visited and not visited areas, finding no major differences between them (Table A.1.1), suggesting that there is no significant bias introduced due to this adjustment. We also recalculated power estimates for the evaluation indicators, showing that with the attained sample we have enough power for this evaluation.

**Table A.1.1 Comparison of characteristics for households visited and not visited**

	Households visited	Households not visited
Percent of households with electricity	0	0
Percent of households with improved wall type	90.2	86.2
Percent of living structures that are improvised	0.6	0.1
Poverty index	68.7	73.1
Percent of population aged 1-5 years	12.5	12.9
Percent of population aged 15-49 years	23.6	23.0
Average distance to nearest health facility	5.6	7.1
Coverage of 4 antenatal care visits	50.4	61.0
Coverage of institutional delivery	55	49.4
Institutional births per 1000 inhabitants	17.2	16.2

### **A.1.2 Prior levels of indicators**

Where possible, we used IHME's estimates of the national levels of indicator coverage in 2010, multiplied by 0.9, to obtain estimates of coverage and prevalence among the poorest 20% of the population. Where these data were not available, and for the malnutrition indicators, we used the 2008 estimates of coverage and prevalence among the poorest 20% of the population provided to us by IDB.

### **A.1.3 Statistical power calculation**

All calculations were done using the "samps" command in Stata version 12.1. Calculations assumed a two-tailed two-sample proportions test with an alpha level of 0.05 corresponding to a 95% confidence interval, and a beta level of 0.20 corresponding to an 80% power level.

## **A.2 Sampling Procedures**

In total, 19 municipalities were identified by IDB as the "target area" for the initiative, and 4 municipalities were identified as control areas. Clusters (segments) were randomly-selected from a list of all segments within the targeted municipalities, with probability proportional to size, where size was represented by the number of occupied households within the segment, based on data from the 2005 National Population Census. Within each randomly-selected cluster, a complete household listing exercise was carried out, enabling the systematic selection of households for participation in the survey, based on household composition. All households in which women aged 15-49 years and/or children aged 0-59 months resided were eligible to be selected for the survey. Additional information about the selection of eligible households is described in Section A.1.1 "Sample sizes".

In this section, we describe the random sampling procedures for selecting the segments from the target area that were surveyed. An alternate sample was also selected in the event that the survey could not be conducted in the selected segments. Below we describe the selection of the primary and alternate samples.

### **A.2.1 Primary sample**

The primary sample of 63 intervention and 28 control clusters (segments) were randomly-selected from a total of 1,174 intervention segments in 19 municipalities and 281 control segments in 4 municipalities which, based on data from the 2005 National Population Census, contained 137,829 and 32,992 occupied households respectively. As stated previously, segments were selected in each study arm with probability proportional to size, as follows:

We put the segments in a random order and generated a variable representing the cumulative number of households by that segment. We divided the total number of households by the number of segments we meant to sample, to obtain an interval length " $\Delta$ " (2188 in intervention areas; 1178 in control areas). A random starting point " $\Sigma$ " was drawn from a uniform distribution between 1 and the interval length  $\Delta$ . The  $n^{\text{th}}$  segment in the sample was first segment whose cumulative number of households was greater than  $\Sigma + (n - 1) * \Delta$ .

## APPENDIX B. SURVEY WEIGHTS, SAMPLING ERRORS, AND DESIGN EFFECTS

### B.1 Weighting Methodology

As previously described, cluster sampling was performed using the segment as the primary sampling unit. There were 43 intervention segments and 25 control segments interviewed. Design weights for households, women and children were generated and incorporated into the merged datasets for analyses. The weights were calculated as follows for households:

$$\text{Weight} = \frac{1}{p(\text{selecting Household } Y)} = \frac{1}{p(\text{selecting Segment } X) * p(\text{selecting Household } Y \text{ in segment } X)}$$

where

$$p(\text{selecting Segment } X) = \frac{\# \text{ occupied households in Segment } X \text{ in 2005}}{\text{Total } \# \text{ occupied households in target municipalities in 2005}} * \# \text{ draws}$$

and the number of draws corresponds to the number of originally designated segments in the corresponding study arm (63 for intervention areas and 28 in control areas), and the total number of occupied households in target municipalities in 2005 corresponds to 137,829 households in the intervention arm and 32,992 households in the control arm, and

if the household includes children under five according to the SM2015 census:

$$\begin{aligned} & p(\text{selecting household } Y \text{ in segment } X) \\ &= \frac{\# \text{ households with age - eligible children interviewed for SM2015 in segment } X}{\# \text{ occupied households with age - eligible children in Segment } X \text{ from SM2015 census}} \end{aligned}$$

or if the household does not include children under five according to the SM2015 census:

$$\begin{aligned} & p(\text{selecting household } Y \text{ in segment } X) \\ &= \frac{\# \text{ households with eligible women but no eligible children interviewed for SM2015 in segment } X}{\# \text{ occupied households with age - eligible women but no children in Segment } X \text{ from SM2015 census}} \end{aligned}$$

Minor modifications to this formula were used to calculate weights for women and children as follows:

$$\begin{aligned} & p(\text{selecting woman } Z) \\ &= \frac{p(\text{selecting Segment } X) * p(\text{selecting Household } Y \text{ in Segment } X)}{\text{average number of women 15 - 49 years old per household in SM2015 census} * p(\text{selecting Woman } Z \text{ in household } Y)} \end{aligned}$$

where the average number of women 15-49 years old per household in the sample was 1.4309946 in intervention areas and 1.5568627 in control areas (according to the SM2015 Household Census), and

if the household includes children under five according to the SM2015 census:

$$\begin{aligned} & p(\text{selecting Household } Y \text{ in Segment } X) \\ &= \frac{\# \text{ households with eligible children completing women's health survey for SM2015 in Segment } X}{\# \text{ occupied households with age - eligible children in Segment } X \text{ from SM2015 census}} \end{aligned}$$

or if the household does not include children under five according to the SM2015 census:

$$p(\text{selecting Household } Y \text{ in Segment } X) = \frac{\# \text{ households with eligible women but not children completing women's health survey for SM2015 in Segment } X}{\# \text{ occupied households with age - eligible women but not children in Segment } X \text{ from SM2015 census}}$$

and

$$p(\text{selecting Woman } Z \text{ in Household } Y) = \frac{\# \text{ women in Household } Y \text{ completing the survey}}{\# \text{ women 15 - 49 years old residing in Household } Y \text{ from SM2015 census}}$$

and

$$p(\text{selecting Child } W) = \frac{p(\text{selecting Segment } X) * p(\text{selecting Household } Y \text{ in Segment } X)}{\text{average number of children 0 - 59 months old per household in sample} * p(\text{selecting child } W \text{ in Household } Y)}$$

where the average number of children 0-59 months old per household in the sample was 1.0956052 in intervention areas and 1.0993464 in control areas (according to the SM2015 Household Census), and

$$p(\text{selecting Household } Y \text{ in Segment } X) = \frac{\# \text{ households completing children's health survey for SM2015 in Segment } X}{\# \text{ occupied households with age - eligible children in Segment } X \text{ from SM2015 census}}$$

and

$$p(\text{selecting Child } W \text{ in Household } Y) = \frac{\# \text{ children in Household } Y \text{ completing the survey}}{\# \text{ children 0 - 59 months residing in Household } Y \text{ from SM2015 census}}$$

The weights yielded results which were similar to the unweighted results.

## B.2 Sampling Errors

As described in Appendix A, a random sample of eligible households was ultimately selected from each of 43 clusters (segments) in intervention areas and 25 clusters in control areas (though 63 and 28 segments were originally designated, respectively) which had been randomly-sampled with probability proportional to size from the target intervention and control areas of the initiative which consisted of 1174 and 281 segments respectively. Although cluster-sampling can improve efficiency when the target population is spread out over a large area, the resultant sample consists of observations that are not completely independent of one another. The standard errors presented throughout this report account for this intra-class correlation, using Taylor-linearized variance estimation. Standard errors for key indicators being assessed as part of the SM2015 initiative are summarized in Table B, below.

## B.3 Design Effects for Key Indicators

As described above, cluster-sampling yields a sample of observations that are not completely independent of one another. The effective sample size is therefore reduced because there is less variation in the selected sample than in a simple random sample. The design effect represents the impact of cluster-sampling on the effective sample size, expressed as the ratio of the actual variance observed to the variance computed under the assumption of simple random sampling, given the sample size obtained. For a DEFF of 2.0, based on data from 2,023 women, we would conclude that the observed sample variance is twice as large as it would be if we had selected 2,023 women completely at random from the target area.

In other words, under simple random sampling, we would only need half as many women (1,012) in order to produce the same results. The design effect (DEFF) is calculated as follows:

$DEFF = 1 + \delta (n - 1)$ , where  $\delta$  = intra-class correlation and  $n$  = average size of the cluster

Design effects, therefore, increase as the intra-class correlation increases and as the size of the clusters increases. Because the intra-class correlation depends on the characteristic being assessed, the design effects vary across the range of indicators assessed in this survey.

Another measure that can be used to assess design effects is the square root of DEFF (hereafter abbreviated as DEFT), which is, naturally, less variable than DEFF. The DEFT represents the increase in the standard error (and therefore, the confidence interval) that is associated with the use of cluster sampling rather than simple random sampling for a fixed sample size. For a DEFT of 2.0, the standard error would be twice as large, and the confidence interval would be twice as wide under cluster sampling as compared to a simple random sample of the same size.

For well-designed surveys, estimates of design effects should be in the range of 1.0 to 3.0. However, depending on the characteristic being assessed, design effects may be 10.0 or larger. Design effects for key indicators being assessed as part of the SM2015 initiative are summarized in Table B, below. As expected, most design effects were minimal.

**Table B.1 Design effects, SM2015-Nicaragua Baseline Household Survey, 2013**

Payment indicators						
Number	Indicator	N	Weighted %	Weighted SE	DEFF	DEFT
5020	Niños 0-59 meses con esquema de vacunación completo para su edad, según el esquema oficial del Programa Nacional de Inmunización (PNI)	1411	48	3.1	5.5	2.4
5040	Niños de 0 a 5 meses que fueron alimentados exclusivamente con leche materna el día anterior	134	59.5	5.6	1.8	1.3
5030	Niños de 12 a 59 meses que recibieron 2 dosis de tratamiento antiparasitario en el último año	1117	32	1.3	0.8	0.9
5060	Madres que dieron a sus niños de 0 a 59 meses SRO y zinc en el último episodio de diarrea en las últimas dos semanas	1411	1.4	0.8	0.9	0.9
2010	Mujeres en edad reproductiva (15-49) que actualmente utilizan (o cuya pareja utiliza) un método moderno de planificación familiar (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas).	963	81.6	1.8	2	1.4
4010	Mujeres en edad reproductiva (15-49) cuyo parto más reciente fue realizado por personal calificado en una unidad de salud en los últimos dos años	815	87	2.3	3.9	2
4035	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 10 días en su embarazo más reciente en los dos últimos años	815	59.5	2.9	2.3	1.5
4105	Neonatos que recibieron atención neonatal por personal calificado en una unidad de salud dentro de las 10 días siguientes a su nacimiento durante los últimos dos años	815	78.2	2.9	3.1	1.8
Non-payment indicators, full sample						
1050	Niños de 0-59 meses con niveles de hemoglobina < 110 g/L	1411	38.8	1.9	1.9	1.4
1060	Niños de 6-23 meses con niveles de hemoglobina < 110 g/L	458	53.9	2.9	1.5	1.2
1070	Niños 0-59 meses con talla < -2SD de la media de la población de referencia de longitud para edad	1411	13.3	1.4	2.2	1.5
5025	Niños de 12 a 23 meses de edad con vacuna para Sarampión, Paperas y Rubeola (SPR)	298	70.9	3.8	2	1.4
5070	Niños entre 6 y 23 meses cuyas madres informan haber consumido al menos 50 sobres de micronutrientes en polvo durante los últimos 6 meses	458	0.2	0.2	1	1
6030	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo enfermo (0-59 meses) en las últimas dos semanas	1411	32.9	1.9	2.4	1.5
6040	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo (0-59 meses) enfermo en las últimas dos semanas pero que no buscaron atención de salud	467	1	0.5	1.2	1.1
5010	Niños de 12 a 23 meses de edad con vacuna para Sarampión medida a través de DBS (seroconversión positiva)					
1090	Número de nacimientos con vida por cada 1.000 mujeres de edades comprendidas entre los 15-19 años, en un año dado	364	139.2	20.2	1.2	1.1
2020	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que no deseaban quedar embarazadas y que no estaban usando/no tenían acceso a métodos de planificación familiar	963	18.4	1.8	2	1.4
2030	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que utilizaron el año pasado un método de PF, que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que informan haber interrumpido el uso de un método de planificación familiar durante el año anterior	854	3.9	0.9	2	1.4
4110	Madres (15-49) que pueden reconocer al menos 5 signos de peligro en el recién nacido para su parto más reciente en los dos últimos años	551	33.9	2.2	1.2	1.1
6010	Mujeres en edad reproductiva (15-49) que informan haber sufrido alguna una enfermedad en las últimas dos semanas	1720	22.7	1.7	2.8	1.7
6080	Tiempo de viaje promedio hasta el centro de atención de salud más próximo durante la última visita	1720	34.5	3.1	12.5	3.5
3010	Mujeres en edad reproductiva (15-49) que recibieron por lo menos a una atención prenatal por personal calificado en su embarazo más reciente en los últimos dos años	815	95.1	0.9	1.5	1.2
3020	Mujeres en edad reproductiva (15-49) que recibieron por lo menos 4 controles prenatales en su embarazo más reciente por personal calificado en los últimos dos años	815	81.1	1.5	1.1	1.1
4020	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 48 horas en su embarazo más reciente en los dos últimos años	815	48.7	2.8	2	1.4
4030	Mujeres que recibieron cuidado de post-parto por personal calificado antes de los 7 días después de su parto más reciente en los dos últimos años	815	57.8	2.9	2.2	1.5
4040	Mujeres en edad reproductiva (15-49) que recibieron control postnatal dentro de las 24 horas inmediatas al nacimiento, un control adicional antes de los 7 días y otro control antes de los 42 días por personal calificado en unidad de salud cuyo parto más reciente ocurrió en los dos últimos años	815	0.4	0.2	0.9	1
5050	Niños nacidos en los últimos 24 meses que fueron puestos al seno materno durante la primera hora después del parto	821	82.4	1.7	1.7	1.3
6810	Mujeres (15-49 años) que durante su embarazo más reciente en los últimos dos años utilizaron la casa materna	815	11.2	1.7	2.4	1.6
6100	Monto promedio del gasto familiar el mes pasado	1300	4205.9	343.9	8.6	2.9

N=Size of denominator; SE=Standard error; DEFF=Design effect; DEFT=Square root of design effect

**APPENDIX C. SM2015 HOUSEHOLD INDICATORS**
**Table C.1 Performance of payment and non-payment indicators among intervention areas, SM2015-Nicaragua  
Baseline Household Survey, 2013**

Payment indicators				
Number	Indicator	N	Weighted %	Weighted SE
5020	Niños 0-59 meses con esquema de vacunación completo para su edad, según el esquema oficial del Programa Nacional de Inmunización (PNI)	1411	48	3.1
5040	Niños de 0 a 5 meses que fueron alimentados exclusivamente con leche materna el día anterior	134	59.5	5.6
5030	Niños de 12 a 59 meses que recibieron 2 dosis de tratamiento antiparasitario en el último año	1117	32	1.3
5060	Madres que dieron a sus niños de 0 a 59 meses SRO y zinc en el último episodio de diarrea en las últimas dos semanas	1411	1.4	0.8
2010	Mujeres en edad reproductiva (15-49) que actualmente utilizan (o cuya pareja utiliza) un método moderno de planificación familiar (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas).	963	81.6	1.8
4010	Mujeres en edad reproductiva (15-49) cuyo parto más reciente fue realizado por personal calificado en una unidad de salud en los últimos dos años	815	87	2.3
4035	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 10 días en su embarazo más reciente en los dos últimos años	815	59.5	2.9
4105	Neonatos que recibieron atención neonatal por personal calificado en una unidad de salud dentro de las 10 días siguientes a su nacimiento durante los últimos dos años	815	78.2	2.9
Non-payment indicators				
1050	Niños de 0-59 meses con niveles de hemoglobina < 110 g/L	1411	38.8	1.9
1060	Niños de 6-23 meses con niveles de hemoglobina < 110 g/L	458	53.9	2.9
1070	Niños 0-59 meses con talla < -2 SD de la media de la población de referencia de longitud para edad	1411	13.3	1.4
5025	Niños de 12 a 23 meses de edad con vacuna para Sarampión, Paperas y Rubeola (SPR)	298	70.9	3.8
5070	Niños entre 6 y 23 meses cuyas madres informan haber consumido al menos 50 sobres de micronutrientes en polvo durante los últimos 6 meses	458	0.2	0.2
6030	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo enfermo (0-59 meses) en las últimas dos semanas	1411	32.9	1.9
6040	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo (0-59 meses) enfermo en las últimas dos semanas pero que no buscaron atención de salud	467	1	0.5
5010	Niños de 12 a 23 meses de edad con vacuna para Sarampión medida a través de DBS (seroconversión positiva)			
1090	Número de nacimientos con vida por cada 1.000 mujeres de edades comprendidas entre los 15-19 años, en un año dado	364	139.2	20.2
2020	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que no deseaban quedar embarazadas y que no estaban usando/no tenían acceso a métodos de planificación familiar	963	18.4	1.8
2030	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que utilizaron el año pasado un método de PF, que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que informan haber interrumpido el uso de un método de planificación familiar durante el año anterior	854	3.9	0.9
4110	Madres (15-49) que pueden reconocer al menos 5 signos de peligro en el recién nacido para su parto más reciente en los dos últimos años	551	33.9	2.2
6010	Mujeres en edad reproductiva (15-49) que informan haber sufrido alguna una enfermedad en las últimas dos semanas	1720	22.7	1.7
6080	Tiempo de viaje promedio hasta el centro de atención de salud más próximo durante la última visita	1720	34.5	3.1
3010	Mujeres en edad reproductiva (15-49) que recibieron por lo menos a una atención prenatal por personal calificado en su embarazo más reciente en los últimos dos años	815	95.1	0.9
3020	Mujeres en edad reproductiva (15-49) que recibieron por lo menos 4 controles prenatales en su embarazo más reciente por personal calificado en los últimos dos años	815	81.1	1.5
4020	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 48 horas en su embarazo más reciente en los dos últimos años	815	48.7	2.8
4030	Mujeres que recibieron cuidado de post-parto por personal calificado antes de los 7 días después de su parto más reciente en los dos últimos años	815	57.8	2.9
4040	Mujeres en edad reproductiva (15-49) que recibieron control postnatal dentro de las 24 horas inmediatas al nacimiento, un control adicional antes de los 7 días y otro control antes de los 42 días por personal calificado en unidad de salud cuyo parto más reciente ocurrió en los dos últimos años	815	0.4	0.2
5050	Niños nacidos en los últimos 24 meses que fueron puestos al seno materno durante la primera hora después del parto	821	82.4	1.7
6810	Mujeres (15-49 años) que durante su embarazo más reciente en los últimos dos años utilizaron la casa materna	815	11.2	1.7
6100	Monto promedio del gasto familiar el mes pasado	1300	4205.9	343.9

**Table C.2 Performance of payment and non-payment indicators overall (intervention and control areas), SM2015-Nicaragua Baseline Household Survey, 2013**

Payment indicators				
Number	Indicator	N	Weighted %	Weighted SE
5020	Niños 0-59 meses con esquema de vacunación completo para su edad, según el esquema oficial del Programa Nacional de Inmunización (PNI)	2236	49.9	2.6
5040	Niños de 0 a 5 meses que fueron alimentados exclusivamente con leche materna el día anterior	220	55.6	4.6
5030	Niños de 12 a 59 meses que recibieron 2 dosis de tratamiento antiparasitario en el último año	1775	32.6	1.1
5060	Madres que dieron a sus niños de 0 a 59 meses SRO y zinc en el último episodio de diarrea en las últimas dos semanas	2236	2.4	0.8
2010	Mujeres en edad reproductiva (15-49) que actualmente utilizan (o cuya pareja utiliza) un método moderno de planificación familiar (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas).	1558	83.6	1.4
4010	Mujeres en edad reproductiva (15-49) cuyo parto más reciente fue realizado por personal calificado en una unidad de salud en los últimos dos años	1323	87.9	1.9
4035	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 10 días en su embarazo más reciente en los dos últimos años	1323	62.8	2.5
4105	Neonatos que recibieron atención neonatal por personal calificado en una unidad de salud dentro de las 10 días siguientes a su nacimiento durante los últimos dos años	1323	76.8	2.4
Non-payment indicators				
1050	Niños de 0-59 meses con niveles de hemoglobina < 110 g/L	2236	40.5	1.9
1060	Niños de 6-23 meses con niveles de hemoglobina < 110 g/L	716	54.8	2.6
1070	Niños 0-59 meses con talla < -2 SD de la media de la población de referencia de longitud para edad	2236	14	1.1
5025	Niños de 12 a 23 meses de edad con vacuna para Sarampión, Paperas y Rubeola (SPR)	475	73.5	3.1
5070	Niños entre 6 y 23 meses cuyas madres informan haber consumido al menos 50 sobres de micronutrientes en polvo durante los últimos 6 meses	716	0.4	0.3
6030	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo enfermo (0-59 meses) en las últimas dos semanas	2236	32.5	1.6
6040	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo (0-59 meses) enfermo en las últimas dos semanas pero que no buscaron atención de salud	719	0.9	0.4
5010	Niños de 12 a 23 meses de edad con vacuna para Sarampión medida a través de DBS (seroconversión positiva)			
1090	Número de nacimientos con vida por cada 1.000 mujeres de edades comprendidas entre los 15-19 años, en un año dado	579	123	15.5
2020	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que no deseaban quedar embarazadas y que no estaban usando/no tenían acceso a métodos de planificación familiar	1558	16.4	1.4
2030	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que utilizaron el año pasado un método de PF, que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que informan haber interrumpido el uso de un método de planificación familiar durante el año anterior	1417	4	0.8
4110	Madres (15-49) que pueden reconocer al menos 5 signos de peligro en el recién nacido para su parto más reciente en los dos últimos años	869	31.9	1.9
6010	Mujeres en edad reproductiva (15-49) que informan haber sufrido alguna una enfermedad en las últimas dos semanas	2823	24.7	1.6
6080	Tiempo de viaje promedio hasta el centro de atención de salud más próximo durante la última visita	2823	35.6	2.7
3010	Mujeres en edad reproductiva (15-49) que recibieron por lo menos a una atención prenatal por personal calificado en su embarazo más reciente en los últimos dos años	1323	94.7	0.8
3020	Mujeres en edad reproductiva (15-49) que recibieron por lo menos 4 controles prenatales en su embarazo más reciente por personal calificado en los últimos dos años	1323	80.6	1.5
4020	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 48 horas en su embarazo más reciente en los dos últimos años	1323	48.7	2.2
4030	Mujeres que recibieron cuidado de post-parto por personal calificado antes de los 7 días después de su parto más reciente en los dos últimos años	1323	59.7	2.3
4040	Mujeres en edad reproductiva (15-49) que recibieron control postnatal dentro de las 24 horas inmediatas al nacimiento, un control adicional antes de los 7 días y otro control antes de los 42 días por personal calificado en unidad de salud cuyo parto más reciente ocurrió en los dos últimos años	1323	1	0.3
5050	Niños nacidos en los últimos 24 meses que fueron puestos al seno materno durante la primera hora después del parto	1333	81.7	1.5
6810	Mujeres (15-49 años) que durante su embarazo más reciente en los últimos dos años utilizaron la casa materna	1323	11.6	1.5
6100	Monto promedio del gasto familiar el mes pasado	2081	4244.6	281.6

**Table C.3 Performance of payment and non-payment indicators among control areas, SM2015-Nicaragua Base-line Household Survey, 2013**

Payment indicators				
Number	Indicator	N	Weighted %	Weighted SE
5020	Niños 0-59 meses con esquema de vacunación completo para su edad, según el esquema oficial del Programa Nacional de Inmunización (PNI)	825	56.8	2.9
5040	Niños de 0 a 5 meses que fueron alimentados exclusivamente con leche materna el día anterior	86	42.7	6.2
5030	Niños de 12 a 59 meses que recibieron 2 dosis de tratamiento antiparasitario en el último año	658	35	1.9
5060	Madres que dieron a sus niños de 0 a 59 meses SRO y zinc en el último episodio de diarrea en las últimas dos semanas	825	6	2.3
2010	Mujeres en edad reproductiva (15-49) que actualmente utilizan (o cuya pareja utiliza) un método moderno de planificación familiar (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas).	595	88.9	1.5
4010	Mujeres en edad reproductiva (15-49) cuyo parto más reciente fue realizado por personal calificado en una unidad de salud en los últimos dos años	508	90.8	3.1
4035	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 10 días en su embarazo más reciente en los dos últimos años	508	73.6	2.7
4105	Neonatos que recibieron atención neonatal por personal calificado en una unidad de salud dentro de las 10 días siguientes a su nacimiento durante los últimos dos años	508	71.8	3.6
Non-payment indicators				
1050	Niños de 0-59 meses con niveles de hemoglobina < 110 g/L	825	46.4	5.3
1060	Niños de 6-23 meses con niveles de hemoglobina < 110 g/L	258	58.2	6
1070	Niños 0-59 meses con talla < -2 SD de la media de la población de referencia de longitud para edad	825	16.4	2
5025	Niños de 12 a 23 meses de edad con vacuna para Sarampión, Paperas y Rubeola (SPR)	177	82.5	2.9
5070	Niños entre 6 y 23 meses cuyas madres informan haber consumido al menos 50 sobres de micronutrientes en polvo durante los últimos 6 meses	258	1.3	1
6030	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo enfermo (0-59 meses) en las últimas dos semanas	825	30.9	2.1
6040	Mujeres en edad reproductiva (15-49) que informan haber tenido un hijo (0-59 meses) enfermo en las últimas dos semanas pero que no buscaron atención de salud	252	0.7	0.5
5010	Niños de 12 a 23 meses de edad con vacuna para Sarampión medida a través de DBS (seroconversión positiva)			
1090	Número de nacimientos con vida por cada 1.000 mujeres de edades comprendidas entre los 15 -19 años, en un año dado	215	79.7	16.7
2020	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que no deseaban quedar embarazadas y que no estaban usando/no tenían acceso a métodos de planificación familiar	595	11.1	1.5
2030	Mujeres en edad reproductiva (15-49) (mujeres sexualmente activas que utilizaron el ano pasado un método de PF, que no buscan embarazo, se excluyen mujeres con menopausia, histerectomía, vírgenes, embarazadas o desean quedar embarazadas) que informan haber interrumpido el uso de un método de planificación familiar durante el año anterior	563	4.2	1.4
4110	Madres (15-49) que pueden reconocer al menos 5 signos de peligro en el recién nacido para su parto más reciente en los dos últimos años	318	24.9	2.5
6010	Mujeres en edad reproductiva (15-49) que informan haber sufrido alguna una enfermedad en las últimas dos semanas	1103	29.7	3.3
6080	Tiempo de viaje promedio hasta el centro de atención de salud más próximo durante la última visita	1103	38.5	5.1
3010	Mujeres en edad reproductiva (15-49) que recibieron por lo menos a una atención prenatal por personal calificado en su embarazo más reciente en los últimos dos años	508	93.2	1.4
3020	Mujeres en edad reproductiva (15-49) que recibieron por lo menos 4 controles prenatales en su embarazo más reciente por personal calificado en los últimos dos años	508	79	3.9
4020	Mujeres en edad reproductiva (15-49) que recibieron cuidado de post-parto por personal calificado dentro de las primeras 48 horas en su embarazo más reciente en los dos últimos años	508	48.7	2.4
4030	Mujeres que recibieron cuidado de post-parto por personal calificado antes de los 7 días después de su parto más reciente en los dos últimos años	508	66	2.5
4040	Mujeres en edad reproductiva (15-49) que recibieron control postnatal dentro de las 24 horas inmediatas al nacimiento, un control adicional antes de los 7 días y otro control antes de los 42 días por personal calificado en unidad de salud cuyo parto más reciente ocurrió en los dos últimos años	508	2.8	0.9
5050	Niños nacidos en los últimos 24 meses que fueron puestos al seno materno durante la primera hora después del parto	512	79.5	2.5
6810	Mujeres (15-49 años) que durante su embarazo más reciente en los últimos dos años utilizaron la casa materna	508	13	3.3
6100	Monto promedio del gasto familiar el mes pasado	767	4387.1	403.4

**APPENDIX D. CHARACTERISTICS OF RESPONDENTS OVERALL (IN INTERVENTION AND CONTROL SEGMENTS)**

**Table D.2.3.1 Household composition: age and sex**

Percent distribution of the de facto household population by five-year age groups based on the household roster completed as part of the SM2015 Household Survey			
Age	Male (%)	Female (%)	Total (%)
<5	12.1	11.6	11.9
5-9	11.8	11.3	11.6
10-14	12.6	12.2	12.4
15-19	12	11.9	11.9
20-24	11	10.4	10.7
25-29	8	8.4	8.2
30-34	7.5	7.6	7.5
35-39	5.6	5.8	5.7
40-44	4.7	4.9	4.8
45-49	3.7	4.1	3.9
50-54	3.3	3.4	3.4
55-59	2.3	2.5	2.4
60-64	1.8	1.8	1.8
65-69	1.1	1.4	1.3
70-74	1	1.1	1
75-79	0.7	0.8	0.8
80+	0.8	1	0.9
Total	100	100	100
N	20144	21120	41264

**Table D.2.3.2 Household composition**

Number of households, women and children; and percent distribution of households by sex of head of the household, number of usual members, and marital status of members 15+			
Household characteristic	N	%	SE
Number of households	2071		
Number of women	2823		
Number of children	2225		
Sex of the head of the household			
Male	1479	71.4	1
Female	592	28.6	1
DK/DTR	0		
Missing	0		
Total	2071	100	
Number of usual members			
1	2	0.1	0.1
2	52	2.5	0.3
3	379	18.3	0.8
4	420	20.3	0.9
5	388	18.7	0.9
6	279	13.5	0.8
7	213	10.3	0.7
8	136	6.6	0.5
9+	202	9.8	0.7
DK/DTR	0		
Missing	0		
Total	2071	100	
Marital status of members of the household			
Single	2113	32.4	0.6
Married	1960	30.1	0.6
Open union / partnered	2116	32.5	0.6
Widow / divorced / separated	325	5	0.3
Other	1	0	0
DK/DTR	3		
Missing	0		
Total	6518	100	

**Table D.2.4.1a Household characteristics: water source**

Percent distribution of households by source of drinking water, location of water source and round trip time to obtain drinking water			
Household characteristic	N	Weighted %	Weighted SE
<b>Source of drinking water</b>			
Pipes that lead to the house	1044	46.2	4.2
Pipes that lead to the patio/yard	300	15.8	2.3
Public pump	37	1.9	0.5
Tube or drilled well	65	3.7	0.9
Protected dug well	234	13.5	2.5
Unprotected dug well	153	7.5	1.2
Protected spring	72	3.5	0.7
Unprotected spring	55	2.6	0.6
Rainwater	19	1.5	0.9
Water tank truck	0	0	
Car with a small tank	0	0	
Surface water	30	1.4	0.4
Bottled water	13	0.9	0.5
Water jug	7	0.4	0.2
Other	28	1.2	0.3
DK/DTR	0		
Missing	14		
Total	2071	100	
<b>Location of water source</b>			
In own house/home	1155	53.4	3.7
In own patio/yard	458	25.5	2.5
Elsewhere	444	21.2	2.2
DK/DTR	0		
Missing	14		
Total	2071	100	
<b>Time to obtain drinking water (round trip)</b>			
Water on premises	1601	79.7	2.3
Less than 30 minutes	380	18.4	2
30 minutes or longer	47	1.9	0.4
DK/DTR	0		
Missing	43		
Total	2071	100	

**Table D.2.4.1b Household characteristics: sanitation**

Percent distribution of households by sanitation facility type and if the facility is shared			
Household characteristic	N	Weighted %	Weighted SE
<b>Sanitation facility</b>			
Flushing toilet	334	13	2.1
Toilet with water poured from gourds	41	2	0.3
Latrine / pit toilet	1429	73.1	2.2
Dry toilet	6	0.3	0.1
No toilet, bushes, field	239	11.2	1.6
Other	8	0.3	0.1
DK/DTR	0		
Missing	14		
Total	2071	100	
<b>Shared toilet/facilities, among households using any type of toilet</b>			
Yes	250	15.3	1.4
No	1559	84.7	1.4
DK/DTR	1		
Missing	0		
Total	1810	100	

**Table D.2.4.2 Household characteristics: cooking fuel**

Percent distribution of households by cooking fuel source and the location for cooking food; and percentage of households with a separate kitchen			
Household characteristic	N	Weighted %	Weighted SE
Cooking fuel source (the respondent was to select all sources that applied)			
Electricity	37	2.1	0.5
Gas tank	610	32.3	4.9
Coal	36	2.7	1
Wood	1694	80	4.1
Straw/twigs/grass	35	2	0.4
Agricultural crops	18	1.1	0.3
No food is cooked at home	2	0.2	0.1
Other	1	0.1	0.1
DK/DTR	0		
Missing	14		
Total	2071		
Location for cooking food, among those who reported a cooking fuel source			
In the house	1465	70.2	1.9
In a separate building	521	26.7	1.9
Outside	66	3	0.5
Other	2	0.1	0
DK/DTR	0		
Missing	1		
Total	2055	100	
Separate kitchen, among those who reported a cooking fuel source and cook in the home			
Yes	1105	73.3	1.9
No	359	26.7	1.9
DK/DTR	1		
Missing	0		
Total	1465	100	

**Table D.2.4.3a Availability of assets: household effects**

Percent distribution of households with specific household effects							
Household characteristic	N	Weighted %	Weighted SE	Household characteristic	N	Weighted %	Weighted SE
<b>Electricity</b>				<b>Refrigerator</b>			
Yes	1542	75.8	3.3	Yes	497	23.4	2.2
No	514	24.2	3.3	No	1559	76.6	2.2
DK/DTR	1			DK/DTR	1		
Missing	14			Missing	14		
Total	2071	100		Total	2071	100	
<b>Radio</b>				<b>Computer</b>			
Yes	1390	67.3	1.5	Yes	139	5.6	1.2
No	666	32.7	1.5	No	1917	94.4	1.2
DK/DTR	1			DK/DTR	1		
Missing	14			Missing	14		
Total	2071	100		Total	2071	100	
<b>Television</b>				<b>Wristwatch</b>			
Yes	1176	56.9	3.1	Yes	689	33.1	1.2
No	880	43.1	3.1	No	1367	66.9	1.2
DK/DTR	1			DK/DTR	1		
Missing	14			Missing	14		
Total	2071	100		Total	2071	100	
<b>Cell phone</b>				<b>Guitar</b>			
Yes	1411	68	2.3	Yes	81	3.3	0.4
No	645	32	2.3	No	1975	96.7	0.4
DK/DTR	1			DK/DTR	1		
Missing	14			Missing	14		
Total	2071	100		Total	2071	100	
<b>Telephone (landline)</b>							
Yes	57	1.7	0.5				
No	1997	98.3	0.5				
DK/DTR	3						
Missing	14						
Total	2071	100					

**Table D.2.4.3b Availability of assets: means of transportation**

Percentage of households with specific means of transport			
Household characteristic	N	Weighted %	Weighted SE
<b>Bicycle</b>			
Yes	556	26.1	2
No	1500	73.9	2
DK/DTR	1		
Missing	14		
Total	2071	100	
<b>Motorcycle / scooter</b>			
Yes	242	10.5	1
No	1814	89.5	1
DK/DTR	1		
Missing	14		
Total	2071	100	
<b>Animal-driven cart</b>			
Yes	17	0.6	0.2
No	2039	99.4	0.2
DK/DTR	1		
Missing	14		
Total	2071	100	
<b>Car</b>			
Yes	90	3.4	0.6
No	1966	96.6	0.6
DK/DTR	1		
Missing	14		
Total	2071	100	
<b>Truck</b>			
Yes	14	0.6	0.2
No	2042	99.4	0.2
DK/DTR	1		
Missing	14		
Total	2071	100	

**Table D.2.4.3c Availability of assets: other assets**

Percentage distribution of number of rooms used for sleeping, and percentage of households with ownership of bank account, agricultural land and animals			
Household characteristic	N	Weighted %	Weighted SE
<b>Rooms used for sleeping</b>			
Zero	34	1.6	0.4
One	927	45.1	2
Two	702	34.7	1.3
Three or more	394	18.5	1.6
DK/DTR	0		
Missing	14		
Total	2071	100	
<b>Ownership of bank account</b>			
Yes	123	5.5	0.9
No	1931	94.5	0.9
DK/DTR	3		
Missing	14		
Total	2071	100	
<b>Ownership of agricultural land</b>			
Yes, own	482	22.6	2
Yes, rent	173	8.2	1.2
Yes, share/community share	80	3.8	0.7
No	1317	65.4	3.2
DK/DTR	5		
Missing	14		
Total	2071	100	
<b>Ownership of animals (bull or cow, mule, goat, chicken, or pig)</b>			
Yes	1250	58.8	3.8
No	806	41.2	3.8
DK/DTR	1		
Missing	14		
Total	2071	100	

**Table D.2.5.1a Total household expenditures per person**

Percent distribution of households by monthly total expenditure per person			
Characteristic	N	Weighted %	Weighted SE
Monthly expenditure per person (córdobas)			
Less than C\$200	185	8.4	0.9
C\$200 - <400	460	21.5	1.6
C\$400 - <600	398	20.1	1.1
C\$600 - <800	284	14	0.8
C\$800 - <1000	183	8.9	0.8
C\$1000+	546	27.1	2.6
Missing	15		
Total	2071	100	

**Table D.2.5.1b Household expenditures by type**

Percent distribution of households expenditures by type, as a proportion of total household monthly expenditure											
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
Food			Housing, gas, electricity, and water			Transportation					
0%	32	1.7	0.3	0%	540	25.2	3.3	0%	1149	57.2	1.7
0.1% - 9%	9	0.3	0.1	0.1% - 9%	940	45.3	2.6	0.1% - 9%	619	30.1	1.4
10% - 24%	51	2.2	0.4	10% - 24%	428	23	3.1	10% - 24%	222	10.1	0.8
25% - 49%	325	14.8	1	25% - 49%	99	4.9	0.9	25% - 49%	44	2.2	0.4
50% - 74%	647	32.8	1.5	50% - 74%	19	0.9	0.3	50% - 74%	6	0.3	0.1
75% - 89%	555	27.8	1.3	75% - 89%	5	0.2	0.1	75% - 89%	2	0.1	0
≥90%	399	20.3	1.8	≥90%	12	0.4	0.1	≥90%	1	0	0
DK/DTR	37			DK/DTR	10			DK/DTR	8		
Missing	16			Missing	18			Missing	20		
Total	2071	100		Total	2071	100		Total	2071	100	
Alcoholic beverages, tobacco, and narcotics			Clothing and footwear			Communication					
0%	1702	83.8	1.1	0%	1409	68.9	1.7	0%	1055	53.7	2.1
0.1% - 9%	207	10.5	0.9	0.1% - 9%	192	9.6	1	0.1% - 9%	879	41.5	2
10% - 24%	102	4.7	0.5	10% - 24%	270	12.9	0.8	10% - 24%	94	4.3	0.4
25% - 49%	21	0.9	0.2	25% - 49%	141	7.2	0.7	25% - 49%	9	0.4	0.1
50% - 74%	4	0.1	0.1	50% - 74%	26	1.4	0.3	50% - 74%	1	0	0
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	3	0.1	0.1	≥90%	2	0.1	0.1
DK/DTR	14			DK/DTR	9			DK/DTR	11		
Missing	21			Missing	21			Missing	20		
Total	2071	100		Total	2071	100		Total	2071	100	
Education tuition, fees and school supplies			Furniture, household equipment and routine household maintenance			Recreation, culture, restaurants and hotels					
0%	788	39.7	1.6	0%	1896	93.8	0.6	0%	1918	96	0.6
0.1% - 9%	961	48.2	1.8	0.1% - 9%	92	4.2	0.5	0.1% - 9%	102	3.8	0.6
10% - 24%	212	9.3	0.9	10% - 24%	34	1.3	0.3	10% - 24%	6	0.2	0.1
25% - 49%	44	2	0.3	25% - 49%	14	0.5	0.2	25% - 49%	2	0.1	0.1
50% - 74%	7	0.4	0.2	50% - 74%	4	0.1	0.1	50% - 74%	0	0	
75% - 89%	2	0.1	0.1	75% - 89%	0	0		75% - 89%	0	0	
≥90%	5	0.3	0.1	≥90%	0	0		≥90%	0	0	
DK/DTR	31			DK/DTR	9			DK/DTR	21		
Missing	21			Missing	22			Missing	22		
Total	2071	100		Total	2071	100		Total	2071	100	

**Table D.2.5.1c Household health care expenditures by type**

Percent distribution of households health care expenditures by type, as a proportion of total household monthly expenditure							
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
<b>Out-of-pocket health care</b>				<b>Private insurance premiums</b>			
0%	1546	77.1	1.5	0%	2042	99.8	0.1
0.1% - 9%	260	12.3	1.2	0.1% - 9%	5	0.2	0.1
10% - 24%	159	6.6	0.7	10% - 24%	0	0	
25% - 49%	69	3.3	0.5	25% - 49%	0	0	
50% - 74%	13	0.6	0.2	50% - 74%	0	0	
75% - 89%	1	0.1	0.1	75% - 89%	0	0	
≥90%	0	0		≥90%	0	0	
DK/DTR	2			DK/DTR	3		
Missing	21			Missing	21		
Total	2071	100		Total	2071	100	
<b>Social security premiums</b>				<b>Other costs associated with accessing health care</b>			
0%	1930	95	0.9	0%	2036	99.7	0.1
0.1% - 9%	86	3.7	0.7	0.1% - 9%	10	0.3	0.1
10% - 24%	24	1.2	0.3	10% - 24%	0	0	
25% - 49%	3	0.1	0	25% - 49%	1	0	0
50% - 74%	0	0		50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	0	0	
DK/DTR	8			DK/DTR	3		
Missing	20			Missing	21		
Total	2071	100		Total	2071	100	

**Table D.2.5.2 Household medical expenditures by type**

Percent distribution of household health expenditures by type of care as a proportion of total household monthly health expenditure, among households with any reported out-of-pocket health care expenses or health care access expenses															
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
Care that required overnight stay in a hospital or health facility				Care by traditional or alternative healers, or traditional birth attendants				Care by pharmacists or medications bought from a pharmacy without a prescription				Diagnostic and laboratory tests such as X-rays or blood tests			
0%	479	95.4	1.4	0%	501	99.2	0.5	0%	300	62.1	2.4	0%	436	90	1.6
0.1% - 9%	2	0.6	0.5	0.1% - 9%	0	0		0.1% - 9%	20	3.4	0.8	0.1% - 9%	4	0.6	0.3
10% - 24%	2	0.2	0.1	10% - 24%	0	0		10% - 24%	27	3.9	0.9	10% - 24%	22	3.3	0.8
25% - 49%	3	0.3	0.2	25% - 49%	1	0.4	0.4	25% - 49%	22	3.6	0.9	25% - 49%	15	2.3	0.7
50% - 74%	3	0.8	0.5	50% - 74%	0	0		50% - 74%	12	2.3	0.7	50% - 74%	2	0.2	0.1
75% - 89%	1	0.1	0.1	75% - 89%	0	0		75% - 89%	2	0.4	0.3	75% - 89%	2	0.2	0.1
≥90%	13	2.5	1	≥90%	1	0.4	0.4	≥90%	118	24.2	2.3	≥90%	22	3.4	0.8
DK/DTR	0			DK/DTR	0			DK/DTR	3			DK/DTR	0		
Missing	1			Missing	1			Missing	0			Missing	1		
Total	504	100		Total	504	100		Total	504	100		Total	504	100	
Other costs associated with staying overnight in a hospital or health facility				Dentists				Health care products such prescription glasses, hearing aids, prosthetic devices, etc.				Other health care products or services			
0%	488	96.8	1.1	0%	479	95.9	0.9	0%	486	97.7	0.6	0%	494	98.6	0.7
0.1% - 9%	5	0.9	0.5	0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	1	0.2	0.2
10% - 24%	2	0.5	0.4	10% - 24%	2	0.8	0.6	10% - 24%	1	0.1	0.1	10% - 24%	3	0.5	0.3
25% - 49%	1	0.5	0.5	25% - 49%	6	1	0.4	25% - 49%	1	0.1	0.1	25% - 49%	1	0.1	0.1
50% - 74%	1	0.1	0.1	50% - 74%	2	0.3	0.2	50% - 74%	6	0.8	0.4	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	1	0.2	0.2	75% - 89%	0	0	
≥90%	6	1.2	0.5	≥90%	14	1.9	0.6	≥90%	8	1	0.4	≥90%	4	0.6	0.4
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	1			Missing	1			Missing	1			Missing	1		
Total	504	100		Total	504	100		Total	504	100		Total	504	100	
Care by doctors, nurses, or other health workers that did not require overnight stay				Medications prescribed by health personnel											
0%	480	96.6	0.8	0%	253	52.6	3								
0.1% - 9%	2	0.2	0.2	0.1% - 9%	5	1.2	0.5								
10% - 24%	6	1.1	0.5	10% - 24%	9	1.6	0.6								
25% - 49%	8	1	0.4	25% - 49%	33	5	1								
50% - 74%	1	0.3	0.3	50% - 74%	29	4.7	0.9								
75% - 89%	2	0.3	0.2	75% - 89%	8	1.6	0.7								
≥90%	4	0.4	0.2	≥90%	166	33.4	2.9								
DK/DTR	0			DK/DTR	0										
Missing	1			Missing	1										
Total	504	100		Total	504	100									

**Table D.2.5.3 Household medical expenditures by source of financing**

Percent distribution of households by source of medical expenditures as a percentage of reported total household medical expenditures for overnight hospital stays in the last 12 months, among those households with overnight hospital stays															
Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE
Any of the household members' current income				Health insurance plan payment or reimbursement				Property sold				Political donations or grants			
0%	93	44.1	4	0%	224	100		0%	221	98.7	0.8	0%	223	99.8	0.2
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	1	0.3	0.3	10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0	
25% - 49%	8	3.2	1.2	25% - 49%	0	0		25% - 49%	0	0		25% - 49%	0	0	
50% - 74%	8	2.9	1	50% - 74%	0	0		50% - 74%	0	0		50% - 74%	0	0	
75% - 89%	1	0.7	0.7	75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	113	48.8	4.1	≥90%	0	0		≥90%	3	1.3	0.8	≥90%	1	0.2	0.2
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	224	100		Total	224	100		Total	224	100		Total	224	100	
Savings (e.g. bank account)				Items sold (e.g., furniture, animals, or jewelry)				Money from relatives or friends who do not belong to the household				Another source			
0%	193	85.2	2.6	0%	211	93.4	2	0%	194	85.8	2.5	0%	213	95.8	1.6
0.1% - 9%	1	0.2	0.2	0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0	
25% - 49%	3	1.3	0.8	25% - 49%	1	0.7	0.7	25% - 49%	3	0.7	0.5	25% - 49%	1	0.3	0.3
50% - 74%	3	0.9	0.5	50% - 74%	2	1	0.7	50% - 74%	9	4.2	1.4	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	24	12.5	2.6	≥90%	10	4.9	1.5	≥90%	18	9.3	2.1	≥90%	10	3.9	1.5
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	224	100		Total	224	100		Total	224	100		Total	224	100	
Reducing other household spending				Money loaned from someone who is not a friend of the family				Remittances from family members or friends abroad							
0%	211	95	1.8	0%	200	88.6	2.2	0%	217	97.6	1.1				
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0					
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0					
25% - 49%	2	0.5	0.3	25% - 49%	2	0.6	0.4	25% - 49%	0	0					
50% - 74%	0	0		50% - 74%	2	0.6	0.4	50% - 74%	1	0.2	0.2				
75% - 89%	1	0.3	0.3	75% - 89%	0	0		75% - 89%	0	0					
≥90%	10	4.2	1.6	≥90%	20	10.3	2.1	≥90%	6	2.2	1				
DK/DTR	0			DK/DTR	0			DK/DTR	0						
Missing	0			Missing	0			Missing	0						
Total	224	100		Total	224	100		Total	224	100					

**Table D.3.1.1 Demographic characteristics of respondents**

Percent distribution of the household population by age, marital status and respondent's relationship to the head of the household			
Background characteristic	N	%	SE
<b>Age</b>			
15-19 years	583	20.7	0.8
20-24 years	671	23.8	0.8
25-29 years	507	18	0.7
30-34 years	405	14.3	0.7
35-39 years	281	10	0.6
40-44 years	202	7.2	0.5
45-49 years	174	6.2	0.5
Missing	0		
Total	2823	100	
<b>Marital status</b>			
Single	874	31	0.9
Married	802	28.4	0.8
Open union / partnered	1023	36.2	0.9
Divorced	6	0.2	0.1
Separated	94	3.3	0.3
Widowed	23	0.8	0.2
Other	0	0	
DK/DTR	1	0	0
Missing	0		
Total	2823	100	
<b>Respondent's relationship to the head of household</b>			
Head of the household	338	12	0.6
Spouse	630	22.3	0.8
Biological child	741	26.2	0.8
Adopted / step child	38	1.3	0.2
Grandchild	67	2.4	0.3
Niece / nephew	34	1.2	0.2
Mother / father	5	0.2	0.1
Sister / brother	44	1.6	0.2
Daughter-in-law / son-in-law	211	7.5	0.5
Sister-in-law / brother-in-law	19	0.7	0.2
Grandparent	0	0	
Mother-in-law / father-in-law	1	0	0
Other relative	6	0.2	0.1
Non-relative	55	1.9	0.3
Life partner	625	22.1	0.8
Other	9	0.3	0.1
Missing	0		
Total	2823	100	

**Table D.3.1.2 Department and municipality of residence of respondents**

Municipality	No. of women
Bocana de Paiwas	85
El Cua	115
Jinotega	592
Matiguás	122
Mulukuku	81
Prinzapolka	36
Puerto Cabezas	327
Rancho Grande	87
Rosita	35
San Juan Río Coco	268
San Sebastián de Yali	114
Santa María de Pantasma	156
Telpaneca	243
Terrabona	33
Tuma - La Dalia	411
Wiwili	118
Ocotepec	42

**Table D.3.2.1 Educational attainment and literacy**

Percentage of women age 15-49 who attended school; percentage of women who attended a literacy course; percent distribution by highest level of education attended, among those who attended school; and literacy of women			
Education characteristic	N	Weighted %	Weighted SE
<b>Education</b>			
Attended school	2458	86.2	1.5
Did not attend school	350	13.8	1.5
DK/DTR	2		
Missing	13		
Total	2823	100	
<b>Literacy course</b>			
Attended literacy course	283	10.1	1.1
Did not attend literacy course	2527	89.9	1.1
DK/DTR	0		
Missing	13		
Total	2823	100	
<b>Highest level of education, among those who attended school</b>			
Primary	1196	46.6	3.3
Secondary	833	35.5	1.6
Middle or high school	54	2.1	0.4
University	306	13.1	2
Technical school	67	2.6	0.6
DK/DTR	2		
Missing	0		
Total	2458	100	
<b>Literacy</b>			
Cannot read at all	299	10.8	1.3
Able to read parts of sentence	369	13.2	1.2
Able to read whole sentence	2121	75.4	1.9
Blind or visually impaired	15	0.6	0.2
DK/DTR	6		
Missing	13		
Total	2823	100	

**Table D.3.3 Employment**

Percent distribution of women age 15-49 by employment status and role			
Employment characteristic	N	Weighted %	Weighted SE
<b>Employment status</b>			
Employed and being paid for work	360	13.3	1.4
Employed but did not work in the last w	7	0.3	0.2
Employed by a family member without	9	0.3	0.1
Student	272	12.3	1.4
Homemaker	2025	68.5	2.5
Retired	2	0	0
Unable to work due to disability	9	0.4	0.2
DK/DTR	116	4.6	0.9
Missing	9	0.2	0.1
Total	1		
<b>Occupational role, among women employed and being paid for work</b>			
Employee	344	94.8	1.9
Employer	6	1.8	1
Owner	2	0.5	0.5
Self-employed	8	2.8	1.4
DK/DTR	0		
Missing	0		
Total	360	100	

**Table D.3.4.1 Exposure to mass media**

Percent distribution of women by exposure to newspapers, radio and television; percentage exposed to all three forms of media and to any form of media at least once a week			
Characteristic	N	Weighted %	Weighted SE
<b>Newspapers, among fully or partially literate women</b>			
≥1 time per week	1153	47.8	2.3
<1 time per week	353	13.6	1.2
Never	977	38.5	2
Not applicable	3	0.1	0
DK/DTR	4		
Missing	0		
Total	2490	100	
<b>Radio</b>			
≥1 time per week	2076	73.9	1.9
<1 time per week	243	8.1	0.9
Never	465	17.2	1.7
Not applicable	25	0.8	0.3
DK/DTR	1		
Missing	13		
Total	2823	100	
<b>Television</b>			
≥1 time per week	1718	65.3	2.7
<1 time per week	188	6.8	0.8
Not applicable	814	25.1	2.6
Never	82	2.8	0.9
DK/DTR	8		
Missing	13		
Total	2823	100	
<b>Exposed to all three forms of media at least once per week, among fully or partially literate women</b>			
Yes	704	31.2	2.4
No	1744	67.3	2.4
Not applicable	38	1.5	0.5
DK/DTR	4		
Missing	0		
Total	2490	100	
<b>Exposed to any form of media at least once per week</b>			
Yes	704	28.4	2.3
No	1960	69.5	2.3
Not applicable	53	2	0.7
DK/DTR	5		
Missing	101		
Total	2823	100	

**Table D.3.5.1a Proximity to health care facilities: nearest health facility**

Percent distribution of women according to distance and travel time to health care facility closest to household			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	352	15.9	2.4
1 to <5 km	1386	54.1	3.2
5 to <10 km	438	17.1	2.5
≥10 km	353	13	2.4
DK/DTR	281		
Missing	13		
Total	2823	100	
<b>Travel time</b>			
<15 min	671	25.7	3.6
15 to <30 min	718	26.5	2.6
30 to <45 min	505	19.4	2
45 to <60 min	77	3.1	0.7
≥60 min	735	25.2	3.2
DK/DTR	16		
Missing	101		
Total	2823	100	

**Table D.3.5.1b Proximity to health care facilities: usual health facility**

Percent distribution of women according to distance and travel time to health care facility that the head of household usually attends			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	301	13.4	2.1
1 to <5 km	1301	54.7	3.3
5 to <10 km	397	16.5	2.5
≥10 km	388	15.4	2.6
DK/DTR	265		
Missing	0		
Total	2652	100	
<b>Travel time</b>			
<15 min	616	23	3.3
15 to <30 min	687	26.8	2.8
30 to <45 min	492	19.8	2
45 to <60 min	82	3.5	0.7
≥60 min	763	26.9	3.3
DK/DTR	6		
Missing	6		
Total	2652	100	

**Table D.3.5.1c Proximity to health care facilities: health facility for delivery**

Percent distribution of women according to distance and travel time to health care facility attended for most recent delivery in the last two years			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	24	3.5	1.2
1 to <5 km	252	36.2	5.5
5 to <10 km	78	10.7	1.7
≥10 km	396	49.6	5.7
DK/DTR	213		
Missing	0		
Total	963	100	
<b>Travel time</b>			
<15 min	141	18.4	3.2
15 to <30 min	111	11.3	1.4
30 to <45 min	69	7.1	1.2
45 to <60 min	16	1.6	0.7
≥60 min	612	61.6	3.8
DK/DTR	14		
Missing	0		
Total	963	100	

**Table D.3.5.1d Proximity to health care facilities: health facility for recent illness**

Percent distribution of women according to distance and travel time to health care facility attended for respondent's recent illness or child's recent illness			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	255	11.7	1.7
1 to <5 km	1200	54.4	3.3
5 to <10 km	361	15.5	2.4
≥10 km	448	18.4	2.5
DK/DTR	279		
Missing	0		
Total	2543	100	
<b>Travel time</b>			
<15 min	556	21.3	2.9
15 to <30 min	624	25.5	2.6
30 to <45 min	464	19.8	1.9
45 to <60 min	70	3	0.6
≥60 min	814	30.4	3.4
DK/DTR	7		
Missing	8		
Total	2543	100	

**Table D.3.6.1 Current health status**

Percent distribution of women age 15-49 by self-rated current health status relative to the health status last year and percentage who can easily perform daily activities			
Characteristic	N	Weighted %	Weighted SE
<b>Current health relative to health last year</b>			
Better	1106	42.4	1.5
Worse	324	9.8	0.7
About the same	1376	47.8	1.3
DK/DTR	4		
Missing	13		
Total	2823	100	
<b>Ability to perform daily activities</b>			
Easily	2317	83.6	1.2
With some difficulty	437	14.8	1
With much difficulty	50	1.5	0.4
Unable to do	5	0.1	0.1
DK/DTR	1		
Missing	13		
Total	2823	100	

**Table D.3.6.2 Recent illness**

Percentage of women age 15-49 who were sick in the last two weeks; and among those who were sick, percent distribution by type of recent illness			
Characteristic	N	Weighted %	Weighted SE
<b>Respondent was sick during the past two weeks</b>			
Yes	742	24.7	1.6
No	2066	75.3	1.6
DK/DTR	2		
Missing	13		
Total	2823	100	
<b>Type of illness, among those sick in the past two weeks</b>			
Fever	71	10.1	1.9
Malaria	1	0.1	0.1
Cough / chest infection	57	5.8	1.1
Tuberculosis	0	0	
Asthma	9	1.7	0.9
Bronchitis	2	0.2	0.2
Pneumonia	1	0.1	0.1
Diarrhea without blood	3	0.3	0.2
Diarrhea with blood	1	0.1	0.1
Diarrhea with vomiting	2	0.3	0.2
Vomiting	4	1.3	0.9
Abdominal pain	66	9.3	1.9
Anemia	0	0	
Skin rash / infection	5	0.4	0.2
Eye / ear infection	7	0.8	0.3
Measles	0	0	
Jaundice	1	0.1	0.1
Headache	174	23.6	2.4
Toothache	17	1.4	0.4
Stroke	0	0	
Hypertension	18	5	1.7
Diabetes	2	1.3	1
HIV/AIDS	0	0	
Paralysis	1	0.1	0.1
Gynecologic problems	24	3.1	0.9
Obstetric problems	1	0.1	0.1
Other	274	34.7	3.1
DK/DTR	1		
Missing	0		
Total	742	100	

**Table D.3.6.3 Utilization of health services**

Among women who reported sick in the last two weeks, percentage of women who sought care for the illness; and among women who sought care, percent distribution by timing of care-seeking after onset of illness			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for recent illness</b>			
Yes	305	43.8	3.2
No	437	56.2	3.2
DK/DTR	0		
Missing	0		
Total	742	100	
<b>Type of health facility where care was sought</b>			
Public hospital	85	32.3	5.8
Public health unit	101	27.3	4.2
Public health center / clinic	80	27.6	4.9
Public mobile clinic	1	0.4	0.4
Other public health facility	0	0	
Private hospital	1	0.4	0.4
Private health center / clinic	13	3.3	1.3
Private office	14	4.9	2.5
Private mobile clinic	0	0	
Other private health facility	2	0.4	0.3
Pharmacy	2	0.5	0.3
Community health worker	0	0	
Traditional healer	0	0	
Other	6	2.9	2.1
DK/DTR	0		
Missing	0		
Total	305	100	
<b>Admitted to hospital for care, among women who sought care at a public or private: hospital, health center / clinic, mobile clinic, or other health facility; public health unit; private office; or pharmacy</b>			
Yes	17	7.2	3
No	282	92.8	3
DK/DTR	0		
Missing	0		
Total	299	100	

**Table D.3.6.4 Insurance coverage**

Percentage distribution of insurance status among all women, women who reported sick in the last two weeks, and women who reported sick in the last two weeks but did not seek care			
Insurance status	N	Weighted %	Weighted SE
<b>Insurance among all women</b>			
MINSAs	0	0	
INSS	151	6.5	1.3
Government / military	5	0.1	0.1
Private insurance	0	0	
Other	0	0	
None	2651	93.4	1.3
DK/DTR	3		
Missing	13		
Total	2823	100	
<b>Insurance among women who were sick in the past two weeks</b>			
MINSAs	0	0	
INSS	54	7.8	1.7
Government / military	1	0.1	0.1
Private insurance	0	0	
Other	0	0	
None	686	92	1.7
DK/DTR	1		
Missing	0		
Total	742	100	
<b>Insurance among women who were sick in the past two weeks but did not seek care</b>			
MINSAs	0	0	
INSS	31	9.8	2.7
Government / military	1	0.2	0.2
Private insurance	0	0	
Other	0	0	
None	404	90	2.7
DK/DTR	1		
Missing	0		
Total	437	100	

**Table D.3.6.5 Other barriers to health care utilization**

Percentage of women according to perceived barriers to health care utilization, among among women who reported being sick in the last two weeks but did not seek care							
Reason for not seeking care	N	Weighted %	Weighted SE	Reason for not seeking care	N	Weighted %	Weighted SE
<b>Not sick enough to seek treatment</b>				<b>The health center's staff is not knowledgeable</b>			
Yes	57	16	3	Yes	6	0.9	0.3
No	380	84	3	No	431	99.1	0.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
<b>Treated self at home</b>				<b>Do not trust the staff</b>			
Yes	150	42.2	4.1	Yes	9	3.3	1.7
No	287	57.8	4.1	No	428	96.7	1.7
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
<b>Care is too expensive</b>				<b>Was previously mistreated</b>			
Yes	25	4	0.9	Yes	14	2.6	0.8
No	412	96	0.9	No	423	97.4	0.8
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
<b>Health center is too far away</b>				<b>Tried, but was refused care</b>			
Yes	21	5.7	2.2	Yes	14	3.5	1.2
No	416	94.3	2.2	No	423	96.5	1.2
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
<b>Could not find transportation</b>				<b>Did not get permission to go to the doctor</b>			
Yes	12	1.9	0.5	Yes	3	0.4	0.3
No	425	98.1	0.5	No	434	99.6	0.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
<b>Could not afford transportation</b>				<b>Did not want to go alone</b>			
Yes	45	8.5	2.3	Yes	5	0.8	0.4
No	392	91.5	2.3	No	432	99.2	0.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	

**Table D.3.6.5 continued**

Reason for not seeking care	N	Weighted %	Weighted SE	Reason for not seeking care	N	Weighted %	Weighted SE
Did not know where to go				Too busy with work, children, and other commitments			
Yes	0	0		Yes	43	8.8	2.1
No	437	100		No	394	91.2	2.1
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
Health center infrastructure is poor				Religious / cultural beliefs			
Yes	5	1.1	0.6	Yes	3	0.5	0.3
No	432	98.9	0.6	No	434	99.5	0.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
Health center does not have enough drugs				No one present at the center when visited			
Yes	97	16.9	2.1	Yes	5	0.6	0.3
No	340	83.1	2.1	No	432	99.4	0.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
Health center is not well equipped				Other			
Yes	16	2.8	0.8	Yes	51	8.1	1.7
No	421	97.2	0.8	No	386	91.9	1.7
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	437	100		Total	437	100	
It is difficult to deal with health center personnel							
Yes	23	5.9	1.9				
No	414	94.1	1.9				
DK/DTR	0						
Missing	0						
Total	437	100					

**Table D.4.2.1 Parity and age at first birth**

Percent of women age 15-49 who have ever given birth, their age at first birth, and the percent of women who have had a miscarriage, stillbirth, or abortion			
Characteristic	N	Weighted %	Weighted SE
<b>Ever given birth</b>			
Yes	2290	74.4	1.3
No	520	25.6	1.3
DK/DTR	0		
Missing	13		
Total	2823	100	
<b>Age at first birth, among parous women</b>			
12-14 years	116	4.9	0.6
15-19 years	1446	64.9	1.9
20-24 years	590	24	1.8
25-29 years	112	5.5	0.8
30-34 years	17	0.5	0.1
35-39 years	3	0.1	0
40-44 years	0	0	
45-49 years	0	0	
DK/DTR	0		
Missing	6		
Total	2290	100	
<b>Ever had a stillbirth, miscarriage, or abortion</b>			
Yes	261	9	1
No	2548	91	1
DK/DTR	1		
Missing	13		
Total	2823	100	

**Table D.4.3.1 Intervals between births**

Among women with two or more children, percent distribution by duration of the birth intervals			
Mean birth interval	N	Weighted %	Weighted SE
<b>Among women with more than one child</b>			
9-11 months	1	0.1	0.1
12-23 months	75	6.2	1
24-35 months	322	26.1	2.1
36-47 months	330	21.2	1.4
48-59 months	277	15.7	1.4
≥60 months	483	30.7	2
Missing	55		
Total	1543	100	
<b>Among women with two children</b>			
9-11 months	1	0.2	0.2
12-23 months	34	7.2	1.9
24-35 months	75	19.2	3.1
36-47 months	66	11.7	1.7
48-59 months	72	11.8	1.7
≥60 months	254	50	3.7
Missing	33		
Total	535	100	
<b>Among women with three or four children</b>			
9-11 months	0	0	
12-23 months	22	6.3	1.6
24-35 months	86	19.3	2.9
36-47 months	127	21	2.7
48-59 months	151	20.6	2.5
≥60 months	209	32.7	2.6
Missing	12		
Total	607	100	
<b>Among women with five or more children</b>			
9-11 months	0	0	
12-23 months	19	5	1.5
24-35 months	161	45.7	3.3
36-47 months	137	32.7	3.2
48-59 months	54	12.3	2.2
≥60 months	20	4.3	1.3
Missing	10		
Total	401	100	

**Table D.4.4.1 Desire for more children**

Among women with a pregnancy in the two years preceding the interview, percent distribution by desire of the most recent pregnancy in the last two years; and among all women, percentage who desire more children			
Characteristic	N	Weighted %	Weighted SE
<b>Respondent desired their most recent pregnancy in the past two years</b>			
Yes	754	68	1.6
No, wanted to wait	267	24.5	1.7
No, did not want (more) children	91	7.5	1
DK/DTR	0		
Missing	26		
Total	1138	100	
<b>Respondent desires current pregnancy</b>			
Yes	53	69.4	8.8
No, wanted to wait	24	23.6	6.5
No, did not want (more) children	2	6.9	5.8
DK/DTR	1		
Missing	0		
Total	80	100	

**Table D.4.4.2 Ideal interval for most recent birth**

Percent distribution of women with 2 or more children by ideal interval for most recent birth, according to the number of children			
Characteristic	N	Weighted %	Weighted SE
<b>Among women with more than one child</b>			
9-11 months	0	0	
12-23 months	29	3.2	0.6
24-35 months	60	6.2	0.8
36-47 months	78	8	0.9
48-59 months	114	11.1	0.9
≥60 months	585	57.2	1.9
Did not want to have another child	158	14.3	1.5
Missing	60		
Total	1084	100	
<b>Among women with two children</b>			
9-11 months	0	0	
12-23 months	11	2.9	1
24-35 months	27	7.9	1.5
36-47 months	28	7.6	1.6
48-59 months	52	13.2	1.9
≥60 months	258	63.6	2.6
Did not want to have another child	23	4.9	1.1
Missing	43		
Total	442	100	
<b>Among women with three or four children</b>			
9-11 months	0	0	
12-23 months	9	2.5	1.1
24-35 months	18	4.4	1.2
36-47 months	30	8.4	1.7
48-59 months	44	11	1.7
≥60 months	236	59.6	2.8
Did not want to have another child	63	14.2	1.7
Missing	9		
Total	409	100	
<b>Among women with five or more children</b>			
9-11 months	0	0	
12-23 months	9	4.9	1.6
24-35 months	15	6.7	1.8
36-47 months	20	8.1	1.9
48-59 months	18	7.7	1.9
≥60 months	91	42.1	3.6
Did not want to have another child	72	30.4	3.8
Missing	8		
Total	233	100	

**Table D.5.1.1 Knowledge of the fertile period**

Percentage of all currently married or partnered women age 15-49 who know the timing of the fertile period			
Characteristic	N	Weighted %	Weighted SE
Are there certain days when a woman is more likely to become pregnant?			
Yes	1346	80.2	1.9
No	316	19.8	1.9
DK/DTR	155		
Missing	8		
Total	1825	100	
Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?			
Just before her period begins	284	22.4	2.3
During her period	59	5.2	1
Right after her period has ended	714	52.4	3
Halfway between two periods	237	18.7	2.1
Other	18	1.3	0.4
DK/DTR	34		
Missing	0		
Total	1346	100	

**Table D.5.2.1a Current use of family planning methods**

Percentage of all currently married or partnered women age 15-49 using family planning methods			
Characteristic or method	N	Weighted %	Weighted SE
<b>Current use of any method</b>			
Yes	1369	69.9	1.7
No	448	30.1	1.7
DK/DTR	0		
Missing	8		
Total	1825	100	
<b>Current use of any method, among women in need of contraceptives</b>			
Yes	1343	84.3	1.4
No	215	15.7	1.4
DK/DTR	0		
Missing	0		
Total	1558	100	
<b>Current use of more than one method</b>			
Yes	15	0.8	0.4
No	1802	99.2	0.4
DK/DTR	0		
Missing	8		
Total	1825	100	
<b>Number of methods the respondent is currently using</b>			
0 methods	448	30.1	1.7
1 method	1354	69.1	1.8
2 methods	15	0.8	0.4
3 or more methods	8	0	
DK/DTR	0		
Missing	0		
Total	1825	100	

**Table D.5.2.1b Current use of family planning methods, by type of method**

Percentage of all currently married or partnered women age 15-49 using specified family planning methods											
Method	N	Weighted %	Weighted SE	Method	N	Weighted %	Weighted SE	Method	N	Weighted %	Weighted SE
Female sterilization				Condom				Rhythm method			
Yes	308	18.3	1.4	Yes	51	2.3	0.5	Yes	10	0.3	0.1
No	1507	81.7	1.4	No	1765	97.7	0.5	No	1806	99.7	0.1
DK/DTR	2			DK/DTR	1			DK/DTR	1		
Missing	8			Missing	8			Missing	8		
Total	1825	100		Total	1825	100		Total	1825	100	
Male sterilization				Female condom				Withdrawal method			
Yes	1	0	0	Yes	0	0		Yes	6	0.2	0.1
No	1815	100	0	No	1815	100		No	1808	99.8	0.1
DK/DTR	1			DK/DTR	2			DK/DTR	3		
Missing	8			Missing	8			Missing	8		
Total	1825	100		Total	1825	100		Total	1825	100	
IUD				Diaphragm				Emergency contraception			
Yes	49	2.9	0.7	Yes	0	0		Yes	0	0	
No	1767	97.1	0.7	No	1815	100		No	1814	100	
DK/DTR	1			DK/DTR	2			DK/DTR	3		
Missing	8			Missing	8			Missing	8		
Total	1825	100		Total	1825	100		Total	1825	100	
Injectables				Sponge, spermicide				Other modern method			
Yes	783	38.7	1.8	Yes	0	0		Yes	0	0	
No	1034	61.3	1.8	No	1816	100		No	1814	100	
DK/DTR	0			DK/DTR	1			DK/DTR	3		
Missing	8			Missing	8			Missing	8		
Total	1825	100		Total	1825	100		Total	1825	100	
Implants				Lactational amenorrhea method				Other traditional method			
Yes	1	0	0	Yes	8	0.2	0.1	Yes	1	0.1	0.1
No	1815	100	0	No	1808	99.8	0.1	No	1812	99.9	0.1
DK/DTR	1			DK/DTR	1			DK/DTR	3		
Missing	8			Missing	8			Missing	9		
Total	1825	100		Total	1825	100		Total	1825	100	
Pill											
Yes	166	7.7	1								
No	1649	92.3	1								
DK/DTR	2										
Missing	8										
Total	1825	100									

**Table D.5.2.1c Current use of modern family planning methods**

Percentage of all currently married or partnered women age 15-49 using modern methods of family planning			
Characteristic	N	Weighted %	Weighted SE
Among all women			
Yes	1351	69.3	1.7
No	466	30.7	1.7
DK/DTR	0		
Missing	8		
Total	1825	100	
Among women in need of contraceptives			
Yes	1325	83.6	1.4
No	233	16.4	1.4
DK/DTR	0		
Missing	0		
Total	1558	100	

**Table D.5.3.1a Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Female sterilization</b>				<b>IUD</b>			
Public hospital	262	84.4	3	Public hospital	28	49.7	12.6
Public health unit	18	5.4	2	Public health unit	11	28.8	11.9
Public health center / clinic	8	2.6	1.2	Public health center / clinic	4	4.3	2.5
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	0	0	
Private hospital	1	0.1	0.1	Private hospital	0	0	
Private health center / clinic	12	4.6	1.7	Private health center / clinic	3	14.4	11.7
Private office	2	1.7	1.5	Private office	1	0.6	0.7
Private mobile clinic	1	0.2	0.2	Private mobile clinic	0	0	
Other private health facility	0	0		Other private health facility	0	0	
Pharmacy	0	0		Pharmacy	0	0	
Community health worker	0	0		Community health worker	0	0	
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	0	0	
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	0	0	
Other	4	0.9	0.6	Other	2	2.1	1.5
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	308	100		Total	49	100	
<b>Male sterilization</b>				<b>Injectables</b>			
Public hospital	1	100		Public hospital	185	24	3.1
Public health unit	0	0		Public health unit	289	35.8	3.1
Public health center / clinic	0	0		Public health center / clinic	150	18.6	2.2
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	4	0.3	0.2
Private hospital	0	0		Private hospital	1	0.1	0.1
Private health center / clinic	0	0		Private health center / clinic	8	1.3	0.7
Private office	0	0		Private office	4	0.8	0.4
Private mobile clinic	0	0		Private mobile clinic	1	0.1	0.1
Other private health facility	0	0		Other private health facility	2	0.2	0.1
Pharmacy	0	0		Pharmacy	88	13.4	2.6
Community health worker	0	0		Community health worker	42	4.5	1.1
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	1	0.1	0.1
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	3	0.3	0.2
Other	0	0		Other	5	0.5	0.2
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	1	100		Total	783	100	

**Table D.5.3.1b Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Implants</b>				<b>Condom</b>			
Public hospital	0	0		Public hospital	6	21.2	9.1
Public health unit	0	0		Public health unit	11	27.1	9.4
Public health center / clinic	0	0		Public health center / clinic	10	19.7	7.3
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	0	0	
Private hospital	0	0		Private hospital	1	2.2	2.2
Private health center / clinic	1	100		Private health center / clinic	0	0	
Private office	0	0		Private office	0	0	
Private mobile clinic	0	0		Private mobile clinic	0	0	
Other private health facility	0	0		Other private health facility	0	0	
Pharmacy	0	0		Pharmacy	21	28.2	7.2
Community health worker	0	0		Community health worker	0	0	
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	0	0	
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	1	1	1
Other	0	0		Other	1	0.7	0.7
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
<b>Total</b>	<b>1</b>	<b>100</b>		<b>Total</b>	<b>51</b>	<b>100</b>	
<b>Pill</b>				<b>Female condom</b>			
Public hospital	23	10.4	3	Public hospital	0	0	0
Public health unit	63	33.9	6.4	Public health unit	0	0	0
Public health center / clinic	36	19.6	4.1	Public health center / clinic	0	0	0
Public mobile clinic	0	0		Public mobile clinic	0	0	0
Other public health facility	1	0.4	0.5	Other public health facility	0	0	0
Private hospital	0	0		Private hospital	0	0	0
Private health center / clinic	2	1.2	1	Private health center / clinic	0	0	0
Private office	1	0.2	0.3	Private office	0	0	0
Private mobile clinic	0	0		Private mobile clinic	0	0	0
Other private health facility	0	0		Other private health facility	0	0	0
Pharmacy	35	31.6	7.5	Pharmacy	0	0	0
Community health worker	4	2.3	1.2	Community health worker	0	0	0
Traditional healer	0	0		Traditional healer	0	0	0
Store	0	0		Store	0	0	0
Market	0	0		Market	0	0	0
Church	0	0		Church	0	0	0
Friend / relative	0	0		Friend / relative	0	0	0
Other	1	0.4	0.4	Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0	0	
<b>Total</b>	<b>166</b>	<b>100</b>		<b>Total</b>	<b>0</b>	<b>0</b>	

**Table D.5.3.1c Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Diaphragm</b>				<b>Lactational amenorrhea method</b>			
Public hospital	0	0	0	Public hospital	3	51.6	22.4
Public health unit	0	0	0	Public health unit	1	13.3	13.7
Public health center / clinic	0	0	0	Public health center / clinic	2	24.5	17.4
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	1	10.7	11.3
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	0	0	
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	1		
Missing	0	0		Missing	0		
Total	0	0		Total	8	100	
<b>Sponge, spermicide</b>				<b>Rhythm method</b>			
Public hospital	0	0	0	Public hospital	0	0	
Public health unit	0	0	0	Public health unit	0	0	
Public health center / clinic	0	0	0	Public health center / clinic	0	0	
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	1	8.3	8.2
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	3	26.2	16.6
Friend / relative	0	0	0	Friend / relative	3	42.3	23.1
Other	0	0	0	Other	3	23.2	15.4
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	10	100	

**Table D.5.3.1d Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Withdrawal method</b>				<b>Other modern method</b>			
Public hospital	0	0		Public hospital	0	0	0
Public health unit	2	29.4	21.9	Public health unit	0	0	0
Public health center / clinic	0	0		Public health center / clinic	0	0	0
Public mobile clinic	0	0		Public mobile clinic	0	0	0
Other public health facility	0	0		Other public health facility	0	0	0
Private hospital	0	0		Private hospital	0	0	0
Private health center / clinic	0	0		Private health center / clinic	0	0	0
Private office	1	23.6	22	Private office	0	0	0
Private mobile clinic	0	0		Private mobile clinic	0	0	0
Other private health facility	0	0		Other private health facility	0	0	0
Pharmacy	0	0		Pharmacy	0	0	0
Community health worker	0	0		Community health worker	0	0	0
Traditional healer	0	0		Traditional healer	0	0	0
Store	0	0		Store	0	0	0
Market	0	0		Market	0	0	0
Church	0	0		Church	0	0	0
Friend / relative	0	0		Friend / relative	0	0	0
Other	3	47	23.8	Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0	0	
Total	6	100		Total	0	0	
<b>Emergency contraception</b>				<b>Other traditional method</b>			
Public hospital	0	0	0	Public hospital	0	0	
Public health unit	0	0	0	Public health unit	1	100	
Public health center / clinic	0	0	0	Public health center / clinic	0	0	
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	0	0	
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	0	0	
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	1	100	

**Table D.5.4.1 Interruption and non-use of family planning methods**

Percentage of women with interruptions last year in the use of contraception, percentage not using contraception, and percentage in need of contraception			
Characteristic	N	Weighted %	Weighted SE
<b>Currently in need of contraceptives</b>			
Yes	1558	80.9	1.6
No	259	19.1	1.6
DK/DTR	0		
Missing	8		
Total	1825	100	
<b>Discontinuation rate: any interruption in use during the last year, among women in need of contraceptives</b>			
Yes	54	3.4	0.7
No	1504	96.6	0.7
DK/DTR	0		
Missing	0		
Total	1558	100	
<b>Number of interruptions in use during the last year, among women in need of contraceptives</b>			
0	1504	96.6	0.7
1	47	3.1	0.6
2-6	7	0.3	0.2
7-12	0	0	
13 or more	0	0	
DK/DTR	0		
Missing	0		
Total	1558	100	
<b>Not currently using any modern method</b>			
Yes	466	30.7	1.7
No	1351	69.3	1.7
DK/DTR	0		
Missing	8		
Total	1825	100	
<b>Unmet need: Not currently using any modern method, among women "in need" of contraceptives</b>			
Yes	233	16.4	1.4
No	1325	83.6	1.4
DK/DTR	0		
Missing	0		
Total	1558	100	

**Table D.5.4.2a Reasons for interruption and non-use of family planning methods**

Percent distribution of women who are not using family planning methods by reason for non-use							
Reason	N	Weighted %	Weighted SE	Reason	N	Weighted %	Weighted SE
<b>Unmarried</b>				<b>Did not have a menstrual period since last birth</b>			
Yes	17	3.9	1.7	Yes	15	2.3	0.8
No	358	96.1	1.7	No	360	97.7	0.8
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Married</b>				<b>Was breastfeeding</b>			
Yes	39	8.6	3.1	Yes	20	2.7	0.6
No	336	91.4	3.1	No	355	97.3	0.6
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Does not have sexual relations</b>				<b>Goes against religion</b>			
Yes	43	10.2	2.4	Yes	4	3.9	2.2
No	330	89.8	2.4	No	371	96.1	2.2
DK/DTR	6			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Virgin</b>				<b>Respondent is opposed to use</b>			
Yes	1	0.1	0.1	Yes	13	1.9	0.6
No	374	99.9	0.1	No	362	98.1	0.6
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Has sexual relations infrequently</b>				<b>Husband / partner is opposed to use</b>			
Yes	41	9.4	2.5	Yes	10	1.9	0.7
No	333	90.6	2.5	No	365	98.1	0.7
DK/DTR	5			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Menopausal</b>				<b>Others are opposed to use</b>			
Yes	26	9	2.9	Yes	1	0.1	0.1
No	348	91	2.9	No	373	99.9	0.1
DK/DTR	5			DK/DTR	5		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Hysterectomy/surgery on the uterus</b>				<b>Knows no method</b>			
Yes	9	1.5	0.7	Yes	8	1.1	0.5
No	366	98.5	0.7	No	367	98.9	0.5
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Cannot become pregnant</b>				<b>Knows no source for getting method</b>			
Yes	20	7.1	2.3	Yes	6	0.5	0.2
No	355	92.9	2.3	No	369	99.5	0.2
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	

**Table D.5.4.2b Reasons for interruption and non-use of family planning methods**

Percent distribution of women who are not using family planning methods by reason for non-use							
Reason	N	Weighted %	Weighted SE	Reason	N	Weighted %	Weighted SE
<b>Concerned about side effects</b>				<b>No trust in health facility staff</b>			
Yes	26	4.2	1.2	Yes	6	0.5	0.2
No	349	95.8	1.2	No	369	99.5	0.2
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Facility is too far</b>				<b>Uncomfortable to use</b>			
Yes	4	0.9	0.5	Yes	3	0.3	0.2
No	371	99.1	0.5	No	372	99.7	0.2
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Could not find transportation to a facility</b>				<b>Interferes with normal body processes</b>			
Yes	1	0.1	0.1	Yes	25	4.7	1.1
No	374	99.9	0.1	No	350	95.3	1.1
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Could not afford transportation</b>				<b>Affects health / does not like them</b>			
Yes	5	0.9	0.4	Yes	95	25.7	3.8
No	370	99.1	0.4	No	280	74.3	3.8
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Costs too much</b>				<b>Was pregnant</b>			
Yes	2	0.5	0.4	Yes	25	7.6	2.1
No	373	99.5	0.4	No	349	92.4	2.1
DK/DTR	4			DK/DTR	5		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Preferred method is not available</b>				<b>Wanted to become pregnant</b>			
Yes	4	1.4	1	Yes	63	23.2	3.9
No	371	98.6	1	No	312	76.8	3.9
DK/DTR	4			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>No method is available</b>				<b>Other</b>			
Yes	4	0.3	0.2	Yes	37	7.2	1.5
No	370	99.7	0.2	No	338	92.8	1.5
DK/DTR	5			DK/DTR	4		
Missing	64			Missing	64		
Total	443	100		Total	443	100	
<b>Health facility has staff that are hard to deal with</b>							
Yes	6	0.8	0.3				
No	369	99.2	0.3				
DK/DTR	4						
Missing	64						
Total	443	100					

**Table D.5.5.1 Participation in family planning decision-making**

Percent distribution of women currently using family planning methods according to who makes the decision to use family planning			
Characteristic	N	Weighted %	Weighted SE
Who makes the decision to use family planning methods?			
Mostly the respondent	234	18.1	1.8
Mostly the husband / partner	110	6.6	0.9
Joint decision	1017	74.8	1.8
Other	5	0.4	0.2
DK/DTR/NA	3		
Missing	0		
Total	1369	100	

**Table D.5.5.2a Family planning decision-making - informed choice**

Percentage of all women currently using family planning methods to whom a health care worker described other methods that can be used			
Characteristic	N	Weighted %	Weighted SE
Did a doctor, nurse, or community health worker ever tell you about other methods of family planning that you could use?			
Yes	928	66	2.5
No	439	34	2.5
DK/DTR	2		
Missing	0		
Total	1369	100	

**Table D.5.6.1 Family planning messages delivered by health care providers**

Percentage of married or partnered women exposed to family planning messages delivered by health care providers at a health care facility or at home, ever and in the last 12 months			
Characteristic	N	Weighted %	Weighted SE
In the last 12 months, did any staff member at a health facility speak to you about family planning methods?			
Yes	697	36.1	2.2
No	1119	63.9	2.2
DK/DTR	1		
Missing	8		
Total	1825	100	
In the last 12 months, did a health promoter visit you to speak to you about family planning methods?			
Yes	153	7.5	0.8
No	1656	92.5	0.8
DK/DTR	8		
Missing	8		
Total	1825	100	
Among respondents who had not visited a health facility seeking care for themselves or their children in the last 12 months:			
In the last 12 months, did a health promoter visit you to speak to you about family planning methods?			
Yes	42	5.9	1.2
No	569	94.1	1.2
DK/DTR	3		
Missing	0		
Total	614	100	

**Table D.6.1.1a Antenatal care coverage for the most recent birth in the last two years**

Percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth; and among those who received any antenatal care, percent distribution by timing of care			
Characteristic	N	Weighted %	Weighted SE
<b>Attended at least one antenatal care visit</b>			
Yes	1022	96.9	0.7
No	36	3.1	0.7
DK/DTR	0		
Missing	56		
Total	1114	100	
<b>Attended at least one antenatal care visit with doctor or professional nurse</b>			
Yes	1005	95.5	0.8
No	53	4.5	0.8
DK/DTR	0		
Missing	56		
Total	1114	100	
<b>First trimester (first 12 weeks) antenatal care visit with doctor or professional nurse</b>			
Yes	478	44.7	2.3
No	577	55.3	2.3
DK/DTR	0		
Missing	59		
Total	1114	100	
<b>Month of gestation of first ANC visit, among women who received any antenatal care</b>			
1	231	22.3	2.2
2	252	24.3	1.5
3	238	22.4	1.7
4	140	14.4	1.5
5	77	7.6	1
6	47	5.2	1
7	23	2.4	0.5
8	10	1.3	0.4
9	3	0.2	0.1
DK/DTR	1		
Missing	0		
Total	1022	100	

**Table D.6.1.1b Antenatal care coverage for the most recent birth in the last two years**

Percentage distribution of attendants at antenatal care, for women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	336	34.4	2.9	0 visits	1021	99.9	0.1	0 visits	1022	100	
1 visit	127	12.7	1.3	1 visit	0	0		1 visit	0	0	
2 visits	70	8.4	1.6	2 visits	0	0		2 visits	0	0	
3 visits	71	6.2	0.9	3 visits	0	0		3 visits	0	0	
4 visits	61	6.4	0.9	4 visits	0	0		4 visits	0	0	
5 visits	81	7.4	1	5 visits	0	0		5 visits	0	0	
6 visits	78	7.6	1.1	6 visits	0	0		6 visits	0	0	
7 visits	81	7.1	0.9	7 visits	1	0.1	0.1	7 visits	0	0	
8 visits	117	9.9	1.3	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	1022	100		Total	1022	100		Total	1022	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	449	42.7	3	0 visits	1022	100		0 visits	1021	99.9	0.1
1 visit	65	5.6	0.7	1 visit	0	0		1 visit	0	0	
2 visits	46	4.4	0.7	2 visits	0	0		2 visits	0	0	
3 visits	60	5.9	0.9	3 visits	0	0		3 visits	0	0	
4 visits	88	9.1	1.4	4 visits	0	0		4 visits	0	0	
5 visits	94	8.3	1	5 visits	0	0		5 visits	0	0	
6 visits	84	9.2	1.3	6 visits	0	0		6 visits	0	0	
7 visits	77	8.6	1.1	7 visits	0	0		7 visits	1	0.1	0.1
8 visits	59	6.1	1.1	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	1022	100		Total	1022	100		Total	1022	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	973	95.6	0.7	0 visits	1022	100		0 visits	1020	99.9	0.1
1 visit	18	1.7	0.4	1 visit	0	0		1 visit	2	0.1	0.1
2 visits	7	0.6	0.2	2 visits	0	0		2 visits	0	0	
3 visits	2	0.1	0.1	3 visits	0	0		3 visits	0	0	
4 visits	8	0.8	0.3	4 visits	0	0		4 visits	0	0	
5 visits	3	0.2	0.1	5 visits	0	0		5 visits	0	0	
6 visits	6	0.5	0.2	6 visits	0	0		6 visits	0	0	
7 visits	2	0.1	0.1	7 visits	0	0		7 visits	0	0	
8 visits	3	0.3	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	1022	100		Total	1022	100		Total	1022	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	1021	99.9	0.1	0 visits	1022	100					
1 visit	1	0.1	0.1	1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	1022	100		Total	1022	100					

**Table D.6.1.1c Antenatal care coverage for the most recent birth in the last two years**

Percentage distribution of usual location of antenatal care for women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth			
Location	N	Weighted %	Weighted SE
Usual location for antenatal care visits			
Public hospital	229	24.8	3.8
Public health unit	432	41	3.5
Public health center / clinic	281	27.6	2.9
Public mobile clinic	1	0.1	0.1
Other public health facility	8	0.5	0.2
Private hospital	3	0.4	0.2
Private health center / clinic	34	3.1	0.7
Private office	26	1.9	0.5
Private mobile clinic	1	0.1	0.1
Other private health facility	0	0	
Pharmacy	0	0	
Community health worker	0	0	
Traditional healer	2	0.2	0.2
Other	5	0.4	0.2
DK/DTR	0		
Missing	0		
Total	1022	100	

**Table D.6.1.2 Frequency of antenatal care visits**

Percent distribution of women with a birth in the last two years by number of antenatal care visits for the most recent birth and percentage of women with four or more visits with at least one with a professional			
Characteristic	N	Weighted %	Weighted SE
<b>Number of antenatal care visits</b>			
None	36	3.1	0.7
1-3 visits	128	13.1	1.1
4-6 visits	464	44.7	1.9
7-9 visits	424	38.9	2.2
10+ visits	4	0.2	0.1
DK/DTR	2		
Missing	59		
Total	1117	100	
<b>Attended at least four antenatal care visits</b>			
Yes	892	83.8	1.5
No	164	16.2	1.5
DK/DTR	2		
Missing	59		
Total	1117	100	
<b>Attended at least four antenatal care visits with doctor or professional nurse</b>			
Yes	861	81.4	1.5
No	195	18.6	1.5
DK/DTR	2		
Missing	59		
Total	1117	100	
<b>Attended at least four antenatal care visits with doctor or professional nurse according to best practices (measuring blood type, anemia, syphilis, HIV, proteinuria, blood pressure, weight, fundal height, fetal heartbeat)</b>			
Yes	417	41.2	2.4
No	639	58.8	2.4
DK/DTR	2		
Missing	59		
Total	1117	100	

**Table D.6.1.3a Content of antenatal care visits - best practices**

Percentage distribution of content during antenatal visit among women with a birth in the last two years with at least one antenatal care visit							
Procedure	N	Weighted %	Weighted SE	Procedure	N	Weighted %	Weighted SE
Measured blood type				Tested for proteinuria			
Yes	807	79.8	2	Yes	791	80.4	2
No	198	20.2	2	No	189	19.6	2
DK/DTR	17			DK/DTR	42		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
Tested for anemia				Measured maternal blood pressure			
Yes	830	82.5	1.8	Yes	1011	99	0.3
No	173	17.5	1.8	No	10	1	0.3
DK/DTR	19			DK/DTR	1		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
Tested for syphilis				Measured maternal weight			
Yes	596	61.2	2.7	Yes	1013	99.1	0.3
No	392	38.8	2.7	No	9	0.9	0.3
DK/DTR	34			DK/DTR	0		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
Tested for HIV				Measured fundal height			
Yes	797	77.1	2.2	Yes	968	94.7	1
No	220	22.9	2.2	No	50	5.3	1
DK/DTR	5			DK/DTR	4		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
				Measured fetal heartbeat			
				Yes	978	95.8	0.8
				No	43	4.2	0.8
				DK/DTR	1		
				Missing	0		
				Total	1022	100	

**Table D.6.1.3b Content of antenatal care visits - other services provided**

Percentage distribution of content during antenatal visit among women with a birth in the last two years with at least one antenatal care visit							
Procedure	N	Weighted %	Weighted SE	Procedure	N	Weighted %	Weighted SE
Collected blood specimen				Tested for diabetes			
Yes	952	91.6	1.5	Yes	489	49.7	2.1
No	69	8.4	1.5	No	508	50.3	2.1
DK/DTR	1			DK/DTR	25		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
Collected urine specimen				Performed an ultrasound			
Yes	963	94	1	Yes	861	82.9	1.4
No	59	6	1	No	161	17.1	1.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
Measured blood glucose							
Yes	672	72.7	1.8				
No	257	27.3	1.8				
DK/DTR	23						
Missing	70						
Total	1022	100					

**Table D.6.1.4 Coverage of tetanus toxoid vaccinations during pregnancy**

Among women with prenatal care for a birth in the last two years, percentage who received a tetanus vaccinations during pregnancy and percent distribution by number of vaccinations received and by time since last tetanus vaccination			
Characteristic	N	Weighted %	Weighted SE
<b>Received tetanus injection during pregnancy</b>			
Yes	949	90.6	1.3
No	105	9.4	1.3
DK/DTR	4		
Missing	59		
Total	1117	100	
<b>Number of tetanus vaccinations during pregnancy</b>			
None	120	10.9	1.4
1	676	64.9	2.1
2	200	20.7	2
3	31	2.8	0.5
4	10	0.6	0.2
5	1	0.2	0.2
DK/DTR	20		
Missing	59		
Total	1117	100	
<b>Time since last tetanus vaccination</b>			
Never vaccinated	404	54.6	2.5
<10 years ago	329	39.6	2.6
≥10 years ago	45	5.8	1.2
DK/DTR	280		
Missing	59		
Total	1117	100	
<b>Time since last tetanus vaccination, among women who were not vaccinated during pregnancy</b>			
Never vaccinated	45	54.1	6.8
<10 years ago	32	43.4	7
≥10 years ago	2	2.5	2
DK/DTR	26		
Missing	0		
Total	105	100	

**Table D.6.1.5 Exposure to safe pregnancy messages**

Among women who received prenatal care for a birth in the last two years, percentage exposed to specific safe pregnancy messages							
Characteristic	N	Weighted %	Weighted SE	Characteristic	N	Weighted %	Weighted SE
<b>Counseled about pregnancy</b>				<b>Advised to have a Caesarean section</b>			
Yes	955	93.6	1	Yes	397	39.4	2.5
No	67	6.4	1	No	625	60.6	2.5
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
<b>Told about signs to watch out for that could indicate a problem with the pregnancy</b>				<b>Counseled about making a transportation plan for the delivery</b>			
Yes	957	92.8	1.2	Yes	238	23.2	1.9
No	64	7.2	1.2	No	783	76.8	1.9
DK/DTR	1			DK/DTR	1		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
<b>Offered an HIV test</b>				<b>Counseled about contraception after delivery</b>			
Yes	838	80.9	2.3	Yes	845	83.4	1.7
No	180	19.1	2.3	No	177	16.6	1.7
DK/DTR	4			DK/DTR	0		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
<b>Counseled about nutrition during pregnancy</b>				<b>Counseled about child care</b>			
Yes	901	88.8	1.1	Yes	774	77.9	2.2
No	117	11.2	1.1	No	246	22.1	2.2
DK/DTR	4			DK/DTR	2		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
<b>Given information about in-facility delivery</b>				<b>Given information about proper ways to breast feed</b>			
Yes	883	87.3	1.4	Yes	883	86.5	1.7
No	137	12.7	1.4	No	135	13.5	1.7
DK/DTR	2			DK/DTR	4		
Missing	0			Missing	0		
Total	1022	100		Total	1022	100	
<b>Advised to delivery in a facility</b>							
Yes	885	87.4	1.5				
No	137	12.6	1.5				
DK/DTR	0						
Missing	0						
Total	1022	100					

**Table D.6.2.1 Place of delivery**

Percent distribution of women with a birth in the last two years by location of most recent birth and percent distribution of women with in-facility deliveries by means of transportation used to get to the facility for delivery							
Characteristic	N	Weighted %	Weighted SE	Mode of transportation	N	Weighted %	Weighted SE
Delivery location for most recent birth				On foot			
Respondent's house	82	9.2	1.8	Yes	121	14	2.2
Another person's house	6	0.6	0.2	No	841	86	2.2
Public hospital	836	78.4	2.4	DK/DTR	1		
Public health center / clinic	96	8.1	1.3	Missing	0		
Public medical ward	0	0		Total	963	100	
Other public health facility	8	0.6	0.2	Private vehicle			
Private hospital	7	0.6	0.2	Yes	221	22.3	1.7
Private health center / clinic	16	1.7	0.6	No	741	77.7	1.7
Private medical ward	0	0		DK/DTR	1		
Other private health facility	0	0		Missing	0		
Other	7	0.8	0.3	Total	963	100	
DK/DTR	0			Ambulance			
Missing	60			Yes	260	23.4	2.4
Total	1118	100		No	702	76.6	2.4
In-hospital delivery				DK/DTR			
Yes	843	78.9	2.4	Missing	0		
No	215	21.1	2.4	Total	963	100	
DK/DTR	0			Other public vehicle			
Missing	60			Yes	385	43.2	2.8
Total	1118	100		No	577	56.8	2.8
In-facility delivery				DK/DTR			
Yes	963	89.4	1.9	Missing	0		
No	95	10.6	1.9	Total	963	100	
DK/DTR	0						
Missing	60						
Total	1118	100					

**Table D.6.2.2a Assistance at delivery: type of attendants**

For women's most recent birth in the past two years, percentage by type of delivery attendants							
Characteristic	N	Weighted %	Weighted SE	Characteristic	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Community health worker</b>			
Yes	935	86.9	1.9	Yes	2	0.2	0.2
No	123	13.1	1.9	No	1054	99.8	0.2
DK/DTR	0			DK/DTR	2		
Missing	59			Missing	59		
Total	1117	100		Total	1117	100	
<b>Professional nurse</b>				<b>Pharmacist</b>			
Yes	858	80.1	1.8	Yes	5	0.6	0.3
No	197	19.9	1.8	No	1050	99.4	0.3
DK/DTR	3			DK/DTR	3		
Missing	59			Missing	59		
Total	1117	100		Total	1117	100	
<b>Auxiliary nurse</b>				<b>Traditional healer</b>			
Yes	205	19.7	1.9	Yes	1	0.2	0.2
No	838	80.3	1.9	No	1054	99.8	0.2
DK/DTR	15			DK/DTR	3		
Missing	59			Missing	59		
Total	1117	100		Total	1117	100	
<b>Laboratory technician</b>				<b>Relative</b>			
Yes	22	2.1	0.5	Yes	125	11.9	1.3
No	1010	97.9	0.5	No	930	88.1	1.3
DK/DTR	26			DK/DTR	3		
Missing	59			Missing	59		
Total	1117	100		Total	1117	100	
<b>Midwife / Comadrona</b>				<b>Other</b>			
Yes	61	6.2	1.3	Yes	15	2.2	0.9
No	986	93.8	1.3	No	1037	97.8	0.9
DK/DTR	11			DK/DTR	6		
Missing	59			Missing	59		
Total	1117	100		Total	1117	100	

**Table D.6.2.2b Assistance at delivery: number of attendants**

For women's most recent live birth in the past two years, the number of attendants during delivery and the presence of skilled attendants			
Characteristic	N	Weighted %	Weighted SE
<b>Delivered alone</b>			
Yes	7	1	0.5
No	1051	99	0.5
DK/DTR	0		
Missing	59		
Total	1117	100	
<b>Number of categories of personnel in attendance at delivery</b>			
None	7	1	0.5
One	167	16.5	1.7
Two	649	60.9	2.2
Three	185	16.7	1.6
Four or more	50	4.9	0.8
DK/DTR	0		
Missing	59		
Total	1117	100	
<b>Delivery with a skilled birth attendant</b>			
Yes	964	89.5	1.8
No	94	10.5	1.8
DK/DTR	0		
Missing	59		
Total	1117	100	

**Table D.6.2.2c Assistance at delivery: in-facility delivery with skilled birth attendant**

For women's most recent live birth in the past two years, the presence of skilled attendants at delivery in a health facility or hospital			
Characteristic	N	Weighted %	Weighted SE
<b>In-facility delivery with a skilled birth attendant</b>			
Yes	956	88.5	1.9
No	102	11.5	1.9
DK/DTR	0		
Missing	58		
Total	1116	100	
<b>In-hospital delivery with a skilled birth attendant</b>			
Yes	837	78.1	2.3
No	221	21.9	2.3
DK/DTR	0		
Missing	58		
Total	1116	100	

**Table D.6.2.3 Mode of delivery and complications**

For women's most recent live birth in the past two years, the mode of delivery and complications during delivery			
Characteristic	N	Weighted %	Weighted SE
<b>Mode of delivery</b>			
Vaginal	811	79	1.8
Planned Caesarean section	79	6.7	0.8
Emergency Caesarean section	168	14.3	1.5
DK/DTR	0		
Missing	59		
Total	1117	100	
<b>Reason for attending a health facility for delivery, among in-facility births</b>			
Planned	387	39.2	2
Emergency	570	60.4	2
Other	6	0.5	0.2
DK/DTR	0		
Missing	0		
Total	963	100	
<b>Respondent had seizures prior to delivery</b>			
Yes	27	2.8	0.5
No	1028	97.2	0.5
DK/DTR	3		
Missing	59		
Total	1117	100	
<b>Child entered neonatal intensive care unit after delivery</b>			
Yes	91	7.5	1
No	965	92.5	1
DK/DTR	2		
Missing	59		
Total	1117	100	
<b>Respondent had excessive bleeding in the first day following the delivery</b>			
Yes	237	19.6	1.8
No	821	80.4	1.8
DK/DTR	0		
Missing	59		
Total	1117	100	

**Table D.6.2.4 Birth size and weight**

For women's most recent live birth in the past two years, the size and weight of the child at birth			
Characteristic	N	Weighted %	Weighted SE
<b>Mother's estimate of the size of the child at birth</b>			
Very large	17	1.6	0.5
Larger than average	81	7.7	1
Average	873	83.1	1.6
Smaller than average	57	6.5	1.4
Very small	15	1.2	0.3
DK/DTR	15		
Missing	59		
Total	1117	100	
<b>Child's weight was measured at birth</b>			
Yes	962	91.2	1.6
No	83	8.8	1.6
DK/DTR	13		
Missing	59		
Total	1117	100	
<b>Child's birth weight, among those who were weighed</b>			
<2.5 kg (low birth weight)	101	11.8	1.6
≥2.5 kg	807	88.2	1.6
DK/DTR	40		
Missing	14		
Total	962	100	

**Table D.6.3.1a Postnatal checkup for the mother**

For women's most recent live birth in the past two years, postpartum care received by the respondent			
Characteristic	N	Weighted %	Weighted SE
Respondent was checked after delivery			
Yes	750	66.8	2.6
No	308	33.2	2.6
DK/DTR	0		
Missing	59		
Total	1117	100	
Respondent was checked every 15 minutes during the first hour after delivery while still at health facility, among in-facility births			
Yes	294	28.4	2
No	667	71.6	2
DK/DTR	2		
Missing	0		
Total	963	100	
Respondent was checked within one week after delivery by a health provider			
Yes	662	59.7	2.3
No	396	40.3	2.3
DK/DTR	0		
Missing	59		
Total	1117	100	

**Table D.6.3.1b Postnatal checkup for the mother: providers**

Percentage distribution of attendants at postnatal care, for women with a birth in the last two years who attended at least one postnatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	129	17.8	1.5	0 visits	745	99.4	0.3	0 visits	749	99.9	0.1
1 visit	386	54.1	2.2	1 visit	5	0.6	0.3	1 visit	1	0.1	0.1
2 visits	171	20.9	1.8	2 visits	0	0		2 visits	0	0	
3 visits	45	5.3	0.9	3 visits	0	0		3 visits	0	0	
4 visits	9	1.1	0.4	4 visits	0	0		4 visits	0	0	
5 visits	4	0.4	0.2	5 visits	0	0		5 visits	0	0	
6 visits	2	0.2	0.1	6 visits	0	0		6 visits	0	0	
7 visits	1	0.1	0.1	7 visits	0	0		7 visits	0	0	
8 visits	3	0.3	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	750	100		Total	750	100		Total	750	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	588	79.2	1.6	0 visits	750	100		0 visits	748	99.8	0.1
1 visit	125	16.3	1.6	1 visit	0	0		1 visit	2	0.2	0.1
2 visits	29	3.5	0.7	2 visits	0	0		2 visits	0	0	
3 visits	4	0.5	0.3	3 visits	0	0		3 visits	0	0	
4 visits	2	0.1	0.1	4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	1	0.1	0.1	6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	1	0.2	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	750	100		Total	750	100		Total	750	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	742	98.9	0.4	0 visits	750	100		0 visits	746	99.4	0.3
1 visit	6	0.8	0.3	1 visit	0	0		1 visit	4	0.6	0.3
2 visits	2	0.3	0.2	2 visits	0	0		2 visits	0	0	
3 visits	0	0		3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	750	100		Total	750	100		Total	750	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	749	99.8	0.2	0 visits	750	100					
1 visit	1	0.2	0.2	1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	750	100		Total	750	100					

**Table D.6.3.2a Postnatal checkup for the neonate**

For women's most recent live birth in the past two years, postpartum care received by the baby			
Characteristic	N	Weighted %	Weighted SE
Baby was checked after delivery			
Yes	879	82.8	1.9
No	177	17.2	1.9
DK/DTR	2		
Missing	61		
Total	1119	100	
Baby was checked within 24 hours after delivery by a health provider			
Yes	348	35	2.2
No	617	65	2.2
DK/DTR	2		
Missing	152		
Total	1119	100	
Baby was checked within one week after delivery by a health provider			
Yes	691	72.9	2.6
No	274	27.1	2.6
DK/DTR	2		
Missing	152		
Total	1119	100	

**Table D.6.3.2b Postnatal checkup for the neonate: providers**

Percentage distribution of attendants at postnatal care, for women with a birth in the last two years who attended at least one postnatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	123	14.5	1.8	0 visits	879	100		0 visits	878	100	0
1 visit	494	58.7	2.2	1 visit	0	0		1 visit	0	0	
2 visits	190	19.8	1.5	2 visits	0	0		2 visits	1	0	0
3 visits	43	4.8	0.8	3 visits	0	0		3 visits	0	0	
4 visits	14	1.2	0.4	4 visits	0	0		4 visits	0	0	
5 visits	7	0.4	0.2	5 visits	0	0		5 visits	0	0	
6 visits	3	0.3	0.1	6 visits	0	0		6 visits	0	0	
7 visits	2	0.2	0.1	7 visits	0	0		7 visits	0	0	
8 visits	3	0.2	0.1	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	879	100		Total	879	100		Total	879	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	724	81.7	1.6	0 visits	878	99.9	0.1	0 visits	878	99.9	0.1
1 visit	130	15.2	1.7	1 visit	1	0.1	0.1	1 visit	1	0.1	0.1
2 visits	15	2.2	0.7	2 visits	0	0		2 visits	0	0	
3 visits	5	0.4	0.2	3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	2	0.2	0.1	5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	2	0.2	0.1	7 visits	0	0		7 visits	0	0	
8 visits	1	0.1	0.1	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	879	100		Total	879	100		Total	879	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	871	99	0.3	0 visits	879	100		0 visits	874	99.6	0.2
1 visit	5	0.7	0.3	1 visit	0	0		1 visit	5	0.4	0.2
2 visits	1	0.2	0.2	2 visits	0	0		2 visits	0	0	
3 visits	1	0.1	0.1	3 visits	0	0		3 visits	0	0	
4 visits	1	0.1	0.1	4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	879	100		Total	879	100		Total	879	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	879	100		0 visits	878	99.9	0.1				
1 visit	0	0		1 visit	1	0.1	0.1				
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	879	100		Total	879	100					

**Table D.7.1 Age and sex of children**

Percent distribution of the de facto population of children aged 0-59 months in the SM2015 baseline survey						
	Female		Male		Total	
	N	%	N	%	N	%
Age, in months						
0-5 months	107	9.7	113	10.1	220	9.8
6-11 months	124	11.2	116	10.4	241	10.8
12-23 months	242	21.9	232	20.7	475	21.2
24-35 months	213	19.3	223	19.9	437	19.5
36-47 months	211	19.1	210	18.8	426	19.1
48-59 months	209	18.9	225	20.1	437	19.5
Total	1106	100	1119	100	2236	100

**Table D.7.1.1 Current health status**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Current health			
Excellent	381	17.2	1.5
Very good	530	23.4	1.5
Good	682	31.7	1.4
Fair	522	24	1.5
Poor	81	3.7	0.5
DK/NR	1		
Missing	39		
Total	2236	100	
Current health relative to health last year			
Better	942	55.7	1.7
Worse	86	5.5	0.7
About the same	656	38.8	1.6
DK/NR	2		
Missing	32		
Total	1718	100	
Ability to perform daily activities			
Easily	2055	93.1	0.8
With some difficulty	94	4.6	0.6
With much difficulty	6	0.3	0.1
Unable to do	38	2	0.3
DK/NR	4		
Missing	39		
Total	2236	100	

**Table D.7.1.2 Recent illness**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Child was sick recently (in the last two weeks)			
Yes	719	32.2	1.6
No	1483	66.8	1.5
DK/NR	0		
Missing	6		
Total	2208	100	
Recent illness			
Fever	178	26	1.8
Malaria	0	0	
Cough/chest infection	209	27.9	2
Tuberculosis	0	0	
Asthma	10	1.8	0.7
Bronchitis	3	0.5	0.3
Pneumonia	18	3	0.8
Diarrhea without blood	134	19.2	1.6
Diarrhea with blood	10	1.2	0.4
Vomiting	11	1.2	0.4
Abdominal pain	2	0.2	0.2
Anemia	1	0.2	0.2
Skin rash/infection	15	2.2	0.6
Eye/ear infection	6	0.7	0.3
Measles	1	0.3	0.3
Jaundice	0	0	
Headache	3	0.4	0.2
Stroke	0	0	
Diabetes	0	0	
HIV/AIDS	0	0	
Paralysis	0	0	
Other	118	15.2	1.5
DK/NR	0		
Missing	0		
Total	719	100	

**Table D.7.1.3 Utilization of health services for recent illness**

Percent distribution of children 0-59 months who were sick in the last two weeks			
Utilization of health services	N	Weighted %	Weighted SE
<b>Sought care for recent illness</b>			
Yes	420	56.3	2.7
No	299	43.7	2.7
DK/NR	0		
Missing	0		
Total	719	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	87	23.5	3.8
Public health unit	113	25.1	2.6
Public clinic/health center	98	24.7	3
Public mobile clinic	0	0	
Other public health center	2	0.3	0.2
Private hospital	4	0.8	0.4
Private clinic/health center	13	2.5	1
Private office	32	7.1	1.2
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	47	10.8	2.1
Community health worker	3	0.5	0.3
Traditional healer	2	0.5	0.4
Other	19	4.1	1.2
DK/NR	0		
Missing	0		
Total	420	100	
<b>Child was hospitalized for recent illness</b>			
Yes	21	3.4	0.9
No	698	96.6	0.9
DK/NR	0		
Missing	0		
Total	719	100	

**Table D.7.2.1 Prevalence of acute respiratory infection and fever**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Child had cough in the last two weeks</b>			
Yes	504	21.5	1.4
No	1701	78.5	1.4
DK/NR	3		
Missing	28		
Total	2236	100	
<b>Child had cough in the last two weeks, by type</b>			
Cough with difficulty breathing due to chest problem	79	3.4	0.5
Cough with difficulty breathing due to congested or runny nose	113	4.4	0.5
Cough with difficulty breathing due to chest problem and congested or runny nose	72	3.4	0.5
Cough with difficulty breathing due to other reason	1	0	0
Cough without difficulty breathing	237	10.3	0.8
No cough	1701	78.6	1.4
DK/NR	5		
Missing	28		
Total	2236	100	
<b>Child had acute respiratory infection in the last two weeks</b>			
Yes	266	11.1	0.9
No	1938	88.9	0.9
DK/NR	4		
Missing	28		
Total	2236	100	
<b>Child had fever in the last two weeks</b>			
Yes	397	18.1	1.1
No	1810	81.9	1.1
DK/NR	1		
Missing	28		
Total	2236	100	

**Table D.7.2.2 Utilization of health services for acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for acute respiratory infection</b>			
Yes	155	56.2	3.8
No	111	43.8	3.8
DK/NR	0		
Missing	0		
Total	266	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	28	20.7	5.1
Public health unit	43	25.9	3.9
Public clinic/health center	41	28.1	3.8
Public mobile clinic	0	0	
Other public health center	1	0.4	0.4
Private hospital	1	0.3	0.4
Private clinic/health center	3	0.9	0.7
Private office	11	6.8	1.9
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	19	11.5	3
Community health worker	1	0.2	0.2
Traditional healer	1	1.2	1.3
Other	6	3.8	1.6
DK/NR	0		
Missing	0		
Total	155	100	

**Table D.7.2.3a Utilization of medications for acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Medication	N	Weighted %	Weighted SE
<b>Any treatment</b>			
Yes	231	84.4	2.8
No	35	15.6	2.8
DK/NR	0		
Missing	0		
Total	266	100	
<b>Antibiotic injection</b>			
Yes	9	4.4	1.7
No	221	95.6	1.7
DK/NR	1		
Missing	35		
Total	266	100	
<b>Antibiotic pill</b>			
Yes	19	8.4	2
No	211	91.6	2
DK/NR	1		
Missing	35		
Total	266	100	
<b>Antibiotic syrup</b>			
Yes	127	52	3.5
No	103	48	3.5
DK/NR	1		
Missing	35		
Total	266	100	
<b>Aspirin</b>			
Yes	3	1.7	1.1
No	227	98.3	1.1
DK/NR	1		
Missing	35		
Total	266	100	

**Table D.7.2.3a continued**

	<b>N</b>	<b>Weighted %</b>	<b>Weighted SE</b>
<b>Acetaminofen</b>			
Yes	137	59.4	3.3
No	93	40.6	3.3
DK/NR	1		
Missing	35		
Total	266	100	
<b>Ibuprofen</b>			
Yes	9	2.9	1.1
No	221	97.1	1.1
DK/NR	1		
Missing	35		
Total	266	100	
<b>Oral rehydration therapy</b>			
Yes	8	3.8	1.4
No	222	96.2	1.4
DK/NR	1		
Missing	35		
Total	266	100	
<b>Other</b>			
Yes	46	20.4	3.1
No	183	79.6	3.1
DK/NR	2		
Missing	35		
Total	266	100	

**Table D.7.2.4 Feeding practices during acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Amount given	N	Weighted %	Weighted SE
Volume of fluids (including breast milk) given during illness			
No fluids	9	3.9	1.4
Much less	46	17.8	2.5
Somewhat less	123	50	3.7
About the same	80	26.2	3.1
More	7	2.1	0.9
DK/NR	1		
Missing	0		
Total	266	100	
Volume of solid foods given during illness			
No solids	9	3	1
Much less	41	15.7	2.9
Somewhat less	141	56.7	3.6
About the same	73	24.2	2.9
More	1	0.4	0.4
DK/NR	1		
Missing	0		
Total	266	100	

**Table D.7.3.1 Prevalence of diarrhea**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Child had diarrhea in the last two weeks			
Yes	245	11.9	1
No	1947	88.1	1
DK/NR	5		
Missing	11		
Total	2208	100	
Child had diarrhea in the last two weeks, by type			
Diarrhea with blood	18	0.7	0.2
Diarrhea without blood	227	11.2	1
No diarrhea	1947	88.1	1
DK/NR	5		
Missing	11		
Total	2208	100	

**Table D.7.3.2 Utilization of health services for diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for diarrhea</b>			
Yes	155	50.8	3.8
No	146	49.2	3.8
DK/NR	0		
Missing	0		
Total	301	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	34	25.8	5.1
Public health unit	23	12.4	2.9
Public clinic/health center	43	29.2	4.2
Public mobile clinic	0	0	
Other public health center	1	0.5	0.5
Private hospital	0	0	
Private clinic/health center	6	2.9	1.3
Private office	14	9	2.2
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	20	12.1	3.2
Community health worker	1	0.6	0.6
Traditional healer	1	0.3	0.3
Other	12	7.4	2.6
DK/NR	0		
Missing	0		
Total	155	100	

**Table D.7.3.3a Utilization of treatments for diarrhea**

Percent distribution of children age 0-59 months who had diarrhea in the last two weeks, as reported by their mother			
Treatment given	N	Weighted %	Weighted SE
<b>Any treatment given</b>			
Yes	206	83.4	2.6
No	39	16.6	2.6
DK/NR	0		
Missing	0		
Total	245	100	
<b>Powdered oral serum</b>			
Yes	106	43.6	3.8
No	139	56.4	3.8
DK/NR	0		
Missing	0		
Total	245	100	
<b>Bottled oral serum</b>			
Yes	24	10.4	2.6
No	221	89.6	2.6
DK/NR	0		
Missing	0		
Total	245	100	
<b>Homemade fluid recommended by health authorities</b>			
Yes	17	6.6	2.1
No	227	93.4	2.1
DK/NR	1		
Missing	0		
Total	245	100	
<b>Antibiotic pill</b>			
Yes	29	12	2.9
No	216	88	2.9
DK/NR	0		
Missing	0		
Total	245	100	

**Table D.7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Antidiarrheal pill</b>			
Yes	18	7.8	2.2
No	227	92.2	2.2
DK/NR	0		
Missing	0		
Total	245	100	
<b>Zinc pill</b>			
Yes	7	1.9	0.9
No	238	98.1	0.9
DK/NR	0		
Missing	0		
Total	245	100	
<b>Other type of pill</b>			
Yes	13	5.9	1.5
No	232	94.1	1.5
DK/NR	0		
Missing	0		
Total	245	100	
<b>Unknown pill</b>			
Yes	30	12.5	2.4
No	214	87.5	2.4
DK/NR	1		
Missing	0		
Total	245	100	
<b>Antibiotic injection</b>			
Yes	2	0.7	0.5
No	243	99.3	0.5
DK/NR	0		
Missing	0		
Total	245	100	

**Table D.7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Non-antibiotic injection</b>			
Yes	0	0	
No	244	100	
DK/NR	1		
Missing	0		
Total	245	100	
<b>Unknown injection</b>			
Yes	1	0.5	0.4
No	243	99.5	0.4
DK/NR	1		
Missing	0		
Total	245	100	
<b>Intravenous therapy</b>			
Yes	1	0.4	0.4
No	243	99.6	0.4
DK/NR	1		
Missing	0		
Total	245	100	
<b>Home remedy / herbal medicine</b>			
Yes	44	16.8	3
No	200	83.2	3
DK/NR	1		
Missing	0		
Total	245	100	
<b>Antibiotic syrup</b>			
Yes	63	25.3	3.5
No	181	74.7	3.5
DK/NR	1		
Missing	0		
Total	245	100	
<b>Antidiarrheal syrup</b>			
Yes	16	5.3	1.3
No	227	94.7	1.3
DK/NR	2		
Missing	0		
Total	245	100	

**Table D.7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Zinc syrup</b>			
Yes	5	2.3	1
No	240	97.7	1
DK/NR	0		
Missing	0		
Total	245	100	
<b>Other syrup</b>			
Yes	15	5.8	1.3
No	230	94.2	1.3
DK/NR	0		
Missing	0		
Total	245	100	
<b>Unknown syrup</b>			
Yes	2	1.3	0.9
No	243	98.7	0.9
DK/NR	0		
Missing	0		
Total	245	100	

**Table D.7.3.3b Utilization of oral rehydration solution for diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Treatment given	N	Weighted %	Weighted SE
Oral rehydration solution and zinc, among all children with diarrhea			
Yes	9	2.4	0.8
No	292	97.6	0.8
DK/NR	0		
Missing	0		
Total	301	100	
Oral rehydration solution and zinc, among those given any treatment			
Yes	9	2.9	1
No	242	97.1	1
DK/NR	0		
Missing	50		
Total	301	100	

**Table D.7.3.4 Feeding practices during diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Amount given	N	Weighted %	Weighted SE
Volume of fluids (including breastmilk) given during illness			
No fluids	6	2.3	1
Much less	47	16.1	2.2
Somewhat less	134	47.3	2.4
About the same	100	30.7	2.4
More	14	3.6	1
DK/NR	0		
Missing	0		
Total	301	100	
Volume of solid foods given during illness			
No solids	15	5	1.3
Much less	46	15.2	2.4
Somewhat less	131	46.2	2.6
About the same	104	32.5	2.5
More	4	1.1	0.6
DK/NR	1		
Missing	0		
Total	301	100	

**Table D.7.4a Immunization against common childhood illnesses**

Percent distribution of children aged 0-59 months, as reported by their mothers						
Immunization	Recall			Vaccination card		
	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE
<b>BCG vaccine (tuberculosis), among children 0-59 months</b>						
None recalled/recorded	47	2.8	0.7	108	6.8	1.1
1 dose	1942	96.3	0.7	1661	93.2	1.1
2+ doses	20	0.9	0.3	0	0	
DK/NR, missing	227			467		
Total	2236	100		2236	100	
<b>Oral polio vaccine, among children 6-59 months</b>						
None recalled/recorded	53	3.2	0.8	85	6.1	1.1
1 dose	256	13.9	1	60	4.3	0.8
2 doses	135	8.2	0.9	68	4.7	0.8
3+ doses	1350	74.7	1.6	1359	84.9	1.7
DK/NR, missing	222			444		
Total	2016	100		2016	100	
<b>Pentavalent vaccine (DPT, HepB, HiB), among children 6-59 months</b>						
None recalled/recorded	58	3.6	0.7	95	6.8	0.9
1 dose	188	10.5	1.3	52	3.6	0.6
2 doses	129	7.4	0.9	116	7.2	1
3+ doses	1429	78.4	1.9	1309	82.5	1.7
DK/NR, missing	212			444		
Total	2016	100		2016	100	
<b>Pneumoccal conjugate vaccine, among children 6+ months who were born 2012 or later</b>						
None recalled/recorded	51	11.5	1.9	25	5.7	1.5
1 dose	60	13.1	1.9	24	6.5	1.9
2 doses	28	6.6	1.3	40	9	1.6
3+ doses	319	68.8	2.9	367	78.8	2.6
DK/NR, missing	100			102		
Total	558	100		558	100	
<b>Rotavirus vaccine, among children 6-59 months</b>						
None recalled/recorded	202	11.7	1.2	163	11	1.2
1 dose	213	12.2	1.1	78	5.5	1
2 doses	120	7.7	0.9	140	10	1.1
3+ doses	1202	68.4	2.1	1188	73.5	2.2
DK/NR, missing	279			447		
Total	2016	100		2016	100	
<b>Diphtheria, tetanus and pertussis (DPT) vaccine, among children 18-59 months</b>						
None recalled/recorded	198	15.7	1.6	223	21.4	2
1 dose	1076	78.5	1.6	949	78.6	2
2+ doses	79	5.7	0.9	0	0	
DK/NR, missing	194			375		
Total	1547	100		1547	100	
<b>Measles, mumps, and rubella (MMR) vaccine, among children 12-59 months</b>						
None recalled/recorded	175	12.6	1.6	170	13.7	1.6
1 dose	1178	75.3	1.9	1183	86.3	1.6
2+ doses	190	12.1	1.1	0	0	
DK/NR, missing	232			422		
Total	1775	100		1775	100	

**Table D.7.4b Immunization against common childhood illnesses, according to age group**

Percent distribution of children, as reported by their mothers									
Immunization	Recall			Vaccination card <sup>a</sup>			Vaccination card <sup>a</sup> plus recall		
	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE
Measles, mumps, and rubella (MMR) vaccine, at least 1 dose among children 12-23 months									
Yes	362	86.2	2.3	351	73.5	3.1	403	88.4	2.2
No	48	13.8	2.3	113	26.5	3.1	44	11.6	2.2
DK/NR, missing	65			11			28		
Total	475	100		475	100		475	100	
Fully immunized <sup>b</sup> , among children 18-59 months									
Yes	727	54.7	2.3	706	43.7	2.6	960	64.4	2.5
No	579	45.3	2.3	800	56.3	2.6	491	35.6	2.5
DK/NR, missing	241			41			96		
Total	1547	100		1547	100		1547	100	
Fully immunized <sup>b</sup> , among children 0-59 months									
Yes	1134	59.3	2.1	1161	49.9	2.6	1477	68.3	2.3
No	748	40.7	2.1	1021	50.1	2.6	627	31.7	2.3
DK/NR, missing	354			54			132		
Total	2236	100		2236	100		2236	100	
<sup>a</sup> Among 1,778 children aged 0-59 months who had a vaccine card available for review (80 percent of the sample, unweighted)									
<sup>b</sup> Full immunization for age is defined as follows: 0-2 months (BCG x1); >2-4 months (BCG x1, OPV x1, Penta x1, Pneum x1, Rota x1); >4-6 months (BCG x1, OPV x2, Penta x2, Pneum x2, Rota x2); >6-12 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3); >12-18 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3, MMR x1); >18-59 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3, MMR x1, DPT x1). All Pneum compliance is calculated among children born 2012 or later.									

**Table D.7.5 De-worming treatment**

Percent distribution of children, as reported by their mothers			
Treatment given	N	Weighted %	Weighted SE
De-worming treatment given at least two times in the last 12 months, among children age 12-59 months			
Yes	561	32.6	1.1
No	1122	67.4	1.1
DK/NR	3		
Missing	31		
Total	1717	100	

**Table D.8.1 Breastfeeding**

Percentage of children			
Characteristic	N	Weighted %	Weighted SE
Early initiation of breastfeeding (among children <24 months)			
Yes	1061	81.7	1.5
No	244	18.3	1.5
Missing, DK/NR	28		
Total	1333	100	
Exclusive breastfeeding (among children 0-5 months)			
Yes	111	55.6	4.6
No	104	44.4	4.6
Missing, DK/NR	5		
Total	220	100	
Continued breastfeeding at 1 year (among children 12-15 months)			
Yes	89	56.4	5
No	61	43.6	5
Missing, DK/NR	4		
Total	154	100	

**Table D.8.2 Solid foods**

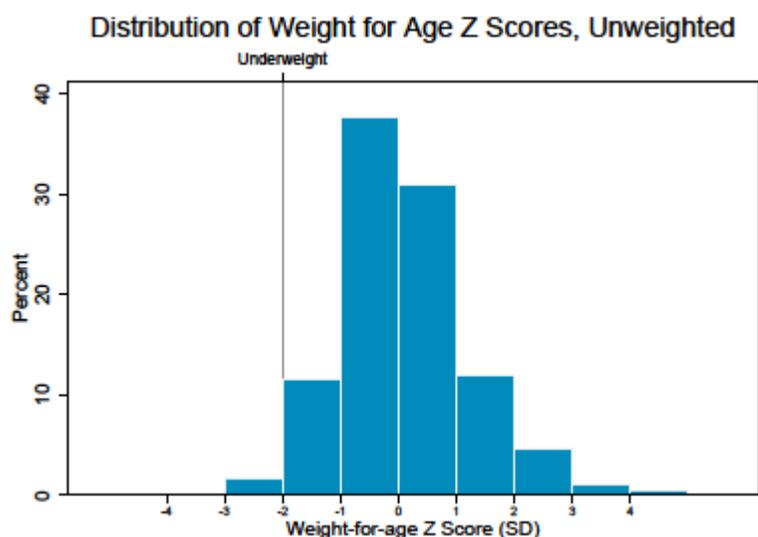
Percentage of children			
Characteristic	N	Weighted %	Weighted SE
<b>Introduction of solid foods (among children 6-8 months)</b>			
Yes	86	81.4	4.7
No	17	18.6	4.7
Missing, DK/NR	1		
Total	104	100	
<b>Minimum dietary diversity (among children 6-23 months)</b>			
Yes	336	44.9	2.6
No	369	55.1	2.6
Missing, DK/NR	11		
Total	716	100	
<b>Minimum meal frequency (among children 6-23 months)</b>			
Yes	342	50.1	2.4
No	309	49.9	2.4
Missing, DK/NR	65		
Total	716	100	
<b>Minimum acceptable diet (among children 6-23 months)</b>			
Yes	162	21.9	2
No	533	78.1	2
Missing, DK/NR	21		
Total	716	100	
<b>Consumption of iron-rich foods (among children 6-23 months)</b>			
Yes	261	35.9	2.6
No	444	64.1	2.6
Missing, DK/NR	11		
Total	716	100	

**Table D.8.3 Micronutrient supplements**

Percentage of children who received the supplement			
Type of supplement	N	Weighted %	Weighted SE
Vitamin A in the last six months (among children aged 0-59 months)			
Yes	913	39.6	2
No	1267	60.4	2
DK/NR	17		
Missing	39		
Total	2236	100	
Iron in the last day (among children aged 0-59 months)			
Yes	130	5.6	0.7
No	2061	94.4	0.7
DK/NR	6		
Missing	39		
Total	2236	100	
Packets of micronutrients in the last six months (among children aged 6-23 months)			
0 times	688	99.2	0.4
1-10 times	1	0.1	0.1
11-20 times	1	0.1	0.1
21-30 times	0	0	
31-40 times	1	0.1	0.1
41-50 times	1	0.1	0.1
51-59 times	0	0	
60+ times	3	0.4	0.3
DK/NR	8		
Missing	11		
Total	714	100	

**Table D.9 Age and sex of children measured**

Percent distribution of the de facto population of children age 0-59 months who underwent the Physical Measurement Module, by sex and type of measurement, unweighted data			
Measurement	Female (%)	Male (%)	Total (%)
<b>Height and weight</b>			
0-5	9.9	10.3	10.1
6-11	11.4	10.4	10.9
12-23	21.8	21	21.4
24-35	19.1	19.7	19.4
36-47	19.2	18.4	18.8
48-59	18.7	20.2	19.4
Total	100	100	100
Number of children	1074	1086	2160
<b>Anemia</b>			
0-5	1.2	1	1.1
6-11	12.2	11.3	11.8
12-23	24.2	22.8	23.5
24-35	20.8	22.1	21.4
36-47	21	20.4	20.7
48-59	20.6	22.4	21.5
Total	100	100	100
Number of children	962	961	1923



**Figure D.9.1.1 Distribution of weight-for-age z-scores among children aged 0-59 months**

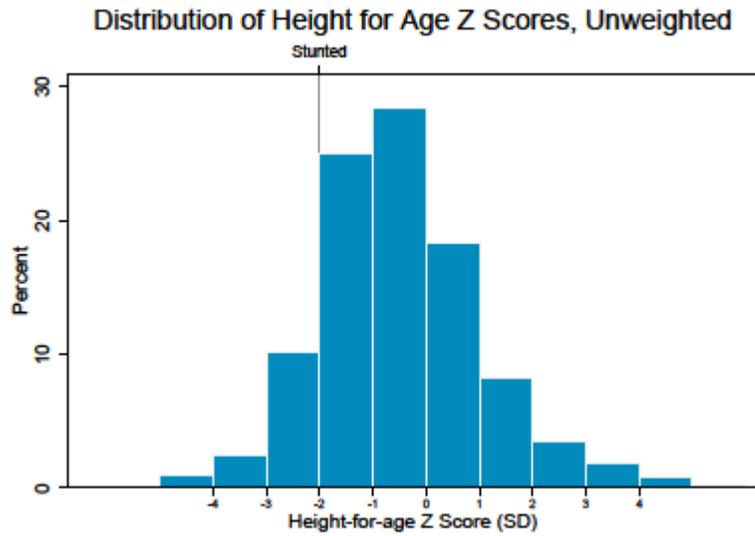


Figure D.9.2.1 Distribution of height-for-age z-scores among children aged 0-59 months

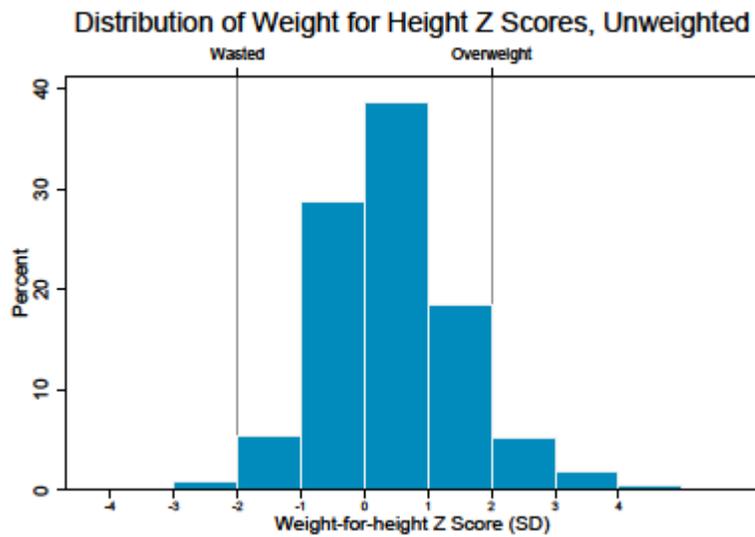
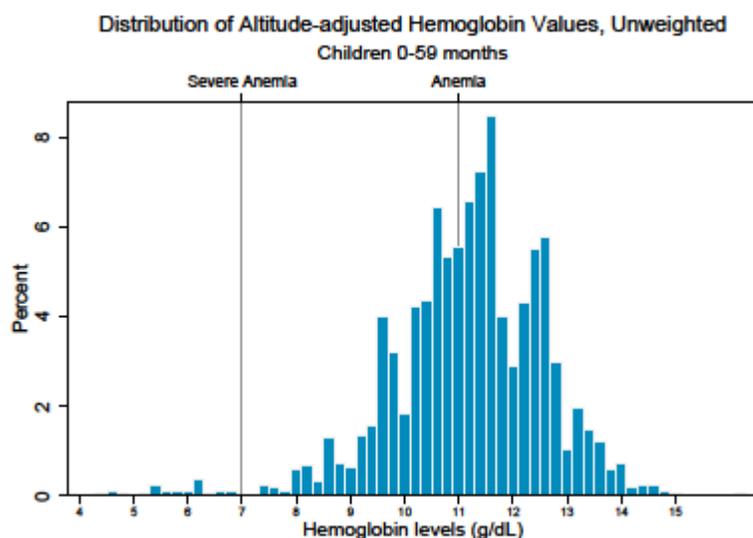


Figure D.9.3.1 Distribution of weight-for-height z-scores among children aged 0-59 months

**Table D.9.2 Prevalence of underweight in children aged 0-59 months**

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: weight-for-height, height-for-age, and weight-for-age, by age and sex									
Characteristic	Weight for age (underweight)			Height-for-age (stunting)		Weight-for-height (wasting)			Number of children
	Percent < -3 SD	Percent < -2 SD	Percent > +2 SD	Percent < -3 SD	Percent < -2 SD	Percent < -3 SD	Percent < -2 SD	Percent > +2 SD	
Total	1.1	4.3	4.7	4	14	0.6	1.5	6.7	2236
Sex									
Male	0.8	3.7	5.2	5.1	15.3	0.4	1.4	7.7	1119
Female	1.3	5	4.1	2.9	12.6	0.8	1.7	5.7	1106
Age in months									
0-5	1.3	2.5	14.3	0	0.9	2.2	4	6.3	220
6-23	0.9	1.2	8.4	1.1	4.3	0	0.4	10	241
12-23	0.1	2.1	5.8	2.5	11.5	0.2	1.4	7.6	475
24-59	1.3	6.2	1.8	6	19.5	0.5	1.2	5.8	1234



**Figure D.9.4.1 Distribution of hemoglobin values among children aged 0-59 months**

**Table D.9.4.2 Prevalence of anemia in children aged 0-59 month**

Characteristic	N	Weighted Anemia Prevalence	
		< 7 g/dL	< 11g/dL
Age in months			
0-5	220	12.5	67
6-11	241	1.3	66.6
12-23	475	2.7	48.9
24-59	1300	1.1	32
0-59	2236	1.6	40.5
6-23			
	716	2.2	54.8
Sex			
Male	1119	1.6	40.6
Female	1106	1.6	40.3

**Table D.10.1.1 Exposure to community health workers**

Percent distribution of women			
Characteristic	N	Weighted %	Weighted SE
Met with a community health worker in the last month			
Yes	63	2	0.4
No	2745	98	0.4
DK/NR	2		
Missing	13		
Total	2823	100	
Number of times respondent met with a community health worker in the last month			
Did not meet	2745	98	0.4
One time	44	1.1	0.3
Two times	15	0.7	0.3
Three times	2	0.1	0.1
Four or more times	2	0.1	0.1
DK/NR	2		
Missing	13		
Total	2823	100	

**Table D.10.1.2 Services provided by community health workers**

Percent distribution of women who met with a community health worker in the last month			
Type of service	N	Weighted %	Weighted SE
<b>Referral for prenatal care</b>			
Yes	24	34.6	8
No	39	65.4	8
DK/NR	0		
Missing	0		
Total	63	100	
<b>Referral for in-facility delivery</b>			
Yes	15	19.6	6.1
No	48	80.4	6.1
DK/NR	0		
Missing	0		
Total	63	100	
<b>Referral for postnatal care</b>			
Yes	23	42.8	9.1
No	40	57.2	9.1
DK/NR	0		
Missing	0		
Total	63	100	
<b>Referral for voluntary counseling and testing for the prevention of HIV/syphilis transmission from mother to child</b>			
Yes	20	29.9	7.8
No	43	70.1	7.8
DK/NR	0		
Missing	0		
Total	63	100	
<b>Advice about family planning and contraception</b>			
Yes	42	66.2	9.8
No	21	33.8	9.8
DK/NR	0		
Missing	0		
Total	63	100	
<b>Child vaccination</b>			
Yes	40	49.8	9.7
No	23	50.2	9.7
DK/NR	0		
Missing	0		
Total	63	100	

Percent distribution of women who met with a community health worker in the last month			
Type of service	N	Weighted %	Weighted SE
<b>Advice about child nutrition</b>			
Yes	38	59.8	9.4
No	25	40.2	9.4
DK/NR	0		
Missing	0		
Total	63	100	
<b>Information, education, and communication sessions</b>			
Yes	27	49.6	9.5
No	36	50.4	9.5
DK/NR	0		
Missing	0		
Total	63	100	
<b>Other</b>			
Yes	16	24.7	7.4
No	47	75.3	7.4
DK/NR	0		
Missing	0		
Total	63	100	

**Table D.10.4.1 Exposure to breastfeeding, child nutrition, and child health interventions**

Percent distribution among women with children under 5			
Characteristic	N	Weighted %	Weighted SE
Received guidance or advice about breastfeeding in the last 12 months			
Yes	526	27.5	1.7
No	1328	71	1.7
DK/NR	2		
Missing	13		
Total	1869	100	
Received guidance or advice about child nutrition in the last 12 months			
Yes	504	25.9	1.5
No	1351	72.7	1.5
DK/NR	1		
Missing	13		
Total	1869	100	
Received guidance or advice about danger signs for children's health in the last 12 months			
Yes	512	26.6	1.6
No	1343	72	1.6
DK/NR	1		
Missing	13		
Total	1869	100	

**Table D.10.4.2 Exposure to child health interventions, by source**

Percentage of women with children under 5 who received guidance or advice about breastfeeding, child nutrition and danger signs for children's health in the last 12 months, and among them, the percentage of women with guidance or advice from specific sources			
Characteristic	Intervention type		
	Breast-feeding	Child nutrition	Child health
Received guidance or advice about interventions for children's health in the last 12 months (%)	27.9	26.2	27
<i>Number of women</i>	1871	1871	1871
Source of advice (%)			
Public hospital	29.5	26.4	25.5
Public health unit	48.9	48.2	50.9
Public health center/clinic	18.5	20.5	19.2
Public mobile clinic	0.1	0	0.3
Other public health center	0.4	0.5	0.5
Private hospital	0.9	0.6	0.6
Private health center/clinic	2.2	2.1	2.2
Private office	0.9	0.7	0.6
Private mobile clinic	0	0.2	0.1
Other private health center	0.2	0.2	0.2
Pharmacy	0	0	0
Community health worker	0.6	0.2	0.2
Traditional healer	0	0	0
Other	0.9	1.4	1.7
DK/NR, missing	0	0	0
<i>Number of women</i>	526	504	512

**Table D.10.5 Satisfaction with community health workers**

Percent distribution of women who met with a community health worker in the last month by level of satisfaction in different fields					
Field of satisfaction	Level of satisfaction				Total
	Very dis-satisfied	Dis-satisfied	Satisfied	Very satisfied	
Number of visits received from community health workers	5.3	4	81.7	9	100
Knowledge and training of community health workers	6	3.5	83.7	6.8	100
Information provided by community health workers	8.5	2.6	76.6	12.2	100
Respectfulness shown by community health workers	8.6	2.3	81.8	7.3	100

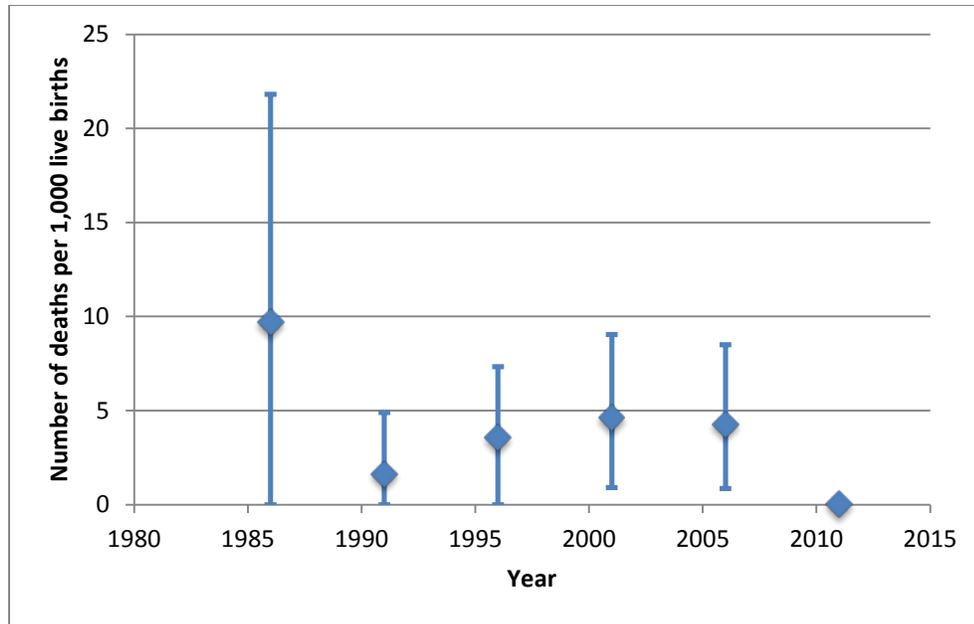


Figure D.11.1 Neonatal mortality estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

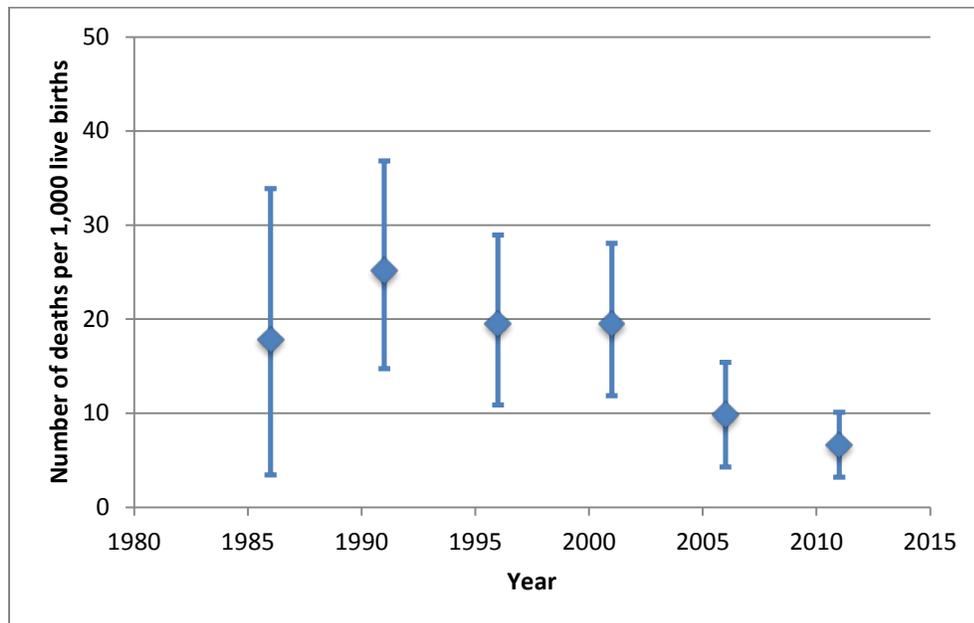


Figure D.11.2 Infant mortality estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

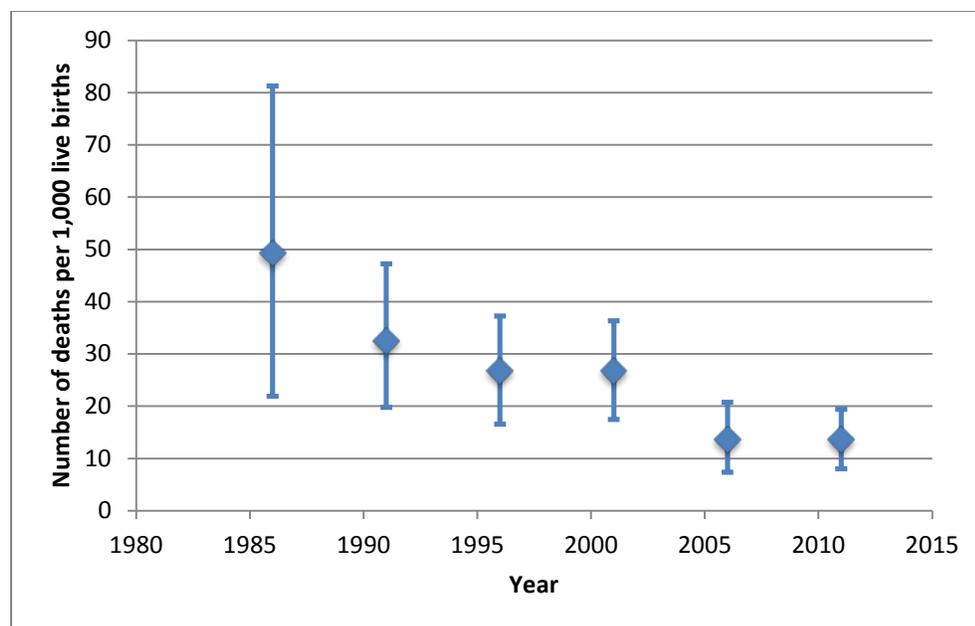


Figure D.11.3 Mortality in children under five years of age estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

Table D.11.3a Mortality in children under 5 years of age in the target area of the initiative

Based on complete birth history data from the five years preceding the interview, among study areas, Mexico 2013

Child mortality indicator	Deaths per 1,000 live births	95% CI
Neonatal mortality	0.0	(0.0-0.0)
Infant mortality	6.6	(3.2-10.1)
Under-5 mortality	13.6	(8.0-19.4)

APPENDIX E. CHARACTERISTICS OF RESPONDENTS IN CONTROL SEGMENTS

**Table E.2.3.1 Household composition: age and sex**

Percent distribution of the de facto household population by five-year age groups based on the household roster completed as part of the SM2015 Household Survey			
Age	Male (%)	Female (%)	Total (%)
<5	11.1	10.7	10.9
5-9	11.9	11	11.4
10-14	11.7	11.4	11.5
15-19	11.6	10.7	11.1
20-24	10.5	10.3	10.4
25-29	8.1	8.7	8.4
30-34	8	8.1	8
35-39	5.8	5.8	5.8
40-44	4.8	5.1	5
45-49	4.2	4.4	4.3
50-54	3.7	3.6	3.7
55-59	2.6	2.9	2.7
60-64	2	2	2
65-69	1.2	1.7	1.5
70-74	1.1	1.3	1.2
75-79	0.7	1.1	0.9
80+	1.1	1.3	1.2
Total	100	100	100
N	7125	7435	14560

**Table E.2.3.2 Household composition**

Number of households, women and children; and percent distribution of households by sex of head of the household, number of usual members, and marital status of members 15+			
Household characteristic	N	%	SE
Number of households	771		
Number of women	1103		
Number of children	818		
Sex of the head of the household			
Male	528	68.5	1.7
Female	243	31.5	1.7
DK/DTR	0		
Missing	0		
Total	771	100	
Number of usual members			
1	1	0.1	0.1
2	12	1.6	0.4
3	132	17.1	1.4
4	157	20.4	1.5
5	146	18.9	1.4
6	102	13.2	1.2
7	84	10.9	1.1
8	47	6.1	0.9
9+	90	11.7	1.2
DK/DTR	0		
Missing	0		
Total	771	100	
Marital status of members of the household			
Single	857	33.3	0.9
Married	717	27.8	0.9
Open union / partnered	879	34.1	0.9
Widow / divorced / separated	122	4.7	0.4
Other	2		
DK/DTR	0		
Missing	2577	100	
Total	4353	100	

**Table E.2.4.1a Household characteristics: water source**

Percent distribution of households by source of drinking water, location of water source and round trip time to obtain drinking water			
Household characteristic	N	Weighted %	Weighted SE
<b>Source of drinking water</b>			
Pipes that lead to the house	476	59	6.3
Pipes that lead to the patio/yard	62	8.9	1.9
Public pump	13	1.7	0.8
Tube or drilled well	26	3.9	1.3
Protected dug well	73	10	2.5
Unprotected dug well	44	6.5	2.2
Protected spring	20	2.9	1.1
Unprotected spring	18	3	1.3
Rainwater	0	0	
Water tank truck	0	0	
Car with a small tank	0	0	
Surface water	11	1.5	0.6
Bottled water	4	0.5	0.2
Water jug	5	0.8	0.4
Other	10	1.4	0.5
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Location of water source</b>			
In own house/home	502	63.1	5.6
In own patio/yard	91	13.3	2.4
Elsewhere	169	23.5	4.8
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Time to obtain drinking water (round trip)</b>			
Water on premises	590	77.2	4.9
Less than 30 minutes	136	19.4	4.3
30 minutes or longer	25	3.4	0.9
DK/DTR	0		
Missing	20		
Total	771	100	

**Table E.2.4.1b Household characteristics: sanitation**

Percent distribution of households by sanitation facility type and if the facility is shared			
Household characteristic	N	Weighted %	Weighted SE
<b>Sanitation facility</b>			
Flushing toilet	207	22.9	5.8
Toilet with water poured from gourds	17	2.4	0.7
Latrine / pit toilet	455	62.6	6
Dry toilet	3	0.4	0.2
No toilet, bushes, field	76	11.1	2.9
Other	4	0.5	0.3
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Shared toilet/facilities, among households using any type of toilet</b>			
Yes	83	12.8	1.4
No	598	87.2	1.4
DK/DTR	1		
Missing	0		
Total	682	100	

**Table E.2.4.2 Household characteristics: cooking fuel**

Percent distribution of households by cooking fuel source and the location for cooking food; and percentage of households with a separate kitchen			
Household characteristic	N	Weighted %	Weighted SE
Cooking fuel source (the respondent was to select all sources that applied)			
Electricity	8	1	0.3
Gas tank	219	24.4	5.7
Coal	1	0.1	0.1
Wood	637	87.3	4.1
Straw/twigs/grass	4	0.5	0.3
Agricultural crops	0	0	
No food is cooked at home	0	0	
Other	0	0	
DK/DTR	0		
Missing	9		
Total	771		
Location for cooking food, among those who reported a cooking fuel source			
In the house	588	77.1	2.8
In a separate building	145	19.2	2.4
Outside	27	3.4	0.8
Other	2	0.2	0.2
DK/DTR	0		
Missing	0		
Total	762	100	
Separate kitchen, among those who reported a cooking fuel source and cook in the home			
Yes	465	79.9	2.5
No	123	20.1	2.5
DK/DTR	0		
Missing	0		
Total	588	100	

**Table E.2.4.3a Availability of assets: household effects**

Percent distribution of households with specific household effects							
Household characteristic	N	Weighted %	Weighted SE	Household characteristic	N	Weighted %	Weighted SE
<b>Electricity</b>				<b>Refrigerator</b>			
Yes	593	75.6	6.5	Yes	212	24.5	4.6
No	169	24.4	6.5	No	550	75.5	4.6
DK/DTR	0			DK/DTR	0		
Missing	9			Missing	9		
Total	771	100		Total	771	100	
<b>Radio</b>				<b>Computer</b>			
Yes	509	67.4	2.6	Yes	79	7.8	2.7
No	253	32.6	2.6	No	683	92.2	2.7
DK/DTR	0			DK/DTR	0		
Missing	9			Missing	9		
Total	771	100		Total	771	100	
<b>Television</b>				<b>Wristwatch</b>			
Yes	474	59.7	5.5	Yes	276	35.4	2.6
No	288	40.3	5.5	No	486	64.6	2.6
DK/DTR	0			DK/DTR	0		
Missing	9			Missing	9		
Total	771	100		Total	771	100	
<b>Cell phone</b>				<b>Guitar</b>			
Yes	563	72.7	3.8	Yes	39	4.4	1
No	199	27.3	3.8	No	723	95.6	1
DK/DTR	0			DK/DTR	0		
Missing	9			Missing	9		
Total	771	100		Total	771	100	
<b>Telephone (landline)</b>							
Yes	42	3.9	1.7				
No	719	96.1	1.7				
DK/DTR	1						
Missing	9						
Total	771	100					

**Table E.2.4.3b Availability of assets: means of transportation**

Percentage of households with specific means of transport			
Household characteristic	N	Weighted %	Weighted SE
<b>Bicycle</b>			
Yes	273	35	3.3
No	489	65	3.3
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Motorcycle / scooter</b>			
Yes	119	15.5	1.8
No	643	84.5	1.8
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Animal-driven cart</b>			
Yes	10	1.1	0.4
No	752	98.9	0.4
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Car</b>			
Yes	53	6.3	1.2
No	709	93.7	1.2
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Truck</b>			
Yes	6	0.7	0.4
No	756	99.3	0.4
DK/DTR	0		
Missing	9		
Total	771	100	

**Table E.2.4.3c Availability of assets: other assets**

Percentage distribution of number of rooms used for sleeping, and percentage of households with ownership of bank account, agricultural land and animals			
Household characteristic	N	Weighted %	Weighted SE
<b>Rooms used for sleeping</b>			
Zero	12	1.6	0.5
One	328	44.8	3.4
Two	251	32.9	1.9
Three or more	171	20.6	3.3
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Ownership of bank account</b>			
Yes	63	6.6	1.7
No	699	93.4	1.7
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Ownership of agricultural land</b>			
Yes, own	168	22.2	2.9
Yes, rent	50	6.8	1.5
Yes, share/community share	17	2.1	0.7
No	527	68.9	3.7
DK/DTR	0		
Missing	9		
Total	771	100	
<b>Ownership of animals (bull or cow, mule, goat, chicken, or pig)</b>			
Yes	430	59.2	4.5
No	332	40.8	4.5
DK/DTR	0		
Missing	9		
Total	771	100	

**Table E.2.5.1a Total household expenditures per person**

Percent distribution of households by monthly total expenditure per person			
Characteristic	N	Weighted %	Weighted SE
Monthly expenditure per person (córdobas)			
Less than C\$200	75	10.1	2
C\$200 - <400	155	20.6	2
C\$400 - <600	128	17.8	1.8
C\$600 - <800	110	15.4	1.7
C\$800 - <1000	71	9.4	1.5
C\$1000+	223	26.8	3.6
Missing	9		
Total	771	100	

**Table E.2.5.1b Household expenditures by type**

Percent distribution of households expenditures by type, as a proportion of total household monthly expenditure											
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
Food			Housing, gas, electricity, and water			Transportation					
0%	10	1.3	0.4	0%	184	27.3	6.9	0%	426	56	2.4
0.1% - 9%	6	0.7	0.3	0.1% - 9%	355	46.6	5.1	0.1% - 9%	229	30	2.5
10% - 24%	25	2.7	0.8	10% - 24%	157	18.7	3.1	10% - 24%	85	11.3	1.4
25% - 49%	154	19.8	1.8	25% - 49%	43	4.9	1.3	25% - 49%	16	2.4	0.6
50% - 74%	243	33.2	2.2	50% - 74%	9	1.1	0.4	50% - 74%	0	0	
75% - 89%	184	25	2.4	75% - 89%	2	0.2	0.2	75% - 89%	2	0.3	0.2
≥90%	118	17.2	2.8	≥90%	9	1.1	0.4	≥90%	1	0.1	0.1
DK/DTR	22			DK/DTR	1			DK/DTR	1		
Missing	9			Missing	11			Missing	11		
Total	771	100		Total	771	100		Total	771	100	
Alcoholic beverages, tobacco, and narcotics			Clothing and footwear			Communication					
0%	617	83	1.2	0%	492	65.7	2.5	0%	333	45.1	3.8
0.1% - 9%	71	8.9	0.8	0.1% - 9%	80	9.3	1.7	0.1% - 9%	375	48.4	3.6
10% - 24%	47	6	1.1	10% - 24%	127	17.2	1.6	10% - 24%	40	5.3	0.7
25% - 49%	12	1.6	0.4	25% - 49%	45	6.1	1.1	25% - 49%	5	0.7	0.3
50% - 74%	4	0.5	0.2	50% - 74%	9	1.2	0.5	50% - 74%	1	0.2	0.2
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	2	0.3	0.2	≥90%	2	0.4	0.3
DK/DTR	9			DK/DTR	5			DK/DTR	4		
Missing	11			Missing	11			Missing	11		
Total	771	100		Total	771	100		Total	771	100	
Education tuition, fees and school supplies			Furniture, household equipment and routine household maintenance			Recreation, culture, restaurants and hotels					
0%	269	38	2.5	0%	681	91.6	1.5	0%	675	92	1.9
0.1% - 9%	354	46.5	2.6	0.1% - 9%	44	5.2	1.3	0.1% - 9%	66	7.5	1.7
10% - 24%	91	12.5	1.2	10% - 24%	17	1.9	0.6	10% - 24%	5	0.5	0.3
25% - 49%	18	2.2	0.6	25% - 49%	8	1	0.4	25% - 49%	1	0.1	0.1
50% - 74%	3	0.5	0.4	50% - 74%	3	0.4	0.3	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	2	0.3	0.2	≥90%	0	0		≥90%	0	0	
DK/DTR	23			DK/DTR	7			DK/DTR	13		
Missing	11			Missing	11			Missing	11		
Total	771	100		Total	771	100		Total	771	100	

**Table E.2.5.1c Household health care expenditures by type**

Percent distribution of households health care expenditures by type, as a proportion of total household monthly expenditure							
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
<b>Out-of-pocket health care</b>				<b>Private insurance premiums</b>			
0%	530	71.1	2.9	0%	755	99.7	0.2
0.1% - 9%	120	14.8	2	0.1% - 9%	4	0.3	0.2
10% - 24%	80	10.1	1	10% - 24%	0	0	
25% - 49%	24	3.2	0.7	25% - 49%	0	0	
50% - 74%	6	0.7	0.3	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	0	0	
DK/DTR	0			DK/DTR	1		
Missing	11			Missing	11		
Total	771	100		Total	771	100	
<b>Social security premiums</b>				<b>Other costs associated with accessing health care</b>			
0%	688	91.8	1.8	0%	750	99	0.4
0.1% - 9%	54	6.3	1.5	0.1% - 9%	9	1	0.4
10% - 24%	14	1.6	0.5	10% - 24%	0	0	
25% - 49%	3	0.3	0.2	25% - 49%	0	0	
50% - 74%	0	0		50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0	
≥90%	0	0		≥90%	0	0	
DK/DTR	1			DK/DTR	1		
Missing	11			Missing	11		
Total	771	100		Total	771	100	

**Table E.2.5.2 Household medical expenditures by type**

Percent distribution of household health expenditures by type of care as a proportion of total household monthly health expenditure, among households with any reported out-of-pocket health care expenses or health care access expenses															
Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE	Expenditure category	N	Weighted %	Weighted SE
Care that required overnight stay in a hospital or health facility				Care by traditional or alternative healers, or traditional birth attendants				Care by pharmacists or medications bought from a pharmacy without a prescription				Diagnostic and laboratory tests such as X-rays or blood tests			
0%	213	93	2.2	0%	230	100		0%	127	57.4	4.9	0%	186	83	3.1
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	11	4.6	1.3	0.1% - 9%	3	1.6	0.9
10% - 24%	2	0.6	0.4	10% - 24%	0	0		10% - 24%	20	7.9	2.1	10% - 24%	13	4.6	1.6
25% - 49%	3	1.2	0.8	25% - 49%	0	0		25% - 49%	14	5.4	1.8	25% - 49%	10	4.1	1.5
50% - 74%	2	1.1	0.8	50% - 74%	0	0		50% - 74%	5	1.7	1.1	50% - 74%	2	0.6	0.4
75% - 89%	1	0.4	0.4	75% - 89%	0	0		75% - 89%	1	0.5	0.5	75% - 89%	2	0.7	0.5
≥90%	9	3.8	1.3	≥90%	0	0		≥90%	50	22.7	3.5	≥90%	14	5.3	1.5
DK/DTR	0			DK/DTR	0			DK/DTR	3			DK/DTR	0		
Missing	1			Missing	1			Missing	0			Missing	1		
Total	231	100		Total	231	100		Total	231	100		Total	231	100	
Other costs associated with staying overnight in a hospital or health facility				Dentists				Health care products such prescription glasses, hearing aids, prosthetic devices, etc.				Other health care products or services			
0%	221	96.3	1.6	0%	215	94.3	1.8	0%	217	95.5	1.4	0%	223	96.3	2.1
0.1% - 9%	4	1.6	1	0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	1	0.4	0.5	10% - 24%	0	0		10% - 24%	1	0.5	0.4	10% - 24%	2	1.1	0.8
25% - 49%	0	0		25% - 49%	3	1.4	0.7	25% - 49%	1	0.3	0.3	25% - 49%	1	0.4	0.4
50% - 74%	1	0.4	0.4	50% - 74%	1	0.4	0.4	50% - 74%	5	2	0.8	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	3	1.3	0.7	≥90%	11	3.9	1.4	≥90%	6	1.8	0.9	≥90%	4	2.1	1.4
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	1			Missing	1			Missing	1			Missing	1		
Total	231	100		Total	231	100		Total	231	100		Total	231	100	
Care by doctors, nurses, or other health workers that did not require overnight stay				Medications prescribed by health personnel											
0%	214	93.4	1.3	0%	113	51.7	3.6								
0.1% - 9%	2	0.8	0.6	0.1% - 9%	1	0.5	0.5								
10% - 24%	2	0.8	0.6	10% - 24%	5	1.6	0.8								
25% - 49%	7	3	1	25% - 49%	24	9.7	1.8								
50% - 74%	0	0		50% - 74%	17	7.3	1.6								
75% - 89%	1	0.5	0.4	75% - 89%	4	1.4	1								
≥90%	4	1.7	0.8	≥90%	66	27.8	3								
DK/DTR	0			DK/DTR	0										
Missing	1			Missing	1										
Total	231	100		Total	231	100									

**Table E.2.5.3 Household medical expenditures by source of financing**

Percent distribution of households by source of medical expenditures as a percentage of reported total household medical expenditures for overnight hospital stays in the last 12 months, among those households with overnight hospital stays															
Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE	Financing source	N	Weighted %	Weighted SE
Any of the household members' current income				Health insurance plan payment or reimbursement				Property sold				Political donations or grants			
0%	37	38.9	5.5	0%	99	100		0%	97	98	1.4	0%	98	99.2	0.8
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	1	0.9	1	10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0	
25% - 49%	4	3.7	2.3	25% - 49%	0	0		25% - 49%	0	0		25% - 49%	0	0	
50% - 74%	6	6.3	2.1	50% - 74%	0	0		50% - 74%	0	0		50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	51	50.1	6	≥90%	0	0		≥90%	2	2	1.4	≥90%	1	0.8	0.8
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	99	100		Total	99	100		Total	99	100		Total	99	100	
Savings (e.g. bank account)				Items sold (e.g., furniture, animals, or jewelry)				Money from relatives or friends who do not belong to the household				Another source			
0%	88	89.2	3.3	0%	97	98.3	1.2	0%	87	89.8	3.7	0%	92	90.8	4.1
0.1% - 9%	1	0.6	0.6	0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0	
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0	
25% - 49%	1	1	1	25% - 49%	0	0		25% - 49%	3	2.4	1.7	25% - 49%	1	1.1	1.1
50% - 74%	3	3.2	1.8	50% - 74%	0	0		50% - 74%	3	2.6	1.5	50% - 74%	0	0	
75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0		75% - 89%	0	0	
≥90%	6	6.1	2.9	≥90%	2	1.7	1.2	≥90%	6	5.2	2.2	≥90%	6	8.1	4.1
DK/DTR	0			DK/DTR	0			DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0			Missing	0			Missing	0		
Total	99	100		Total	99	100		Total	99	100		Total	99	100	
Reducing other household spending				Money loaned from someone who is not a friend of the family				Remittances from family members or friends abroad							
0%	88	89.5	3.4	0%	86	86.7	3.3	0%	94	96.2	1.9				
0.1% - 9%	0	0		0.1% - 9%	0	0		0.1% - 9%	0	0					
10% - 24%	0	0		10% - 24%	0	0		10% - 24%	0	0					
25% - 49%	2	1.7	1.2	25% - 49%	2	2.2	1.5	25% - 49%	0	0					
50% - 74%	0	0		50% - 74%	2	2	1.5	50% - 74%	1	0.7	0.7				
75% - 89%	1	1	1	75% - 89%	0	0		75% - 89%	0	0					
≥90%	8	7.8	2.4	≥90%	9	9.1	2.9	≥90%	4	3.1	1.8				
DK/DTR	0			DK/DTR	0			DK/DTR	0						
Missing	0			Missing	0			Missing	0						
Total	99	100		Total	99	100		Total	99	100					

**Table E.3.1.1 Demographic characteristics of respondents**

Percent distribution of the household population by age, marital status and respondent's relationship to the head of the household			
Background characteristic	N	%	SE
<b>Age</b>			
15-19 years	216	19.6	1.2
20-24 years	261	23.7	1.3
25-29 years	213	19.3	1.2
30-34 years	160	14.5	1.1
35-39 years	99	9	0.9
40-44 years	74	6.7	0.8
45-49 years	80	7.3	0.8
Missing	0		
Total	1103	100	
<b>Marital status</b>			
Single	364	33	1.4
Married	284	25.7	1.3
Open union / partnered	420	38.1	1.5
Divorced	4	0.4	0.2
Separated	26	2.4	0.5
Widowed	4	0.4	0.2
Other	0	0	
DK/DTR	1	0.1	0.1
Missing	0		
Total	1103	100	
<b>Respondent's relationship to the head of household</b>			
Head of the household	126	11.4	1
Spouse	207	18.8	1.2
Biological child	330	29.9	1.4
Adopted / step child	17	1.5	0.4
Grandchild	29	2.6	0.5
Niece / nephew	12	1.1	0.3
Mother / father	1	0.1	0.1
Sister / brother	16	1.5	0.4
Daughter-in-law / son-in-law	94	8.5	0.8
Sister-in-law / brother-in-law	5	0.5	0.2
Grandparent	0	0	
Mother-in-law / father-in-law	0	0	
Other relative	2	0.2	0.1
Non-relative	18	1.6	0.4
Life partner	239	21.7	1.2
Other	7	0.6	0.2
Missing	0		
Total	1103	100	

**Table E.3.1.2 Department and municipality of residence of respondents**

Municipality	No. of women
Jinotega	592
San Juan Río Coco	268
Telpaneca	243

**Table E.3.2.1 Educational attainment and literacy**

Percentage of women age 15-49 who attended school; percentage of women who attended a literacy course; percent distribution by highest level of education attended, among those who attended school; and literacy of women			
Education characteristic	N	Weighted %	Weighted SE
<b>Education</b>			
Attended school	989	87.6	2.4
Did not attend school	107	12.4	2.4
DK/DTR	1		
Missing	6		
Total	1103	100	
<b>Literacy course</b>			
Attended literacy course	152	15.5	2
Did not attend literacy course	945	84.5	2
DK/DTR	0		
Missing	6		
Total	1103	100	
<b>Highest level of education, among those who attended school</b>			
Primary	419	45.2	4.8
Secondary	348	34.4	2.9
Middle or high school	20	1.8	0.7
University	155	13.2	2.8
Technical school	46	5.3	1.5
DK/DTR	1		
Missing	0		
Total	989	100	
<b>Literacy</b>			
Cannot read at all	109	10.9	2.7
Able to read parts of sentence	136	12.5	2.8
Able to read whole sentence	840	75.3	3.8
Blind or visually impaired	8	1.3	0.8
DK/DTR	4		
Missing	6		
Total	1103	100	

**Table E.3.3 Employment**

Percent distribution of women age 15-49 by employment status and role			
Employment characteristic	N	Weighted %	Weighted SE
<b>Employment status</b>			
Employed and being paid for work	189	17.5	2.5
Employed but did not work in the last w	3	0.1	0.1
Employed by a family member without	7	0.4	0.1
Student	104	12.7	2.6
Homemaker	725	62.8	4.1
Retired	1	0.1	0.1
Unable to work due to disability	2	0.9	0.8
DK/DTR	59	5	1.1
Missing	6	0.5	0.3
Total	1		
<b>Occupational role, among women employed and being paid for work</b>			
Employee	177	92.7	3.6
Employer	3	0.8	0.5
Owner	2	1.5	1.2
Self-employed	7	5	2.6
DK/DTR	0		
Missing	0		
Total	189	100	

**Table E.3.4.1 Exposure to mass media**

Percent distribution of women by exposure to newspapers, radio and television; percentage exposed to all three forms of media and to any form of media at least once a week			
Characteristic	N	Weighted %	Weighted SE
<b>Newspapers, among fully or partially literate women</b>			
≥1 time per week	426	44.3	4.8
<1 time per week	153	16.6	2.4
Never	394	38.9	3.9
Not applicable	2	0.1	0.1
DK/DTR	1		
Missing	0		
Total	976	100	
<b>Radio</b>			
≥1 time per week	835	80.1	1.4
<1 time per week	101	8	1.2
Never	157	11.7	1.3
Not applicable	4	0.2	0.1
DK/DTR	0		
Missing	6		
Total	1103	100	
<b>Television</b>			
≥1 time per week	729	67.1	5.1
<1 time per week	77	8.2	1.6
Not applicable	268	23.7	4.6
Never	19	1.1	0.5
DK/DTR	4		
Missing	6		
Total	1103	100	
<b>Exposed to all three forms of media at least once per week, among fully or partially literate women</b>			
Yes	280	30.6	4.4
No	688	69	4.3
Not applicable	7	0.5	0.3
DK/DTR	1		
Missing	0		
Total	976	100	
<b>Exposed to any form of media at least once per week</b>			
Yes	280	27.9	4.4
No	765	71.5	4.3
Not applicable	9	0.6	0.3
DK/DTR	2		
Missing	47		
Total	1103	100	

**Table E.3.5.1a Proximity to health care facilities: nearest health facility**

Percent distribution of women according to distance and travel time to health care facility closest to household			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	161	16.3	4.1
1 to <5 km	583	57.3	6
5 to <10 km	127	15.5	4.5
≥10 km	97	10.9	4.2
DK/DTR	129		
Missing	6		
Total	1103	100	
<b>Travel time</b>			
<15 min	289	24.4	4.8
15 to <30 min	285	25.1	3.7
30 to <45 min	173	17.7	2.6
45 to <60 min	38	5.7	1.5
≥60 min	276	27.2	6.2
DK/DTR	8		
Missing	34		
Total	1103	100	

**Table E.3.5.1b Proximity to health care facilities: usual health facility**

Percent distribution of women according to distance and travel time to health care facility that the head of household usually attends			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	136	13.3	3.1
1 to <5 km	553	57.5	5.8
5 to <10 km	117	15.8	4
≥10 km	118	13.5	4.4
DK/DTR	115		
Missing	0		
Total	1039	100	
<b>Travel time</b>			
<15 min	258	20.3	3.9
15 to <30 min	279	26.5	4
30 to <45 min	170	18.2	2.7
45 to <60 min	41	6.6	1.5
≥60 min	288	28.4	6.5
DK/DTR	0		
Missing	3		
Total	1039	100	

**Table E.3.5.1c Proximity to health care facilities: health facility for delivery**

Percent distribution of women according to distance and travel time to health care facility attended for most recent delivery in the last two years			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	7	2.1	1.1
1 to <5 km	114	31.9	7.2
5 to <10 km	23	8.3	2.8
≥10 km	158	57.6	6.9
DK/DTR	81		
Missing	0		
Total	383	100	
<b>Travel time</b>			
<15 min	37	8.3	1.9
15 to <30 min	49	11.9	2.6
30 to <45 min	33	8.5	2.6
45 to <60 min	12	3.7	1.2
≥60 min	244	67.7	4.8
DK/DTR	8		
Missing	0		
Total	383	100	

**Table E.3.5.1d Proximity to health care facilities: health facility for recent illness**

Percent distribution of women according to distance and travel time to health care facility attended for respondent's recent illness or child's recent illness			
Distance and time	N	Weighted %	Weighted SE
<b>Distance</b>			
<1 km	114	12	2.7
1 to <5 km	496	57.1	5.1
5 to <10 km	101	13.2	3.6
≥10 km	150	17.7	4.1
DK/DTR	130		
Missing	0		
Total	991	100	
<b>Travel time</b>			
<15 min	231	18.3	3.3
15 to <30 min	239	23.1	3.8
30 to <45 min	161	19.6	3.2
45 to <60 min	34	5.8	1.5
≥60 min	319	33.2	6.7
DK/DTR	5		
Missing	2		
Total	991	100	

**Table E.3.6.1 Current health status**

Percent distribution of women age 15-49 by self-rated current health status relative to the health status last year and percentage who can easily perform daily activities			
Characteristic	N	Weighted %	Weighted SE
<b>Current health relative to health last year</b>			
Better	399	36.8	3.1
Worse	150	13.5	1.7
About the same	545	49.7	2.8
DK/DTR	3		
Missing	6		
Total	1103	100	
<b>Ability to perform daily activities</b>			
Easily	846	75.9	2.7
With some difficulty	220	21.1	2.1
With much difficulty	27	2.8	1.1
Unable to do	3	0.1	0.1
DK/DTR	1		
Missing	6		
Total	1103	100	

**Table E.3.6.2 Recent illness**

Percentage of women age 15-49 who were sick in the last two weeks; and among those who were sick, percent distribution by type of recent illness			
Characteristic	N	Weighted %	Weighted SE
<b>Respondent was sick during the past two weeks</b>			
Yes	329	29.7	3.3
No	768	70.3	3.3
DK/DTR	0		
Missing	6		
Total	1103	100	
<b>Type of illness, among those sick in the past two weeks</b>			
Fever	19	5.2	2
Malaria	0	0	
Cough / chest infection	25	5.4	1.4
Tuberculosis	0	0	
Asthma	6	3.9	2.5
Bronchitis	1	0.1	0.1
Pneumonia	0	0	
Diarrhea without blood	1	0.3	0.3
Diarrhea with blood	1	0.2	0.2
Diarrhea with vomiting	0	0	
Vomiting	0	0	
Abdominal pain	25	9.8	3.3
Anemia	0	0	
Skin rash / infection	1	0.2	0.2
Eye / ear infection	3	0.6	0.3
Measles	0	0	
Jaundice	0	0	
Headache	76	19.8	3.2
Toothache	6	1.2	0.6
Stroke	0	0	
Hypertension	7	2.4	1.3
Diabetes	0	0	
HIV/AIDS	0	0	
Paralysis	1	0.3	0.3
Gynecologic problems	7	1.2	0.5
Obstetric problems	0	0	
Other	149	49.6	4.1
DK/DTR	1		
Missing	0		
Total	329	100	

**Table E.3.6.3 Utilization of health services**

Among women who reported sick in the last two weeks, percentage of women who sought care for the illness; and among women who sought care, percent distribution by timing of care-seeking after onset of illness			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for recent illness</b>			
Yes	139	44.6	5.2
No	190	55.4	5.2
DK/DTR	0		
Missing	0		
Total	329	100	
<b>Type of health facility where care was sought</b>			
Public hospital	35	33.8	8.7
Public health unit	51	35.5	8.7
Public health center / clinic	27	15.8	3.7
Public mobile clinic	0	0	
Other public health facility	0	0	
Private hospital	0	0	
Private health center / clinic	11	7	3.3
Private office	9	5.4	2.9
Private mobile clinic	0	0	
Other private health facility	1	0.5	0.5
Pharmacy	1	0.4	0.4
Community health worker	0	0	
Traditional healer	0	0	
Other	4	1.6	0.9
DK/DTR	0		
Missing	0		
Total	139	100	
<b>Admitted to hospital for care, among women who sought care at a public or private: hospital, health center / clinic, mobile clinic, or other health facility; public health unit; private office; or pharmacy</b>			
Yes	9	13.2	7.6
No	126	86.8	7.6
DK/DTR	0		
Missing	0		
Total	135	100	

**Table E.3.6.4 Insurance coverage**

Percentage distribution of insurance status among all women, women who reported sick in the last two weeks, and women who reported sick in the last two weeks but did not seek care			
Insurance status	N	Weighted %	Weighted SE
<b>Insurance among all women</b>			
MINSA	0	0	
INSS	85	9.4	1.9
Government / military	2	0.1	0.1
Private insurance	0	0	
Other	0	0	
None	1007	90.5	2
DK/DTR	3		
Missing	6		
Total	1103	100	
<b>Insurance among women who were sick in the past two weeks</b>			
MINSA	0	0	
INSS	41	14.4	3.2
Government / military	0	0	
Private insurance	0	0	
Other	0	0	
None	287	85.6	3.2
DK/DTR	1		
Missing	0		
Total	329	100	
<b>Insurance among women who were sick in the past two weeks but did not seek care</b>			
MINSA	0	0	
INSS	22	16.4	5.9
Government / military	0	0	
Private insurance	0	0	
Other	0	0	
None	167	83.6	5.9
DK/DTR	1		
Missing	0		
Total	190	100	

**Table E.3.6.5 Other barriers to health care utilization**

Percentage of women according to perceived barriers to health care utilization, among among women who reported being sick in the last two weeks but did not seek care							
Reason for not seeking care	N	Weighted %	Weighted SE	Reason for not seeking care	N	Weighted %	Weighted SE
<b>Not sick enough to seek treatment</b>				<b>The health center's staff is not knowledgeable</b>			
Yes	24	16.7	4.8	Yes	4	1.4	0.6
No	166	83.3	4.8	No	186	98.6	0.6
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
<b>Treated self at home</b>				<b>Do not trust the staff</b>			
Yes	58	37.4	4.2	Yes	6	2.9	1.5
No	132	62.6	4.2	No	184	97.1	1.5
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
<b>Care is too expensive</b>				<b>Was previously mistreated</b>			
Yes	15	5.2	1.5	Yes	4	1.2	0.6
No	175	94.8	1.5	No	186	98.8	0.6
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
<b>Health center is too far away</b>				<b>Tried, but was refused care</b>			
Yes	11	9.3	5.2	Yes	5	2.9	1.5
No	179	90.7	5.2	No	185	97.1	1.5
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
<b>Could not find transportation</b>				<b>Did not get permission to go to the doctor</b>			
Yes	5	2	0.9	Yes	2	0.5	0.4
No	185	98	0.9	No	188	99.5	0.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
<b>Could not afford transportation</b>				<b>Did not want to go alone</b>			
Yes	12	4.5	1.6	Yes	2	0.6	0.5
No	178	95.5	1.6	No	188	99.4	0.5
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	

**Table E.3.6.5 continued**

Reason for not seeking care	N	Weighted %	Weighted SE	Reason for not seeking care	N	Weighted %	Weighted SE
Did not know where to go				Too busy with work, children, and other commitments			
Yes	0	0		Yes	22	9.3	2.8
No	190	100		No	168	90.7	2.8
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
Health center infrastructure is poor				Religious / cultural beliefs			
Yes	0	0		Yes	0	0	
No	190	100		No	190	100	
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
Health center does not have enough drugs				No one present at the center when visited			
Yes	39	15.3	3.1	Yes	3	0.9	0.5
No	151	84.7	3.1	No	187	99.1	0.5
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
Health center is not well equipped				Other			
Yes	7	2.8	1.2	Yes	33	13.9	4.1
No	183	97.2	1.2	No	157	86.1	4.1
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	190	100		Total	190	100	
It is difficult to deal with health center personnel							
Yes	8	7.2	4.5				
No	182	92.8	4.5				
DK/DTR	0						
Missing	0						
Total	190	100					

**Table E.4.2.1 Parity and age at first birth**

Percent of women age 15-49 who have ever given birth, their age at first birth, and the percent of women who have had a miscarriage, stillbirth, or abortion			
Characteristic	N	Weighted %	Weighted SE
<b>Ever given birth</b>			
Yes	887	72.9	2.3
No	210	27.1	2.3
DK/DTR	0		
Missing	6		
Total	1103	100	
<b>Age at first birth, among parous women</b>			
12-14 years	33	4.3	1.1
15-19 years	546	65.6	2.6
20-24 years	252	25.3	2.7
25-29 years	46	4.3	1.2
30-34 years	7	0.5	0.2
35-39 years	1	0.1	0.1
40-44 years	0	0	
45-49 years	0	0	
DK/DTR	0		
Missing	2		
Total	887	100	
<b>Ever had a stillbirth, miscarriage, or abortion</b>			
Yes	99	9.9	2.4
No	998	90.1	2.4
DK/DTR	0		
Missing	6		
Total	1103	100	

**Table E.4.3.1 Intervals between births**

Among women with two or more children, percent distribution by duration of the birth intervals			
Mean birth interval	N	Weighted %	Weighted SE
<b>Among women with more than one child</b>			
9-11 months	0	0	
12-23 months	33	7.7	1.5
24-35 months	123	23.3	3.5
36-47 months	117	22.4	2.7
48-59 months	110	18.1	2.7
≥60 months	188	28.4	4.1
Missing	25		
Total	596	100	
<b>Among women with two children</b>			
9-11 months	0	0	
12-23 months	16	6.4	2.3
24-35 months	32	20	5.9
36-47 months	30	13.6	3.7
48-59 months	31	15.8	3.9
≥60 months	103	44.2	6.7
Missing	15		
Total	227	100	
<b>Among women with three or four children</b>			
9-11 months	0	0	
12-23 months	9	8.3	2.8
24-35 months	32	16	4.1
36-47 months	52	24	5.5
48-59 months	59	21.5	4.7
≥60 months	77	30.2	5.5
Missing	7		
Total	236	100	
<b>Among women with five or more children</b>			
9-11 months	0	0	
12-23 months	8	8.5	4.2
24-35 months	59	40.5	5.3
36-47 months	35	31.5	6.2
48-59 months	20	15.4	6.1
≥60 months	8	4.1	1.6
Missing	3		
Total	133	100	

**Table E.4.4.1 Desire for more children**

Among women with a pregnancy in the two years preceding the interview, percent distribution by desire of the most recent pregnancy in the last two years; and among all women, percentage who desire more children			
Characteristic	N	Weighted %	Weighted SE
<b>Respondent desired their most recent pregnancy in the past two years</b>			
Yes	268	65	2.6
No, wanted to wait	120	27.8	1.9
No, did not want (more) children	32	7.1	1.7
DK/DTR	0		
Missing	16		
Total	436	100	
<b>Respondent desires current pregnancy</b>			
Yes	19	71.8	14.8
No, wanted to wait	10	28.2	14.8
No, did not want (more) children	0	0	
DK/DTR	0		
Missing	0		
Total	29	100	

**Table E.4.4.2 Ideal interval for most recent birth**

Percent distribution of women with 2 or more children by ideal interval for most recent birth, according to the number of children			
Characteristic	N	Weighted %	Weighted SE
<b>Among women with more than one child</b>			
9-11 months	0	0	
12-23 months	11	3.8	1.3
24-35 months	19	5.7	1.3
36-47 months	25	6.9	1.1
48-59 months	37	10.5	1.8
≥60 months	206	56.1	2.2
Did not want to have another child	64	17	2.2
Missing	33		
Total	395	100	
<b>Among women with two children</b>			
9-11 months	0	0	
12-23 months	6	6.1	3.1
24-35 months	8	5.7	2.3
36-47 months	8	5	1.8
48-59 months	15	10.8	2.3
≥60 months	107	66.2	4.4
Did not want to have another child	11	6.1	2.1
Missing	27		
Total	182	100	
<b>Among women with three or four children</b>			
9-11 months	0	0	
12-23 months	4	2.2	1.3
24-35 months	6	4	1.9
36-47 months	9	6.4	2
48-59 months	15	10.1	3.2
≥60 months	78	57	5.3
Did not want to have another child	30	20.3	3.6
Missing	4		
Total	146	100	
<b>Among women with five or more children</b>			
9-11 months	0	0	
12-23 months	1	1.8	1.7
24-35 months	5	9.3	3.7
36-47 months	8	12.2	4
48-59 months	7	10.5	3.6
≥60 months	21	32	4.7
Did not want to have another child	23	34.2	5.2
Missing	2		
Total	67	100	

**Table E.5.1.1 Knowledge of the fertile period**

Percentage of all currently married or partnered women age 15-49 who know the timing of the fertile period			
Characteristic	N	Weighted %	Weighted SE
Are there certain days when a woman is more likely to become pregnant?			
Yes	568	86.2	3.6
No	86	13.8	3.6
DK/DTR	48		
Missing	2		
Total	704	100	
Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?			
Just before her period begins	98	17.3	4
During her period	15	2.1	0.7
Right after her period has ended	325	58.9	5.2
Halfway between two periods	99	19.5	3.6
Other	12	2.2	1.1
DK/DTR	19		
Missing	0		
Total	568	100	

**Table E.5.2.1a Current use of family planning methods**

Percentage of all currently married or partnered women age 15-49 using family planning methods			
Characteristic or method	N	Weighted %	Weighted SE
<b>Current use of any method</b>			
Yes	544	72.3	2.7
No	158	27.7	2.7
DK/DTR	0		
Missing	2		
Total	704	100	
<b>Current use of any method, among women in need of contraceptives</b>			
Yes	528	90.4	1.6
No	67	9.6	1.6
DK/DTR	0		
Missing	0		
Total	595	100	
<b>Current use of more than one method</b>			
Yes	11	1.8	1.1
No	691	98.2	1.1
DK/DTR	0		
Missing	2		
Total	704	100	
<b>Number of methods the respondent is currently using</b>			
0 methods	158	27.7	2.7
1 method	533	70.5	2.6
2 methods	11	1.8	1.1
3 or more methods	2	0	
DK/DTR	0		
Missing	0		
Total	704	100	

**Table E.5.2.1b Current use of family planning methods, by type of method**

Percentage of all currently married or partnered women age 15-49 using specified family planning methods											
Method	N	Weighted %	Weighted SE	Method	N	Weighted %	Weighted SE	Method	N	Weighted %	Weighted SE
Female sterilization				Condom				Rhythm method			
Yes	141	22.1	2.6	Yes	27	3.3	1.4	Yes	7	0.6	0.2
No	560	77.9	2.6	No	675	96.7	1.4	No	694	99.4	0.2
DK/DTR	1			DK/DTR	0			DK/DTR	1		
Missing	2			Missing	2			Missing	2		
Total	704	100		Total	704	100		Total	704	100	
Male sterilization				Female condom				Withdrawal method			
Yes	1	0.1	0.1	Yes	0	0		Yes	3	0.2	0.2
No	700	99.9	0.1	No	700	100		No	697	99.8	0.2
DK/DTR	1			DK/DTR	2			DK/DTR	2		
Missing	2			Missing	2			Missing	2		
Total	704	100		Total	704	100		Total	704	100	
IUD				Diaphragm				Emergency contraception			
Yes	28	5.5	2	Yes	0	0		Yes	0	0	
No	674	94.5	2	No	700	100		No	701	100	
DK/DTR	0			DK/DTR	2			DK/DTR	1		
Missing	2			Missing	2			Missing	2		
Total	704	100		Total	704	100		Total	704	100	
Injectables				Sponge, spermicide				Other modern method			
Yes	260	31.5	2.8	Yes	0	0		Yes	0	0	
No	442	68.5	2.8	No	701	100		No	699	100	
DK/DTR	0			DK/DTR	1			DK/DTR	3		
Missing	2			Missing	2			Missing	2		
Total	704	100		Total	704	100		Total	704	100	
Implants				Lactational amenorrhea method				Other traditional method			
Yes	1	0	0	Yes	7	0.5	0.2	Yes	1	0.4	0.4
No	701	100	0	No	695	99.5	0.2	No	699	99.6	0.4
DK/DTR	0			DK/DTR	0			DK/DTR	2		
Missing	2			Missing	2			Missing	2		
Total	704	100		Total	704	100		Total	704	100	
Pill											
Yes	79	9.8	1.9								
No	623	90.2	1.9								
DK/DTR	0										
Missing	2										
Total	704	100									

**Table E.5.2.1c Current use of modern family planning methods**

Percentage of all currently married or partnered women age 15-49 using modern methods of family planning			
Characteristic	N	Weighted %	Weighted SE
<b>Among all women</b>			
Yes	532	71.1	2.7
No	170	28.9	2.7
DK/DTR	0		
Missing	2		
Total	704	100	
<b>Among women in need of contraceptives</b>			
Yes	516	88.9	1.5
No	79	11.1	1.5
DK/DTR	0		
Missing	0		
Total	595	100	

**Table E.5.3.1a Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Female sterilization</b>				<b>IUD</b>			
Public hospital	121	81.2	4.9	Public hospital	15	57.2	18.8
Public health unit	7	6.6	4.3	Public health unit	4	6.8	2.9
Public health center / clinic	1	0.3	0.4	Public health center / clinic	3	4.3	3.1
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	0	0	
Private hospital	1	0.3	0.3	Private hospital	0	0	
Private health center / clinic	7	8.9	4.1	Private health center / clinic	3	26.6	19.6
Private office	0	0		Private office	1	1.2	1.3
Private mobile clinic	0	0		Private mobile clinic	0	0	
Other private health facility	0	0		Other private health facility	0	0	
Pharmacy	0	0		Pharmacy	0	0	
Community health worker	0	0		Community health worker	0	0	
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	0	0	
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	0	0	
Other	4	2.7	1.8	Other	2	3.9	2.8
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	141	100		Total	28	100	
<b>Male sterilization</b>				<b>Injectables</b>			
Public hospital	1	100		Public hospital	55	21.6	6.5
Public health unit	0	0		Public health unit	110	37.7	5
Public health center / clinic	0	0		Public health center / clinic	38	14.3	3
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	2	0.7	0.7
Private hospital	0	0		Private hospital	0	0	
Private health center / clinic	0	0		Private health center / clinic	3	1.7	1.2
Private office	0	0		Private office	1	0.2	0.2
Private mobile clinic	0	0		Private mobile clinic	0	0	
Other private health facility	0	0		Other private health facility	1	0.3	0.3
Pharmacy	0	0		Pharmacy	40	20.6	6.6
Community health worker	0	0		Community health worker	8	2.4	0.8
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	0	0	
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	0	0	
Other	0	0		Other	2	0.4	0.3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	1	100		Total	260	100	

**Table E.5.3.1b Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Implants</b>				<b>Condom</b>			
Public hospital	0	0		Public hospital	3	18.6	12.5
Public health unit	0	0		Public health unit	4	36.1	17.8
Public health center / clinic	0	0		Public health center / clinic	2	4.7	3.9
Public mobile clinic	0	0		Public mobile clinic	0	0	
Other public health facility	0	0		Other public health facility	0	0	
Private hospital	0	0		Private hospital	0	0	
Private health center / clinic	1	100		Private health center / clinic	0	0	
Private office	0	0		Private office	0	0	
Private mobile clinic	0	0		Private mobile clinic	0	0	
Other private health facility	0	0		Other private health facility	0	0	
Pharmacy	0	0		Pharmacy	16	36.4	11.8
Community health worker	0	0		Community health worker	0	0	
Traditional healer	0	0		Traditional healer	0	0	
Store	0	0		Store	0	0	
Market	0	0		Market	0	0	
Church	0	0		Church	0	0	
Friend / relative	0	0		Friend / relative	1	2.5	2.7
Other	0	0		Other	1	1.6	1.8
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	1	100		Total	27	100	
<b>Pill</b>				<b>Female condom</b>			
Public hospital	12	10	4.7	Public hospital	0	0	0
Public health unit	29	42.9	11.8	Public health unit	0	0	0
Public health center / clinic	18	24.8	7.7	Public health center / clinic	0	0	0
Public mobile clinic	0	0		Public mobile clinic	0	0	0
Other public health facility	0	0		Other public health facility	0	0	0
Private hospital	0	0		Private hospital	0	0	0
Private health center / clinic	1	0.8	0.9	Private health center / clinic	0	0	0
Private office	1	0.7	0.7	Private office	0	0	0
Private mobile clinic	0	0		Private mobile clinic	0	0	0
Other private health facility	0	0		Other private health facility	0	0	0
Pharmacy	18	20.7	7.5	Pharmacy	0	0	0
Community health worker	0	0		Community health worker	0	0	0
Traditional healer	0	0		Traditional healer	0	0	0
Store	0	0		Store	0	0	0
Market	0	0		Market	0	0	0
Church	0	0		Church	0	0	0
Friend / relative	0	0		Friend / relative	0	0	0
Other	0	0		Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0	0	
Total	79	100		Total	0	0	

**Table E.5.3.1c Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Diaphragm</b>				<b>Lactational amenorrhea method</b>			
Public hospital	0	0	0	Public hospital	2	30.8	20.9
Public health unit	0	0	0	Public health unit	1	19	18.5
Public health center / clinic	0	0	0	Public health center / clinic	2	34.9	21.8
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	1	15.2	15.5
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	0	0	
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	1		
Missing	0	0		Missing	0		
Total	0	0		Total	7	100	
<b>Sponge, spermicide</b>				<b>Rhythm method</b>			
Public hospital	0	0	0	Public hospital	0	0	
Public health unit	0	0	0	Public health unit	0	0	
Public health center / clinic	0	0	0	Public health center / clinic	0	0	
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	1	15.2	12.8
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	2	27.2	19.4
Friend / relative	0	0	0	Friend / relative	1	15.2	12.8
Other	0	0	0	Other	3	42.5	23.4
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	7	100	

**Table E.5.3.1d Source of family planning methods**

Percent distribution of women currently using selected modern methods of family planning, by location where current method was obtained							
Source	N	Weighted %	Weighted SE	Source	N	Weighted %	Weighted SE
<b>Withdrawal method</b>				<b>Other modern method</b>			
Public hospital	0	0		Public hospital	0	0	0
Public health unit	1	19.1	23.5	Public health unit	0	0	0
Public health center / clinic	0	0		Public health center / clinic	0	0	0
Public mobile clinic	0	0		Public mobile clinic	0	0	0
Other public health facility	0	0		Other public health facility	0	0	0
Private hospital	0	0		Private hospital	0	0	0
Private health center / clinic	0	0		Private health center / clinic	0	0	0
Private office	0	0		Private office	0	0	0
Private mobile clinic	0	0		Private mobile clinic	0	0	0
Other private health facility	0	0		Other private health facility	0	0	0
Pharmacy	0	0		Pharmacy	0	0	0
Community health worker	0	0		Community health worker	0	0	0
Traditional healer	0	0		Traditional healer	0	0	0
Store	0	0		Store	0	0	0
Market	0	0		Market	0	0	0
Church	0	0		Church	0	0	0
Friend / relative	0	0		Friend / relative	0	0	0
Other	2	80.9	23.5	Other	0	0	0
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0	0	
Total	3	100		Total	0	0	
<b>Emergency contraception</b>				<b>Other traditional method</b>			
Public hospital	0	0	0	Public hospital	0	0	
Public health unit	0	0	0	Public health unit	1	100	
Public health center / clinic	0	0	0	Public health center / clinic	0	0	
Public mobile clinic	0	0	0	Public mobile clinic	0	0	
Other public health facility	0	0	0	Other public health facility	0	0	
Private hospital	0	0	0	Private hospital	0	0	
Private health center / clinic	0	0	0	Private health center / clinic	0	0	
Private office	0	0	0	Private office	0	0	
Private mobile clinic	0	0	0	Private mobile clinic	0	0	
Other private health facility	0	0	0	Other private health facility	0	0	
Pharmacy	0	0	0	Pharmacy	0	0	
Community health worker	0	0	0	Community health worker	0	0	
Traditional healer	0	0	0	Traditional healer	0	0	
Store	0	0	0	Store	0	0	
Market	0	0	0	Market	0	0	
Church	0	0	0	Church	0	0	
Friend / relative	0	0	0	Friend / relative	0	0	
Other	0	0	0	Other	0	0	
DK/DTR	0			DK/DTR	0		
Missing	0	0		Missing	0		
Total	0	0		Total	1	100	

**Table E.5.4.1 Interruption and non-use of family planning methods**

Percentage of women with interruptions last year in the use of contraception, percentage not using contraception, and percentage in need of contraception			
Characteristic	N	Weighted %	Weighted SE
<b>Currently in need of contraceptives</b>			
Yes	595	76.2	3
No	107	23.8	3
DK/DTR	0		
Missing	2		
Total	704	100	
<b>Discontinuation rate: any interruption in use during the last year, among women in need of contraceptives</b>			
Yes	22	3.5	1.2
No	573	96.5	1.2
DK/DTR	0		
Missing	0		
Total	595	100	
<b>Number of interruptions in use during the last year, among women in need of contraceptives</b>			
0	573	96.5	1.2
1	15	2.5	0.8
2-6	7	1.1	0.7
7-12	0	0	
13 or more	0	0	
DK/DTR	0		
Missing	0		
Total	595	100	
<b>Not currently using any modern method</b>			
Yes	170	28.9	2.7
No	532	71.1	2.7
DK/DTR	0		
Missing	2		
Total	704	100	
<b>Unmet need: Not currently using any modern method, among women "in need" of contraceptives</b>			
Yes	79	11.1	1.5
No	516	88.9	1.5
DK/DTR	0		
Missing	0		
Total	595	100	

**Table E.5.4.2a Reasons for interruption and non-use of family planning methods**

Percent distribution of women who are not using family planning methods by reason for non-use							
Reason	N	Weighted %	Weighted SE	Reason	N	Weighted %	Weighted SE
<b>Unmarried</b>				<b>Did not have a menstrual period since last birth</b>			
Yes	10	8.8	5.9	Yes	10	4.3	2.1
No	120	91.2	5.9	No	120	95.7	2.1
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Married</b>				<b>Was breastfeeding</b>			
Yes	38	31.4	8.7	Yes	10	3.8	1.5
No	92	68.6	8.7	No	120	96.2	1.5
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Does not have sexual relations</b>				<b>Goes against religion</b>			
Yes	23	18	7	Yes	0	0	
No	105	82	7	No	130	100	
DK/DTR	4			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Virgin</b>				<b>Respondent is opposed to use</b>			
Yes	0	0		Yes	5	1.9	1
No	130	100		No	125	98.1	1
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Has sexual relations infrequently</b>				<b>Husband / partner is opposed to use</b>			
Yes	30	19.7	6.4	Yes	4	3	1.8
No	99	80.3	6.4	No	126	97	1.8
DK/DTR	3			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Menopausal</b>				<b>Others are opposed to use</b>			
Yes	14	23	8.8	Yes	1	0.3	0.3
No	115	77	8.8	No	128	99.7	0.3
DK/DTR	3			DK/DTR	3		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Hysterectomy/surgery on the uterus</b>				<b>Knows no method</b>			
Yes	6	3.7	2.3	Yes	6	1.8	0.8
No	124	96.3	2.3	No	124	98.2	0.8
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Cannot become pregnant</b>				<b>Knows no source for getting method</b>			
Yes	6	3.3	1.8	Yes	6	1.8	0.7
No	124	96.7	1.8	No	124	98.2	0.7
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	

**Table E.5.4.2b Reasons for interruption and non-use of family planning methods**

Percent distribution of women who are not using family planning methods by reason for non-use							
Reason	N	Weighted %	Weighted SE	Reason	N	Weighted %	Weighted SE
<b>Concerned about side effects</b>				<b>No trust in health facility staff</b>			
Yes	17	9.3	3.5	Yes	6	1.8	0.8
No	113	90.7	3.5	No	124	98.2	0.8
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Facility is too far</b>				<b>Uncomfortable to use</b>			
Yes	3	2.8	1.8	Yes	2	0.6	0.5
No	127	97.2	1.8	No	128	99.4	0.5
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Could not find transportation to a facility</b>				<b>Interferes with normal body processes</b>			
Yes	1	0.3	0.3	Yes	8	2.7	0.8
No	129	99.7	0.3	No	122	97.3	0.8
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Could not afford transportation</b>				<b>Affects health / does not like them</b>			
Yes	2	0.8	0.6	Yes	36	22.1	6
No	128	99.2	0.6	No	94	77.9	6
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Costs too much</b>				<b>Was pregnant</b>			
Yes	0	0		Yes	10	10.3	4.9
No	130	100		No	119	89.7	4.9
DK/DTR	2			DK/DTR	3		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Preferred method is not available</b>				<b>Wanted to become pregnant</b>			
Yes	3	4.3	3.5	Yes	22	25.4	9.9
No	127	95.7	3.5	No	108	74.6	9.9
DK/DTR	2			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>No method is available</b>				<b>Other</b>			
Yes	4	1.2	0.6	Yes	12	5.6	2
No	125	98.8	0.6	No	118	94.4	2
DK/DTR	3			DK/DTR	2		
Missing	24			Missing	24		
Total	156	100		Total	156	100	
<b>Health facility has staff that are hard to deal with</b>							
Yes	4	1.4	0.6				
No	126	98.6	0.6				
DK/DTR	2						
Missing	24						
Total	156	100					

**Table E.5.5.1 Participation in family planning decision-making**

Percent distribution of women currently using family planning methods according to who makes the decision to use family planning			
Characteristic	N	Weighted %	Weighted SE
Who makes the decision to use family planning methods?			
Mostly the respondent	91	15.1	2.7
Mostly the husband / partner	51	8.1	2
Joint decision	398	76.3	3.4
Other	2	0.5	0.3
DK/DTR/NA	2		
Missing	0		
Total	544	100	

**Table E.5.5.2a Family planning decision-making - informed choice**

Percentage of all women currently using family planning methods to whom a health care worker described other methods that can be used			
Characteristic	N	Weighted %	Weighted SE
Did a doctor, nurse, or community health worker ever tell you about other methods of family planning that you could use?			
Yes	398	68.6	4
No	145	31.4	4
DK/DTR	1		
Missing	0		
Total	544	100	

**Table E.5.6.1 Family planning messages delivered by health care providers**

Percentage of married or partnered women exposed to family planning messages delivered by health care providers at a health care facility or at home, ever and in the last 12 months			
Characteristic	N	Weighted %	Weighted SE
In the last 12 months, did any staff member at a health facility speak to you about family planning methods?			
Yes	280	36.8	4.5
No	421	63.2	4.5
DK/DTR	1		
Missing	2		
Total	704	100	
In the last 12 months, did a health promoter visit you to speak to you about family planning methods?			
Yes	54	7.6	1.3
No	645	92.4	1.3
DK/DTR	3		
Missing	2		
Total	704	100	
Among respondents who had not visited a health facility seeking care for themselves or their children in the last 12 months:			
In the last 12 months, did a health promoter visit you to speak to you about family planning methods?			
Yes	19	6.2	1.3
No	229	93.8	1.3
DK/DTR	3		
Missing	0		
Total	251	100	

**Table E.6.1.1a Antenatal care coverage for the most recent birth in the last two years**

Percentage of women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth; and among those who received any antenatal care, percent distribution by timing of care			
Characteristic	N	Weighted %	Weighted SE
<b>Attended at least one antenatal care visit</b>			
Yes	390	96.4	1.3
No	14	3.6	1.3
DK/DTR	0		
Missing	37		
Total	441	100	
<b>Attended at least one antenatal care visit with doctor or professional nurse</b>			
Yes	380	93.8	1.6
No	24	6.2	1.6
DK/DTR	0		
Missing	37		
Total	441	100	
<b>First trimester (first 12 weeks) antenatal care visit with doctor or professional nurse</b>			
Yes	200	46.9	4.1
No	204	53.1	4.1
DK/DTR	0		
Missing	37		
Total	441	100	
<b>Month of gestation of first ANC visit, among women who received any antenatal care</b>			
1	99	23.6	3.3
2	101	25	2.4
3	93	24.3	2.2
4	42	10.7	1.9
5	26	7.5	1.7
6	16	5.4	2.4
7	7	1.8	0.6
8	3	0.9	0.5
9	3	0.7	0.4
DK/DTR	0		
Missing	0		
Total	390	100	

**Table E.6.1.1b Antenatal care coverage for the most recent birth in the last two years**

Percentage distribution of attendants at antenatal care, for women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	106	28.9	4.3	0 visits	389	99.8	0.2	0 visits	390	100	
1 visit	41	9.8	1.8	1 visit	0	0		1 visit	0	0	
2 visits	23	6.5	1.4	2 visits	0	0		2 visits	0	0	
3 visits	30	7.6	1.4	3 visits	0	0		3 visits	0	0	
4 visits	20	5.5	1.1	4 visits	0	0		4 visits	0	0	
5 visits	34	8.9	1.9	5 visits	0	0		5 visits	0	0	
6 visits	30	9	1.9	6 visits	0	0		6 visits	0	0	
7 visits	42	9.5	1.8	7 visits	1	0.2	0.2	7 visits	0	0	
8 visits	64	14.2	2.7	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	390	100		Total	390	100		Total	390	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	191	48.9	4	0 visits	390	100		0 visits	389	99.8	0.2
1 visit	33	7.6	1.6	1 visit	0	0		1 visit	0	0	
2 visits	18	5.7	1.5	2 visits	0	0		2 visits	0	0	
3 visits	19	4.7	1.2	3 visits	0	0		3 visits	0	0	
4 visits	27	7.1	1.4	4 visits	0	0		4 visits	0	0	
5 visits	33	8.2	1.7	5 visits	0	0		5 visits	0	0	
6 visits	29	7.5	1.6	6 visits	0	0		6 visits	0	0	
7 visits	20	5.1	1.4	7 visits	0	0		7 visits	1	0.2	0.2
8 visits	20	5.2	1.3	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	390	100		Total	390	100		Total	390	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	368	94.5	1.6	0 visits	390	100		0 visits	389	99.8	0.2
1 visit	7	1.6	0.5	1 visit	0	0		1 visit	1	0.2	0.2
2 visits	3	0.8	0.4	2 visits	0	0		2 visits	0	0	
3 visits	1	0.2	0.2	3 visits	0	0		3 visits	0	0	
4 visits	3	0.8	0.4	4 visits	0	0		4 visits	0	0	
5 visits	2	0.4	0.3	5 visits	0	0		5 visits	0	0	
6 visits	3	0.9	0.5	6 visits	0	0		6 visits	0	0	
7 visits	2	0.6	0.6	7 visits	0	0		7 visits	0	0	
8 visits	1	0.3	0.2	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	390	100		Total	390	100		Total	390	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	390	100		0 visits	390	100					
1 visit	0	0		1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	390	100		Total	390	100					

**Table E.6.1.1c Antenatal care coverage for the most recent birth in the last two years**

Percentage distribution of usual location of antenatal care for women with a birth in the last two years who attended at least one antenatal care visit for the most recent birth			
Location	N	Weighted %	Weighted SE
Usual location for antenatal care visits			
Public hospital	70	17.3	4.8
Public health unit	184	50	5.6
Public health center / clinic	97	24.3	3.2
Public mobile clinic	0	0	
Other public health facility	5	1	0.4
Private hospital	0	0	
Private health center / clinic	20	4.6	1.3
Private office	10	1.9	0.8
Private mobile clinic	0	0	
Other private health facility	0	0	
Pharmacy	0	0	
Community health worker	0	0	
Traditional healer	1	0.2	0.2
Other	3	0.6	0.4
DK/DTR	0		
Missing	0		
Total	390	100	

**Table E.6.1.2 Frequency of antenatal care visits**

Percent distribution of women with a birth in the last two years by number of antenatal care visits for the most recent birth and percentage of women with four or more visits with at least one with a professional			
Characteristic	N	Weighted %	Weighted SE
<b>Number of antenatal care visits</b>			
None	14	3.7	1.3
1-3 visits	38	10.6	3
4-6 visits	161	42.7	3.2
7-9 visits	186	42.6	5.3
10+ visits	3	0.4	0.3
DK/DTR	2		
Missing	37		
Total	441	100	
<b>Attended at least four antenatal care visits</b>			
Yes	350	85.7	4
No	52	14.3	4
DK/DTR	2		
Missing	37		
Total	441	100	
<b>Attended at least four antenatal care visits with doctor or professional nurse</b>			
Yes	333	81.6	4
No	69	18.4	4
DK/DTR	2		
Missing	37		
Total	441	100	
<b>Attended at least four antenatal care visits with doctor or professional nurse according to best practices (measuring blood type, anemia, syphilis, HIV, proteinuria, blood pressure, weight, fundal height, fetal heartbeat)</b>			
Yes	149	36	4.3
No	253	64	4.3
DK/DTR	2		
Missing	37		
Total	441	100	

**Table E.6.1.3a Content of antenatal care visits - best practices**

Percentage distribution of content during antenatal visit among women with a birth in the last two years with at least one antenatal care visit							
Procedure	N	Weighted %	Weighted SE	Procedure	N	Weighted %	Weighted SE
Measured blood type				Tested for proteinuria			
Yes	315	81.8	3.1	Yes	313	83.6	2.6
No	69	18.2	3.1	No	60	16.4	2.6
DK/DTR	6			DK/DTR	17		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
Tested for anemia				Measured maternal blood pressure			
Yes	314	80.1	2.5	Yes	389	99.8	0.2
No	73	19.9	2.5	No	1	0.2	0.2
DK/DTR	3			DK/DTR	0		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
Tested for syphilis				Measured maternal weight			
Yes	228	59.1	3.7	Yes	388	99.5	0.4
No	150	40.9	3.7	No	2	0.5	0.4
DK/DTR	12			DK/DTR	0		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
Tested for HIV				Measured fundal height			
Yes	330	83.5	3.5	Yes	370	94.8	2
No	59	16.5	3.5	No	18	5.2	2
DK/DTR	1			DK/DTR	2		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
				Measured fetal heartbeat			
				Yes	380	97.4	0.9
				No	9	2.6	0.9
				DK/DTR	1		
				Missing	0		
				Total	390	100	

**Table E.6.1.3b Content of antenatal care visits - other services provided**

Percentage distribution of content during antenatal visit among women with a birth in the last two years with at least one antenatal care visit							
Procedure	N	Weighted %	Weighted SE	Procedure	N	Weighted %	Weighted SE
Collected blood specimen				Tested for diabetes			
Yes	370	94.5	1.7	Yes	180	44.9	2.8
No	19	5.5	1.7	No	204	55.1	2.8
DK/DTR	1			DK/DTR	6		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
Collected urine specimen				Performed an ultrasound			
Yes	378	97	1	Yes	341	85.7	2.7
No	12	3	1	No	49	14.3	2.7
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
Measured blood glucose							
Yes	265	70.2	3.2				
No	101	29.8	3.2				
DK/DTR	4						
Missing	20						
Total	390	100					

**Table E.6.1.4 Coverage of tetanus toxoid vaccinations during pregnancy**

Among women with prenatal care for a birth in the last two years, percentage who received a tetanus vaccinations during pregnancy and percent distribution by number of vaccinations received and by time since last tetanus vaccination			
Characteristic	N	Weighted %	Weighted SE
<b>Received tetanus injection during pregnancy</b>			
Yes	372	91.8	2.5
No	30	8.2	2.5
DK/DTR	2		
Missing	35		
Total	439	100	
<b>Number of tetanus vaccinations during pregnancy</b>			
None	38	10.1	2.8
1	253	63.1	4.4
2	86	20.9	3
3	16	3.9	0.8
4	8	1.9	0.6
5	0	0	
DK/DTR	3		
Missing	35		
Total	439	100	
<b>Time since last tetanus vaccination</b>			
Never vaccinated	143	50.8	4.1
<10 years ago	141	43.7	4.8
≥10 years ago	17	5.5	1.9
DK/DTR	103		
Missing	35		
Total	439	100	
<b>Time since last tetanus vaccination, among women who were not vaccinated during pregnancy</b>			
Never vaccinated	15	62.2	10.6
<10 years ago	8	35.5	10.3
≥10 years ago	1	2.3	2.5
DK/DTR	6		
Missing	0		
Total	30	100	

**Table E.6.1.5 Exposure to safe pregnancy messages**

Among women who received prenatal care for a birth in the last two years, percentage exposed to specific safe pregnancy messages							
Characteristic	N	Weighted %	Weighted SE	Characteristic	N	Weighted %	Weighted SE
<b>Counseled about pregnancy</b>				<b>Advised to have a Caesarean section</b>			
Yes	362	91.1	2.7	Yes	161	40.6	3
No	28	8.9	2.7	No	229	59.4	3
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
<b>Told about signs to watch out for that could indicate a problem with the pregnancy</b>				<b>Counseled about making a transportation plan for the delivery</b>			
Yes	370	94.1	2	Yes	100	24.8	3.2
No	19	5.9	2	No	289	75.2	3.2
DK/DTR	1			DK/DTR	1		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
<b>Offered an HIV test</b>				<b>Counseled about contraception after delivery</b>			
Yes	346	87.2	3	Yes	313	79.7	2.4
No	44	12.8	3	No	77	20.3	2.4
DK/DTR	0			DK/DTR	0		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
<b>Counseled about nutrition during pregnancy</b>				<b>Counseled about child care</b>			
Yes	347	88.7	2.3	Yes	278	71	3.2
No	41	11.3	2.3	No	110	29	3.2
DK/DTR	2			DK/DTR	2		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
<b>Given information about in-facility delivery</b>				<b>Given information about proper ways to breast feed</b>			
Yes	340	86.4	2.3	Yes	339	87.1	2.9
No	50	13.6	2.3	No	50	12.9	2.9
DK/DTR	0			DK/DTR	1		
Missing	0			Missing	0		
Total	390	100		Total	390	100	
<b>Advised to delivery in a facility</b>							
Yes	334	84.3	2.9				
No	56	15.7	2.9				
DK/DTR	0						
Missing	0						
Total	390	100					

**Table E.6.2.1 Place of delivery**

Percent distribution of women with a birth in the last two years by location of most recent birth and percent distribution of women with in-facility deliveries by means of transportation used to get to the facility for delivery							
Characteristic	N	Weighted %	Weighted SE	Mode of transportation	N	Weighted %	Weighted SE
Delivery location for most recent birth				On foot			
Respondent's house	16	5.2	2.1	Yes	43	10.3	2.6
Another person's house	1	0.2	0.2	No	340	89.7	2.6
Public hospital	350	86.1	2.3	DK/DTR	0		
Public health center / clinic	24	5.7	1.3	Missing	0		
Public medical ward	0	0		Total	383	100	
Other public health facility	1	0.5	0.5	Private vehicle			
Private hospital	2	0.3	0.2	Yes	91	23.1	2.7
Private health center / clinic	6	0.9	0.5	No	292	76.9	2.7
Private medical ward	0	0		DK/DTR	0		
Other private health facility	0	0		Missing	0		
Other	4	1.1	0.6	Total	383	100	
DK/DTR	0			Ambulance			
Missing	37			Yes	127	32.2	5.7
Total	441	100		No	256	67.8	5.7
In-hospital delivery				DK/DTR			
Yes	352	86.4	2.3	Missing	0		
No	52	13.6	2.3	Total	383	100	
DK/DTR	0			Other public vehicle			
Missing	37			Yes	131	36.7	5.4
Total	441	100		No	252	63.3	5.4
In-facility delivery				DK/DTR			
Yes	383	93.5	2.1	Missing	0		
No	21	6.5	2.1	Total	383	100	
DK/DTR	0						
Missing	37						
Total	441	100					

**Table E.6.2.2a Assistance at delivery: type of attendants**

For women's most recent birth in the past two years, percentage by type of delivery attendants							
Characteristic	N	Weighted %	Weighted SE	Characteristic	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Community health worker</b>			
Yes	374	91.2	2.6	Yes	1	0.3	0.3
No	30	8.8	2.6	No	402	99.7	0.3
DK/DTR	0			DK/DTR	1		
Missing	38			Missing	38		
Total	442	100		Total	442	100	
<b>Professional nurse</b>				<b>Pharmacist</b>			
Yes	332	82.4	3	Yes	2	0.4	0.3
No	69	17.6	3	No	400	99.6	0.3
DK/DTR	3			DK/DTR	2		
Missing	38			Missing	38		
Total	442	100		Total	442	100	
<b>Auxiliary nurse</b>				<b>Traditional healer</b>			
Yes	93	23.8	3	Yes	0	0	
No	299	76.2	3	No	403	100	
DK/DTR	12			DK/DTR	1		
Missing	38			Missing	38		
Total	442	100		Total	442	100	
<b>Laboratory technician</b>				<b>Relative</b>			
Yes	11	2.5	0.7	Yes	59	16.8	3
No	383	97.5	0.7	No	344	83.2	3
DK/DTR	10			DK/DTR	1		
Missing	38			Missing	38		
Total	442	100		Total	442	100	
<b>Midwife / Comadrona</b>				<b>Other</b>			
Yes	12	3.1	1.3	Yes	10	2.3	0.8
No	391	96.9	1.3	No	391	97.7	0.8
DK/DTR	1			DK/DTR	3		
Missing	38			Missing	38		
Total	442	100		Total	442	100	

**Table E.6.2.2b Assistance at delivery: number of attendants**

For women's most recent live birth in the past two years, the number of attendants during delivery and the presence of skilled attendants			
Characteristic	N	Weighted %	Weighted SE
<b>Delivered alone</b>			
Yes	4	1.6	1
No	400	98.4	1
DK/DTR	0		
Missing	38		
Total	442	100	
<b>Number of categories of personnel in attendance at delivery</b>			
None	4	1.6	1
One	55	13.3	2.3
Two	223	54.6	2.7
Three	98	24	2.6
Four or more	24	6.5	2
DK/DTR	0		
Missing	38		
Total	442	100	
<b>Delivery with a skilled birth attendant</b>			
Yes	382	93.4	2.3
No	22	6.6	2.3
DK/DTR	0		
Missing	38		
Total	442	100	

**Table E.6.2.2c Assistance at delivery: in-facility delivery with skilled birth attendant**

For women's most recent live birth in the past two years, the presence of skilled attendants at delivery in a health facility or hospital			
Characteristic	N	Weighted %	Weighted SE
<b>In-facility delivery with a skilled birth attendant</b>			
Yes	379	92.5	2.2
No	25	7.5	2.2
DK/DTR	0		
Missing	38		
Total	442	100	
<b>In-hospital delivery with a skilled birth attendant</b>			
Yes	349	85.8	2.2
No	55	14.2	2.2
DK/DTR	0		
Missing	38		
Total	442	100	

**Table E.6.2.3 Mode of delivery and complications**

For women's most recent live birth in the past two years, the mode of delivery and complications during delivery			
Characteristic	N	Weighted %	Weighted SE
<b>Mode of delivery</b>			
Vaginal	271	68.4	2.9
Planned Caesarean section	44	10.4	1.6
Emergency Caesarean section	89	21.2	2.2
DK/DTR	0		
Missing	37		
Total	441	100	
<b>Reason for attending a health facility for delivery, among in-facility births</b>			
Planned	159	42.7	3.1
Emergency	219	56.1	2.9
Other	5	1.2	0.6
DK/DTR	0		
Missing	0		
Total	383	100	
<b>Respondent had seizures prior to delivery</b>			
Yes	8	2.5	0.9
No	395	97.5	0.9
DK/DTR	1		
Missing	37		
Total	441	100	
<b>Child entered neonatal intensive care unit after delivery</b>			
Yes	48	12.9	1.6
No	355	87.1	1.6
DK/DTR	1		
Missing	37		
Total	441	100	
<b>Respondent had excessive bleeding in the first day following the delivery</b>			
Yes	121	30.1	3.8
No	283	69.9	3.8
DK/DTR	0		
Missing	37		
Total	441	100	

**Table E.6.2.4 Birth size and weight**

For women's most recent live birth in the past two years, the size and weight of the child at birth			
Characteristic	N	Weighted %	Weighted SE
<b>Mother's estimate of the size of the child at birth</b>			
Very large	7	1.6	0.6
Larger than average	37	9.3	1.6
Average	328	81.6	1.9
Smaller than average	19	5.4	1.4
Very small	9	2.2	0.6
DK/DTR	4		
Missing	36		
Total	440	100	
<b>Child's weight was measured at birth</b>			
Yes	387	94.9	2.2
No	15	5.1	2.2
DK/DTR	2		
Missing	36		
Total	440	100	
<b>Child's birth weight, among those who were weighed</b>			
<2.5 kg (low birth weight)	41	11.1	1.8
≥2.5 kg	325	88.9	1.8
DK/DTR	12		
Missing	9		
Total	387	100	

**Table E.6.3.1a Postnatal checkup for the mother**

For women's most recent live birth in the past two years, postpartum care received by the respondent			
Characteristic	N	Weighted %	Weighted SE
Respondent was checked after delivery			
Yes	324	79.3	3.2
No	80	20.7	3.2
DK/DTR	0		
Missing	37		
Total	441	100	
Respondent was checked every 15 minutes during the first hour after delivery while still at health facility, among in-facility births			
Yes	145	38.2	3.3
No	236	61.8	3.3
DK/DTR	2		
Missing	0		
Total	383	100	
Respondent was checked within one week after delivery by a health provider			
Yes	268	66	2.5
No	136	34	2.5
DK/DTR	0		
Missing	37		
Total	441	100	

**Table E.6.3.1b Postnatal checkup for the mother: providers**

Percentage distribution of attendants at postnatal care, for women with a birth in the last two years who attended at least one postnatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadronea</b>				<b>Relative</b>			
0 visits	53	16.8	2.1	0 visits	321	99	0.5	0 visits	323	99.7	0.3
1 visit	147	47.2	4.3	1 visit	3	1	0.5	1 visit	1	0.3	0.3
2 visits	86	25.1	3.1	2 visits	0	0		2 visits	0	0	
3 visits	24	6.7	1.3	3 visits	0	0		3 visits	0	0	
4 visits	6	1.9	0.8	4 visits	0	0		4 visits	0	0	
5 visits	3	0.8	0.5	5 visits	0	0		5 visits	0	0	
6 visits	2	0.6	0.4	6 visits	0	0		6 visits	0	0	
7 visits	1	0.3	0.3	7 visits	0	0		7 visits	0	0	
8 visits	2	0.5	0.3	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	324	100		Total	324	100		Total	324	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	243	74.6	2	0 visits	324	100		0 visits	322	99.4	0.4
1 visit	68	21.6	2.2	1 visit	0	0		1 visit	2	0.6	0.4
2 visits	10	3	1	2 visits	0	0		2 visits	0	0	
3 visits	1	0.3	0.3	3 visits	0	0		3 visits	0	0	
4 visits	2	0.5	0.4	4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	324	100		Total	324	100		Total	324	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	321	98.8	0.6	0 visits	324	100		0 visits	322	99.3	0.5
1 visit	2	0.7	0.5	1 visit	0	0		1 visit	2	0.7	0.5
2 visits	1	0.4	0.4	2 visits	0	0		2 visits	0	0	
3 visits	0	0		3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	324	100		Total	324	100		Total	324	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	324	100		0 visits	324	100					
1 visit	0	0		1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	324	100		Total	324	100					

**Table E.6.3.2a Postnatal checkup for the neonate**

For women's most recent live birth in the past two years, postpartum care received by the baby			
Characteristic	N	Weighted %	Weighted SE
Baby was checked after delivery			
Yes	329	79.9	2.9
No	75	20.1	2.9
DK/DTR	0		
Missing	37		
Total	441	100	
Baby was checked within 24 hours after delivery by a health provider			
Yes	122	35.3	3.6
No	234	64.7	3.6
DK/DTR	0		
Missing	85		
Total	441	100	
Baby was checked within one week after delivery by a health provider			
Yes	232	64.5	3.4
No	124	35.5	3.4
DK/DTR	0		
Missing	85		
Total	441	100	

**Table E.6.3.2b Postnatal checkup for the neonate: providers**

Percentage distribution of attendants at postnatal care, for women with a birth in the last two years who attended at least one postnatal care visit for the most recent birth											
Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE	Attendant	N	Weighted %	Weighted SE
<b>Medical doctor</b>				<b>Midwife / Comadrona</b>				<b>Relative</b>			
0 visits	40	13.1	2.3	0 visits	329	100		0 visits	328	99.8	0.2
1 visit	167	50.4	3.8	1 visit	0	0		1 visit	0	0	
2 visits	80	23.4	3.4	2 visits	0	0		2 visits	1	0.2	0.2
3 visits	21	7.1	2	3 visits	0	0		3 visits	0	0	
4 visits	10	3.2	1	4 visits	0	0		4 visits	0	0	
5 visits	6	1.3	0.6	5 visits	0	0		5 visits	0	0	
6 visits	2	0.7	0.5	6 visits	0	0		6 visits	0	0	
7 visits	1	0.3	0.3	7 visits	0	0		7 visits	0	0	
8 visits	2	0.5	0.3	8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	329	100		Total	329	100		Total	329	100	
<b>Professional nurse</b>				<b>Community health worker</b>				<b>Other</b>			
0 visits	265	80.7	2.2	0 visits	329	100		0 visits	328	99.7	0.3
1 visit	54	16.8	2.3	1 visit	0	0		1 visit	1	0.3	0.3
2 visits	5	1.4	0.9	2 visits	0	0		2 visits	0	0	
3 visits	3	0.7	0.4	3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	1	0.2	0.2	5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	1	0.2	0.2	7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	329	100		Total	329	100		Total	329	100	
<b>Auxiliary nurse</b>				<b>Pharmacy assistant</b>				<b>Didn't know attendant or declined to respond</b>			
0 visits	327	99	0.8	0 visits	329	100		0 visits	325	98.9	0.5
1 visit	1	0.7	0.7	1 visit	0	0		1 visit	4	1.1	0.5
2 visits	0	0		2 visits	0	0		2 visits	0	0	
3 visits	1	0.3	0.3	3 visits	0	0		3 visits	0	0	
4 visits	0	0		4 visits	0	0		4 visits	0	0	
5 visits	0	0		5 visits	0	0		5 visits	0	0	
6 visits	0	0		6 visits	0	0		6 visits	0	0	
7 visits	0	0		7 visits	0	0		7 visits	0	0	
8 visits	0	0		8 visits	0	0		8 visits	0	0	
Missing	0			Missing	0			Missing	0		
Total	329	100		Total	329	100		Total	329	100	
<b>Laboratory technician</b>				<b>Traditional healer</b>							
0 visits	329	100		0 visits	329	100					
1 visit	0	0		1 visit	0	0					
2 visits	0	0		2 visits	0	0					
3 visits	0	0		3 visits	0	0					
4 visits	0	0		4 visits	0	0					
5 visits	0	0		5 visits	0	0					
6 visits	0	0		6 visits	0	0					
7 visits	0	0		7 visits	0	0					
8 visits	0	0		8 visits	0	0					
Missing	0			Missing	0						
Total	329	100		Total	329	100					

**Table E.7.1 Age and sex of children**

Percent distribution of the de facto population of children aged 0-59 months in the SM2015 baseline survey						
	Female		Male		Total	
	N	%	N	%	N	%
Age, in months						
0-5 months	35	8.6	51	12.4	86	10.4
6-11 months	43	10.5	37	9	81	9.8
12-23 months	88	21.6	88	21.5	177	21.5
24-35 months	91	22.3	80	19.5	171	20.7
36-47 months	74	18.1	67	16.3	144	17.5
48-59 months	77	18.9	87	21.2	166	20.1
Total	408	100	410	100	825	100

**Table E.7.1.1 Current health status**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Current health			
Excellent	164	20.1	2.3
Very good	209	26.7	2.5
Good	218	27.9	2.5
Fair	179	21.8	1.9
Poor	28	3.5	0.7
DK/NR	0		
Missing	27		
Total	825	100	
Current health relative to health last year			
Better	344	55.5	2.6
Worse	36	6.2	1.3
About the same	233	38.3	2.4
DK/NR	2		
Missing	20		
Total	635	100	
Ability to perform daily activities			
Easily	749	94.3	0.9
With some difficulty	33	4	0.8
With much difficulty	2	0.2	0.2
Unable to do	12	1.4	0.5
DK/NR	2		
Missing	27		
Total	825	100	

**Table E.7.1.2 Recent illness**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Child was sick recently (in the last two weeks)			
Yes	252	30.3	2.2
No	549	67.5	2
DK/NR	0		
Missing	4		
Total	805	100	
Recent illness			
Fever	53	21.2	2.6
Malaria	0	0	
Cough/chest infection	79	31.9	3.5
Tuberculosis	0	0	
Asthma	3	1.1	0.6
Bronchitis	1	0.6	0.6
Pneumonia	4	1.5	0.7
Diarrhea without blood	42	16.5	3
Diarrhea with blood	5	2.2	0.9
Vomiting	7	2.4	1
Abdominal pain	1	0.4	0.4
Anemia	0	0	
Skin rash/infection	2	0.8	0.5
Eye/ear infection	3	1	0.6
Measles	0	0	
Jaundice	0	0	
Headache	0	0	
Stroke	0	0	
Diabetes	0	0	
HIV/AIDS	0	0	
Paralysis	0	0	
Other	52	20.4	3
DK/NR	0		
Missing	0		
Total	252	100	

**Table E.7.1.3 Utilization of health services for recent illness**

Percent distribution of children 0-59 months who were sick in the last two weeks			
Utilization of health services	N	Weighted %	Weighted SE
<b>Sought care for recent illness</b>			
Yes	161	61.5	4.4
No	91	38.5	4.4
DK/NR	0		
Missing	0		
Total	252	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	28	17.6	4
Public health unit	51	31.7	5.5
Public clinic/health center	29	19	3.2
Public mobile clinic	0	0	
Other public health center	2	1.5	1.1
Private hospital	2	0.9	0.6
Private clinic/health center	9	4.6	1.7
Private office	14	7.8	1.8
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	15	9.8	3.3
Community health worker	1	0.4	0.4
Traditional healer	1	0.5	0.5
Other	9	6.2	2.4
DK/NR	0		
Missing	0		
Total	161	100	
<b>Child was hospitalized for recent illness</b>			
Yes	8	3	1.5
No	244	97	1.5
DK/NR	0		
Missing	0		
Total	252	100	

**Table E.7.2.1 Prevalence of acute respiratory infection and fever**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Child had cough in the last two weeks</b>			
Yes	210	26.4	1.8
No	594	73.6	1.8
DK/NR	1		
Missing	20		
Total	825	100	
<b>Child had cough in the last two weeks, by type</b>			
Cough with difficulty breathing due to chest problem	29	3.8	0.7
Cough with difficulty breathing due to congested or runny nose	60	7.4	1.2
Cough with difficulty breathing due to chest problem and congested or runny nose	24	3.1	0.8
Cough with difficulty breathing due to other reason	1	0.1	0.1
Cough without difficulty breathing	94	11.9	1.2
No cough	594	73.7	1.8
DK/NR	3		
Missing	20		
Total	825	100	
<b>Child had acute respiratory infection in the last two weeks</b>			
Yes	115	14.5	1.5
No	688	85.5	1.5
DK/NR	2		
Missing	20		
Total	825	100	
<b>Child had fever in the last two weeks</b>			
Yes	134	16.7	1.9
No	671	83.3	1.9
DK/NR	0		
Missing	20		
Total	825	100	

**Table E.7.2.2 Utilization of health services for acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for acute respiratory infection</b>			
Yes	72	58.3	6.5
No	43	41.7	6.5
DK/NR	0		
Missing	0		
Total	115	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	10	13.3	5.1
Public health unit	22	31	6.2
Public clinic/health center	16	23.5	4.2
Public mobile clinic	0	0	
Other public health center	1	1.4	1.5
Private hospital	1	1.2	1.2
Private clinic/health center	3	3.2	2.3
Private office	5	6.5	2.9
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	10	14.6	5
Community health worker	1	0.8	0.8
Traditional healer	0	0	
Other	3	4.7	2.5
DK/NR	0		
Missing	0		
Total	72	100	

**Table E.7.2.3a Utilization of medications for acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Medication	N	Weighted %	Weighted SE
<b>Any treatment</b>			
Yes	106	91.1	3.7
No	9	8.9	3.7
DK/NR	0		
Missing	0		
Total	115	100	
<b>Antibiotic injection</b>			
Yes	4	3.5	1.9
No	102	96.5	1.9
DK/NR	0		
Missing	9		
Total	115	100	
<b>Antibiotic pill</b>			
Yes	8	6.8	2.3
No	98	93.2	2.3
DK/NR	0		
Missing	9		
Total	115	100	
<b>Antibiotic syrup</b>			
Yes	66	61.1	4.4
No	40	38.9	4.4
DK/NR	0		
Missing	9		
Total	115	100	
<b>Aspirin</b>			
Yes	1	1.1	1.1
No	105	98.9	1.1
DK/NR	0		
Missing	9		
Total	115	100	

**Table E.7.2.3a continued**

	<b>N</b>	<b>Weighted %</b>	<b>Weighted SE</b>
<b>Acetaminofen</b>			
Yes	66	63.1	5.3
No	40	36.9	5.3
DK/NR	0		
Missing	9		
Total	115	100	
<b>Ibuprofen</b>			
Yes	5	4.4	2.1
No	101	95.6	2.1
DK/NR	0		
Missing	9		
Total	115	100	
<b>Oral rehydration therapy</b>			
Yes	3	2.3	1.3
No	103	97.7	1.3
DK/NR	0		
Missing	9		
Total	115	100	
<b>Other</b>			
Yes	22	22.4	4.9
No	83	77.6	4.9
DK/NR	1		
Missing	9		
Total	115	100	

**Table E.7.2.4 Feeding practices during acute respiratory infection**

Percent distribution of children aged 0-59 months who had acute respiratory infection in the last two weeks, as reported by their mothers			
Amount given	N	Weighted %	Weighted SE
<b>Volume of fluids (including breast milk) given during illness</b>			
No fluids	3	2.2	1.3
Much less	18	15.2	2.8
Somewhat less	39	35	5.2
About the same	50	43.2	4.5
More	5	4.4	2.3
DK/NR	0		
Missing	0		
Total	115	100	
<b>Volume of solid foods given during illness</b>			
No solids	4	3.3	1.6
Much less	19	16.1	4.4
Somewhat less	50	45	6
About the same	41	34.3	4.8
More	1	1.3	1.3
DK/NR	0		
Missing	0		
Total	115	100	

**Table E.7.3.1 Prevalence of diarrhea**

Percent distribution of children aged 0-59 months, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
Child had diarrhea in the last two weeks			
Yes	70	8.7	0.9
No	724	91.3	0.9
DK/NR	4		
Missing	7		
Total	805	100	
Child had diarrhea in the last two weeks, by type			
Diarrhea with blood	9	1	0.4
Diarrhea without blood	61	7.7	0.9
No diarrhea	724	91.3	0.9
DK/NR	4		
Missing	7		
Total	805	100	

**Table E.7.3.2 Utilization of health services for diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Characteristic	N	Weighted %	Weighted SE
<b>Sought care for diarrhea</b>			
Yes	55	49.2	5.8
No	49	50.8	5.8
DK/NR	0		
Missing	0		
Total	104	100	
<b>Type of medical facility where care was sought</b>			
Public hospital	9	17.3	5.6
Public health unit	11	19.8	5.8
Public clinic/health center	11	21.5	6.4
Public mobile clinic	0	0	
Other public health center	1	2.4	2.5
Private hospital	0	0	
Private clinic/health center	4	6.6	3.1
Private office	6	9.4	3.5
Private mobile clinic	0	0	
Other private health center	0	0	
Pharmacy	7	12.7	4.8
Community health worker	0	0	
Traditional healer	1	1.5	1.5
Other	5	8.8	5.2
DK/NR	0		
Missing	0		
Total	55	100	

**Table E.7.3.3a Utilization of treatments for diarrhea**

Percent distribution of children age 0-59 months who had diarrhea in the last two weeks, as reported by their mother			
Treatment given	N	Weighted %	Weighted SE
<b>Any treatment given</b>			
Yes	64	90.8	3.1
No	6	9.2	3.1
DK/NR	0		
Missing	0		
Total	70	100	
<b>Powdered oral serum</b>			
Yes	31	43.2	6.7
No	39	56.8	6.7
DK/NR	0		
Missing	0		
Total	70	100	
<b>Bottled oral serum</b>			
Yes	8	10.3	3
No	62	89.7	3
DK/NR	0		
Missing	0		
Total	70	100	
<b>Homemade fluid recommended by health authorities</b>			
Yes	8	10.2	4.2
No	61	89.8	4.2
DK/NR	1		
Missing	0		
Total	70	100	
<b>Antibiotic pill</b>			
Yes	9	11.1	3.6
No	61	88.9	3.6
DK/NR	0		
Missing	0		
Total	70	100	

**Table E.7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Antidiarrheal pill</b>			
Yes	6	10.8	4.5
No	64	89.2	4.5
DK/NR	0		
Missing	0		
Total	70	100	
<b>Zinc pill</b>			
Yes	6	8.2	3.4
No	64	91.8	3.4
DK/NR	0		
Missing	0		
Total	70	100	
<b>Other type of pill</b>			
Yes	4	6.3	2.9
No	66	93.7	2.9
DK/NR	0		
Missing	0		
Total	70	100	
<b>Unknown pill</b>			
Yes	10	17.3	5.3
No	59	82.7	5.3
DK/NR	1		
Missing	0		
Total	70	100	
<b>Antibiotic injection</b>			
Yes	0	0	
No	70	100	
DK/NR	0		
Missing	0		
Total	70	100	

**Table E.7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Non-antibiotic injection</b>			
Yes	0	0	
No	70	100	
DK/NR	0		
Missing	0		
Total	70	100	
<b>Unknown injection</b>			
Yes	0	0	
No	70	100	
DK/NR	0		
Missing	0		
Total	70	100	
<b>Intravenous therapy</b>			
Yes	0	0	
No	70	100	
DK/NR	0		
Missing	0		
Total	70	100	
<b>Home remedy / herbal medicine</b>			
Yes	12	14.9	4.5
No	58	85.1	4.5
DK/NR	0		
Missing	0		
Total	70	100	
<b>Antibiotic syrup</b>			
Yes	18	24.3	5.6
No	52	75.7	5.6
DK/NR	0		
Missing	0		
Total	70	100	
<b>Antidiarrheal syrup</b>			
Yes	7	8.4	2.7
No	63	91.6	2.7
DK/NR	0		
Missing	0		
Total	70	100	

**Table E.7.3.3a continued**

Treatment given	N	Weighted %	Weighted SE
<b>Zinc syrup</b>			
Yes	1	2.2	2.1
No	69	97.8	2.1
DK/NR	0		
Missing	0		
Total	70	100	
<b>Other syrup</b>			
Yes	5	6.8	2.8
No	65	93.2	2.8
DK/NR	0		
Missing	0		
Total	70	100	
<b>Unknown syrup</b>			
Yes	0	0	
No	70	100	
DK/NR	0		
Missing	0		
Total	70	100	

**Table E.7.3.3b Utilization of oral rehydration solution for diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Treatment given	N	Weighted %	Weighted SE
Oral rehydration solution and zinc, among all children with diarrhea			
Yes	6	6	2.3
No	98	94	2.3
DK/NR	0		
Missing	0		
Total	104	100	
Oral rehydration solution and zinc, among those given any treatment			
Yes	6	7	2.8
No	85	93	2.8
DK/NR	0		
Missing	13		
Total	104	100	

**Table E.7.3.4 Feeding practices during diarrhea**

Percent distribution of children aged 0-59 months who had diarrhea in the last two weeks, as reported by their mothers			
Amount given	N	Weighted %	Weighted SE
Volume of fluids (including breastmilk) given during illness			
No fluids	2	1.5	1.1
Much less	13	12.4	3.1
Somewhat less	36	34.5	4.6
About the same	45	44.4	4.5
More	8	7.1	2.7
DK/NR	0		
Missing	0		
Total	104	100	
Volume of solid foods given during illness			
No solids	5	4.5	1.9
Much less	18	18.4	4
Somewhat less	33	30.9	3.4
About the same	46	44	4.2
More	2	2.2	1.6
DK/NR	0		
Missing	0		
Total	104	100	

**Table E.7.4a Immunization against common childhood illnesses**

Percent distribution of children aged 0-59 months, as reported by their mothers						
Immunization	Recall			Vaccination card		
	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE
<b>BCG vaccine (tuberculosis), among children 0-59 months</b>						
None recalled/recorded	5	0.6	0.3	35	5.6	1.2
1 dose	746	98.2	0.5	635	94.4	1.2
2+ doses	9	1.2	0.5	0	0	
DK/NR, missing	65			155		
Total	825	100		825	100	
<b>Oral polio vaccine, among children 6-59 months</b>						
None recalled/recorded	11	1.5	0.5	27	4.5	1.1
1 dose	121	18.4	2.3	25	4.6	1.2
2 doses	20	3	0.9	18	3.2	0.6
3+ doses	528	77.1	2.3	525	87.6	1.7
DK/NR, missing	59			144		
Total	739	100		739	100	
<b>Pentavalent vaccine (DPT, HepB, HiB), among children 6-59 months</b>						
None recalled/recorded	13	1.8	0.5	31	5.8	1.1
1 dose	90	13.9	1.8	19	3.5	0.8
2 doses	38	5.5	1.2	45	7.4	1.1
3+ doses	540	78.8	2.2	499	83.3	2.1
DK/NR, missing	58			145		
Total	739	100		739	100	
<b>Pneumoccal conjugate vaccine, among children 6+ months who were born 2012 or later</b>						
None recalled/recorded	16	10.1	2.8	9	5.4	1.4
1 dose	24	14.6	2.9	5	3.7	1.4
2 doses	7	5.1	1.5	15	11.3	3.3
3+ doses	116	70.3	4.2	127	79.6	4.3
DK/NR, missing	28			35		
Total	191	100		191	100	
<b>Rotavirus vaccine, among children 6-59 months</b>						
None recalled/recorded	76	11.2	1.9	57	10	1.7
1 dose	99	14.8	1.7	26	4.4	0.8
2 doses	33	4.8	0.8	42	7	1
3+ doses	468	69.2	2.5	468	78.6	2.1
DK/NR, missing	63			146		
Total	739	100		739	100	
<b>Diphtheria, tetanus and pertussis (DPT) vaccine, among children 18-59 months</b>						
None recalled/recorded	63	12.6	2.1	70	16.7	2.8
1 dose	434	82.2	2.3	382	83.3	2.8
2+ doses	27	5.1	1.5	0	0	
DK/NR, missing	49			121		
Total	573	100		573	100	
<b>Measles, mumps, and rubella (MMR) vaccine, among children 12-59 months</b>						
None recalled/recorded	42	7.2	1	57	11.9	2.1
1 dose	495	83.1	1.7	460	88.1	2.1
2+ doses	61	9.7	1.3	0	0	
DK/NR, missing	60			141		
Total	658	100		658	100	

**Table E.7.4b Immunization against common childhood illnesses, according to age group**

Percent distribution of children, as reported by their mothers									
Immunization	Recall			Vaccination card <sup>a</sup>			Vaccination card <sup>a</sup> plus recall		
	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE	N	Weighted %	Weighted SE
Measles, mumps, and rubella (MMR) vaccine, at least 1 dose among children 12-23 months									
Yes	153	97.1	1.3	138	82.9	2.8	161	96.7	1.3
No	5	2.9	1.3	30	17.1	2.8	5	3.3	1.3
DK/NR, missing	19			9			11		
Total	177	100		177	100		177	100	
Fully immunized <sup>b</sup> , among children 18-59 months									
Yes	292	56.6	3.1	284	51	2.8	370	67	3.2
No	224	43.4	3.1	264	49	2.8	174	33	3.2
DK/NR, missing	57			25			29		
Total	573	100		573	100		573	100	
Fully immunized <sup>b</sup> , among children 0-59 months									
Yes	452	61.5	3.1	457	57.1	2.9	567	71.5	3
No	285	38.5	3.1	331	42.9	2.9	216	28.5	3
DK/NR, missing	88			37			42		
Total	825	100		825	100		825	100	
<sup>a</sup> Among 1,778 children aged 0-59 months who had a vaccine card available for review (80 percent of the sample, unweighted)									
<sup>b</sup> Full immunization for age is defined as follows: 0-2 months (BCG x1); >2-4 months (BCG x1, OPV x1, Penta x1, Pneum x1, Rota x1); >4-6 months (BCG x1, OPV x2, Penta x2, Pneum x2, Rota x2); >6-12 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3); >12-18 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3, MMR x1); >18-59 months (BCG x1, OPV x3, Penta x3, Pneum x3, Rota x3, MMR x1, DPT x1). All Pneum compliance is calculated among children born 2012 or later.									

**Table E.7.5 De-worming treatment**

Percent distribution of children, as reported by their mothers			
Treatment given	N	Weighted %	Weighted SE
De-worming treatment given at least two times in the last 12 months, among children age 12-59 months			
Yes	215	35	1.9
No	398	65	1.9
DK/NR	2		
Missing	19		
Total	634	100	

**Table E.8.1 Breastfeeding**

Percentage of children			
Characteristic	N	Weighted %	Weighted SE
Early initiation of breastfeeding (among children <24 months)			
Yes	394	79.5	2.5
No	100	20.5	2.5
Missing, DK/NR	18		
Total	512	100	
Exclusive breastfeeding (among children 0-5 months)			
Yes	33	42.7	6.2
No	48	57.3	6.2
Missing, DK/NR	5		
Total	86	100	
Continued breastfeeding at 1 year (among children 12-15 months)			
Yes	32	55.9	7.1
No	23	44.1	7.1
Missing, DK/NR	4		
Total	59	100	

**Table E.8.2 Solid foods**

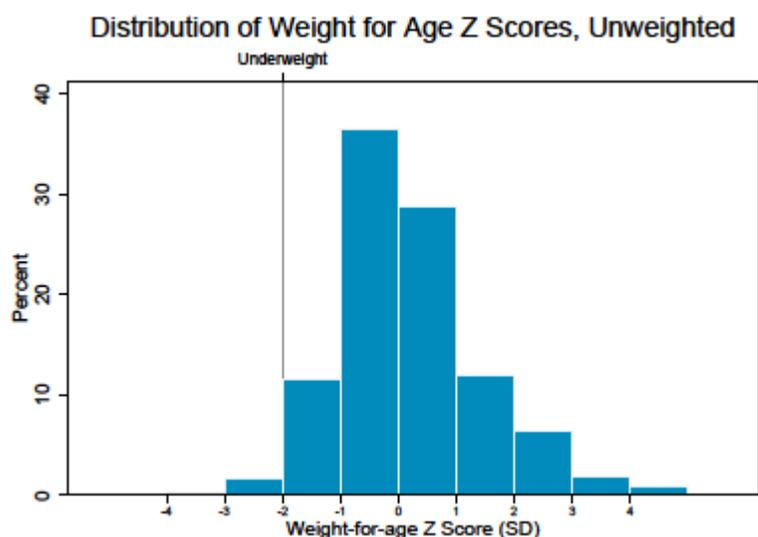
Percentage of children			
Characteristic	N	Weighted %	Weighted SE
Introduction of solid foods (among children 6-8 months)			
Yes	37	83.9	6
No	7	16.1	6
Missing, DK/NR	1		
Total	45	100	
Minimum dietary diversity (among children 6-23 months)			
Yes	132	51.8	4.5
No	117	48.2	4.5
Missing, DK/NR	9		
Total	258	100	
Minimum meal frequency (among children 6-23 months)			
Yes	121	56.5	3.7
No	93	43.5	3.7
Missing, DK/NR	44		
Total	258	100	
Minimum acceptable diet (among children 6-23 months)			
Yes	59	23.4	4.1
No	186	76.6	4.1
Missing, DK/NR	13		
Total	258	100	
Consumption of iron-rich foods (among children 6-23 months)			
Yes	104	39.9	4
No	145	60.1	4
Missing, DK/NR	9		
Total	258	100	

**Table E.8.3 Micronutrient supplements**

Percentage of children who received the supplement			
Type of supplement	N	Weighted %	Weighted SE
Vitamin A in the last six months (among children aged 0-59 months)			
Yes	414	51.1	2.4
No	374	48.9	2.4
DK/NR	10		
Missing	27		
Total	825	100	
Iron in the last day (among children aged 0-59 months)			
Yes	56	6.6	0.9
No	738	93.4	0.9
DK/NR	4		
Missing	27		
Total	825	100	
Packets of micronutrients in the last six months (among children aged 6-23 months)			
0 times	235	97.2	1.6
1-10 times	1	0.5	0.5
11-20 times	1	0.5	0.5
21-30 times	0	0	
31-40 times	1	0.5	0.5
41-50 times	1	0.4	0.4
51-59 times	0	0	
60+ times	2	1	1
DK/NR	7		
Missing	9		
Total	257	100	

**Table E.9 Age and sex of children measured**

Percent distribution of the de facto population of children age 0-59 months who underwent the Physical Measurement Module, by sex and type of measurement, unweighted data			
Measurement	Female (%)	Male (%)	Total (%)
<b>Height and weight</b>			
0-5	8.5	12.6	10.5
6-11	10.8	9	9.9
12-23	21.6	21.9	21.7
24-35	22.3	19.3	20.8
36-47	18.3	16.1	17.2
48-59	18.5	21.1	19.8
Total	100	100	100
Number of children	399	398	797
<b>Anemia</b>			
0-5	2.2	2	2.1
6-11	11	9.9	10.5
12-23	23.8	24.2	24
24-35	23.5	21.9	22.7
36-47	19.6	18.1	18.9
48-59	19.9	23.9	21.8
Total	100	100	100
Number of children	362	343	705



**Figure E.9.1.1 Distribution of weight-for-age z-scores among children aged 0-59 months**

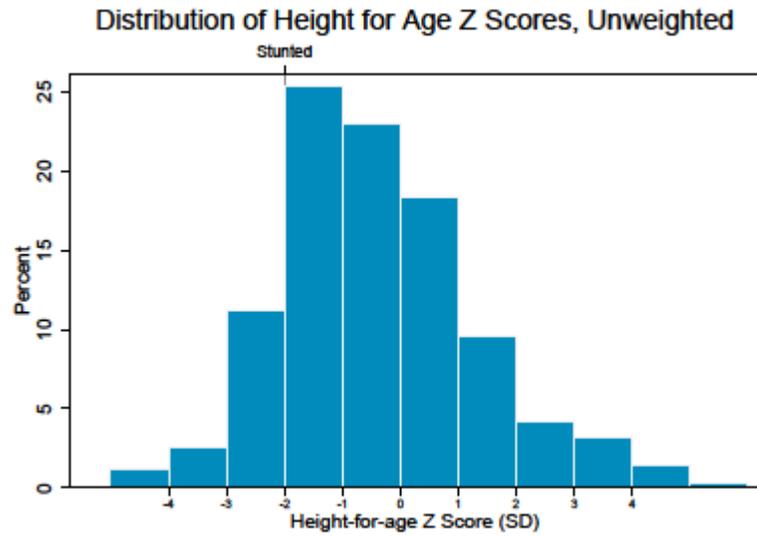


Figure E.9.2.1 Distribution of height-for-age z-scores among children aged 0-59 months

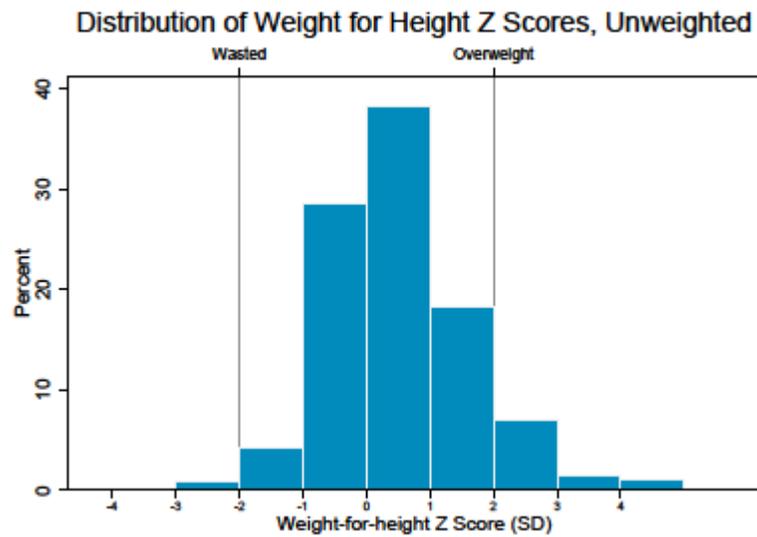
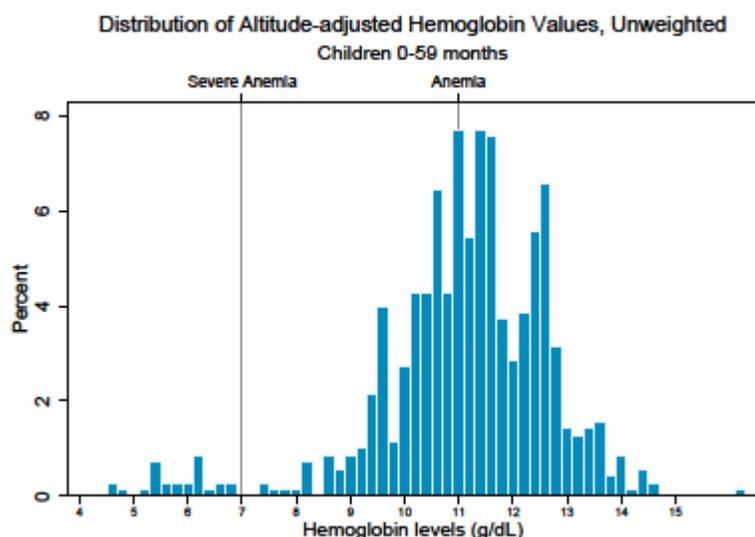


Figure E.9.3.1 Distribution of weight-for-height z-scores among children aged 0-59 months

**Table E.9.2 Prevalence of underweight in children aged 0-59 months**

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: weight-for-height, height-for-age, and weight-for-age, by age and sex									
Characteristic	Weight for age (underweight)			Height-for-age (stunting)		Weight-for-height (wasting)			Number of children
	Percent < -3 SD	Percent < -2 SD	Percent > +2 SD	Percent < -3 SD	Percent < -2 SD	Percent < -3 SD	Percent < -2 SD	Percent > +2 SD	
Total	1.2	3.7	7.9	4.5	16.4	0.7	1.7	8.7	825
Sex									
Male	0.9	3.7	9.9	5.1	16.4	0.4	1.1	8.3	410
Female	1.6	3.6	6	3.9	16.3	0.9	2.3	9.2	408
Age in months									
0-5	1.2	2.1	29.6	0	1.9	2.1	3.2	7.5	86
6-23	0	0	14.5	1.1	3.3	0	0	16.9	81
12-23	0.5	0.5	7.2	3.8	9.5	0.9	1.9	6.6	177
24-59	1.7	6	2.6	6.3	24.7	0.2	1.4	8.2	448



**Figure E.9.4.1 Distribution of hemoglobin values among children aged 0-59 months**

**Table E.9.4.2 Prevalence of anemia in children aged 0-59 month**

Characteristic	N	Weighted Anemia Prevalence	
		< 7 g/dL	< 11g/dL
Age in months			
0-5	86	26.3	63
6-11	81	4.2	63.4
12-23	177	10.8	56
24-59	481	4.9	39.2
0-59	825	6.8	46.4
6-23			
258	8.9	58.2	
Sex			
Male	410	7.2	47.1
Female	408	6.4	45.7

**Table E.10.1.1 Exposure to community health workers**

Percent distribution of women			
Characteristic	N	Weighted %	Weighted SE
Met with a community health worker in the last month			
Yes	34	3.2	1
No	1062	96.8	1
DK/NR	1		
Missing	6		
Total	1103	100	
Number of times respondent met with a community health worker in the last month			
Did not meet	1062	96.8	1
One time	24	1.3	0.3
Two times	9	1.7	0.8
Three times	0	0	
Four or more times	1	0.2	0.2
DK/NR	1		
Missing	6		
Total	1103	100	

**Table E.10.1.2 Services provided by community health workers**

Percent distribution of women who met with a community health worker in the last month			
Type of service	N	Weighted %	Weighted SE
<b>Referral for prenatal care</b>			
Yes	11	33.6	13.4
No	23	66.4	13.4
DK/NR	0		
Missing	0		
Total	34	100	
<b>Referral for in-facility delivery</b>			
Yes	6	10.8	6.6
No	28	89.2	6.6
DK/NR	0		
Missing	0		
Total	34	100	
<b>Referral for postnatal care</b>			
Yes	13	59.6	10.4
No	21	40.4	10.4
DK/NR	0		
Missing	0		
Total	34	100	
<b>Referral for voluntary counseling and testing for the prevention of HIV/syphilis transmission from mother to child</b>			
Yes	11	33.7	13.8
No	23	66.3	13.8
DK/NR	0		
Missing	0		
Total	34	100	
<b>Advice about family planning and contraception</b>			
Yes	19	50.9	14.4
No	15	49.1	14.4
DK/NR	0		
Missing	0		
Total	34	100	
<b>Child vaccination</b>			
Yes	21	48.9	14.1
No	13	51.1	14.1
DK/NR	0		
Missing	0		
Total	34	100	

Percent distribution of women who met with a community health worker in the last month			
Type of service	N	Weighted %	Weighted SE
<b>Advice about child nutrition</b>			
Yes	17	65.2	10.6
No	17	34.8	10.6
DK/NR	0		
Missing	0		
Total	34	100	
<b>Information, education, and communication sessions</b>			
Yes	16	68.1	8.4
No	18	31.9	8.4
DK/NR	0		
Missing	0		
Total	34	100	
<b>Other</b>			
Yes	8	22.1	11.7
No	26	77.9	11.7
DK/NR	0		
Missing	0		
Total	34	100	

**Table E.10.4.1 Exposure to breastfeeding, child nutrition, and child health interventions**

Percent distribution among women with children under 5			
Characteristic	N	Weighted %	Weighted SE
Received guidance or advice about breastfeeding in the last 12 months			
Yes	240	33.2	2.8
No	459	66.1	2.9
DK/NR	1		
Missing	6		
Total	706	100	
Received guidance or advice about child nutrition in the last 12 months			
Yes	237	32.6	2.7
No	463	66.7	2.7
DK/NR	0		
Missing	6		
Total	706	100	
Received guidance or advice about danger signs for children's health in the last 12 months			
Yes	240	33	2.8
No	460	66.3	2.8
DK/NR	0		
Missing	6		
Total	706	100	

**Table E.10.4.2 Exposure to child health interventions, by source**

Percentage of women with children under 5 who received guidance or advice about breastfeeding, child nutrition and danger signs for children's health in the last 12 months, and among them, the percentage of women with guidance or advice from specific sources			
Characteristic	Intervention type		
	Breast-feeding	Child nutrition	Child health
Received guidance or advice about interventions for children's health in the last 12 months (%)	33.4	32.8	33.2
<i>Number of women</i>	707	707	707
Source of advice (%)			
Public hospital	25.1	23.2	22.4
Public health unit	50.1	48	51.2
Public health center/clinic	22.2	23.9	23
Public mobile clinic	0.5	0	0
Other public health center	0.3	0.7	0.7
Private hospital	0	0	0
Private health center/clinic	2	2	1.8
Private office	0.2	0.2	0.7
Private mobile clinic	0	0.5	0.5
Other private health center	0	0	0
Pharmacy	0	0	0
Community health worker	0.7	0.8	0.7
Traditional healer	0	0	0
Other	1.7	2.8	2.8
DK/NR, missing	0	0	0
<i>Number of women</i>	240	237	240

**Table E.10.5 Satisfaction with community health workers**

Percent distribution of women who met with a community health worker in the last month by level of satisfaction in different fields					
Field of satisfaction	Level of satisfaction				Total
	Very dis-satisfied	Dis-satisfied	Satisfied	Very satisfied	
Number of visits received from community health workers	8.6	3.9	83	4.5	100
Knowledge and training of community health workers	10.1	2.5	84	3.3	100
Information provided by community health workers	13.3	3.3	76.2	7.2	100
Respectfulness shown by community health workers	12.3	2.5	80.6	4.6	100

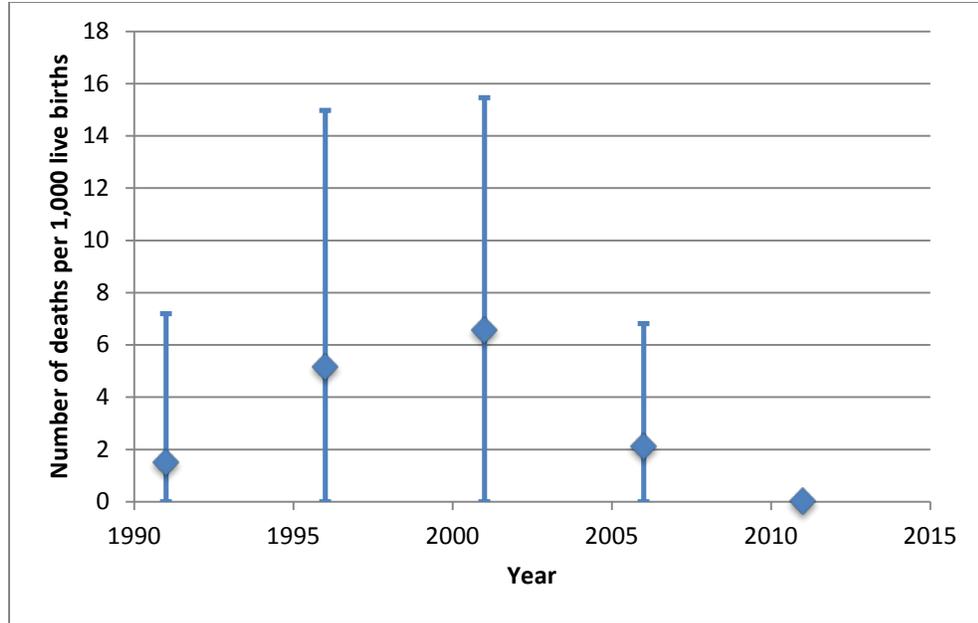


Figure E.11.1 Neonatal mortality estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

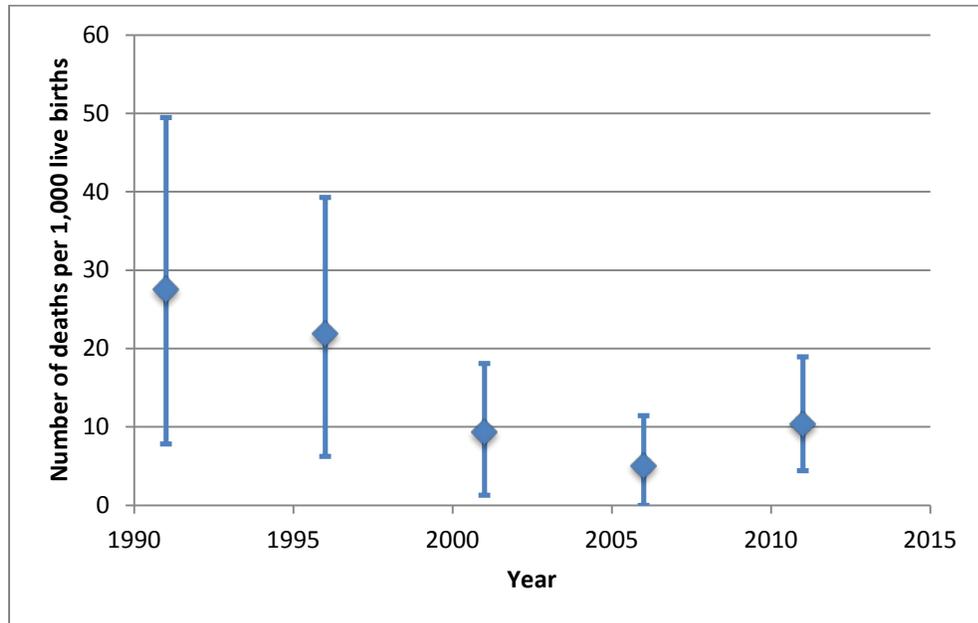


Figure E.11.2 Infant mortality estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

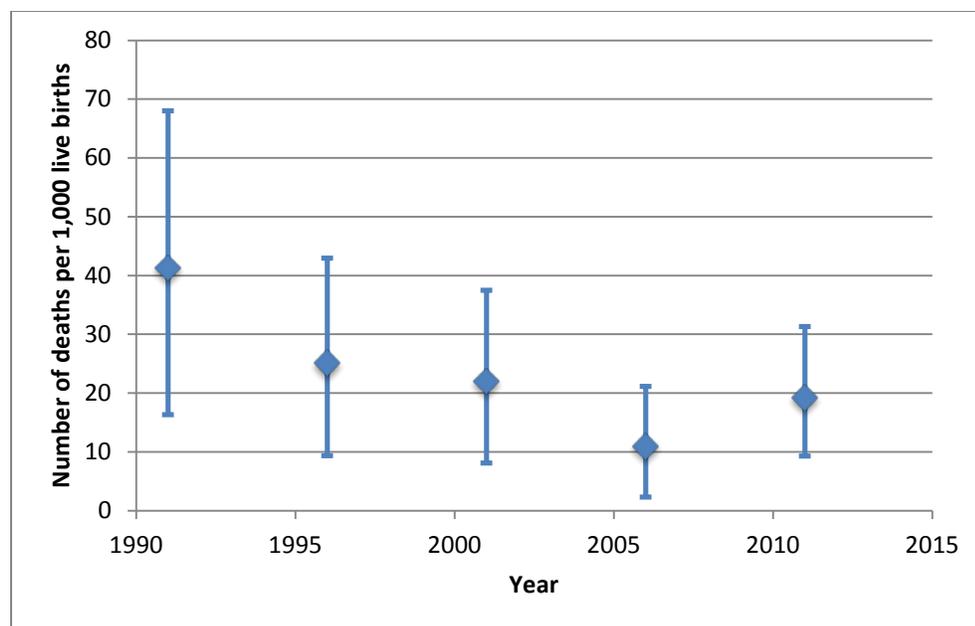


Figure E.11.3 Mortality in children under five years of age estimated from complete birth history data obtained from the SM2015-Nicaragua Baseline Household Survey, 2013

Table E.11.3a Mortality in children under 5 years of age in the target area of the initiative

Based on complete birth history data from the five years preceding the interview, among study areas, Mexico 2013

Child mortality indicator	Deaths per 1,000 live births	95% CI
Neonatal mortality	0.0	(0.0-0.0)
Infant mortality	10.3	(4.4-19.0)
Under-5 mortality	19.2	(9.3-31.3)