Sri Lanka
DEMOGRAPHIC AND HEALTH SURVEY

2006/7

PRELIMINARY REPORT
(Draft)

Department of Census and Statistics

In collaboration with

Ministry of Health care and Nutrition

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1. INTRODUCTION

The objective of this report is to publish the preliminary findings of the Sri Lanka Demographic and Health Survey (SLDHS) until the release of the Final Report which will carry detailed information. The preliminary findings reported here are confined to Background characteristics of respondents such as current fertility, current use of contraception, fertility preferences, maternal care, vaccination coverage, treatment for childhood illnesses, breastfeeding, nutrition, awareness of HIV/AIDS and prevention and it is expected that this will satisfy the urgent needs of users.

The SLDHS was carried out by the Department of Census and Statistics (DCS) for the Health Sector Development Project (HSDP) of the Ministry of Healthcare and Nutrition. The objective was to provide the most needed data to monitor and evaluate the impact of population, health and nutrition programmes implemented by different government agencies. Additionally it also aims measuring the impact of interventions made under the HSDP in improving the quality and efficiency of healthcare services as a whole.

It is also expected that this will serve as a continuation of the series of Demographic and Health Surveys conducted since 1987 in Sri Lanka. This will also cater to the needs of compilation of a number of Millennium Development Indicators.

Demographic and Health surveys are normally designed to collect data on fertility and determinants of fertility, family planning, fertility preferences, infant and child mortality, reproductive health, nutrition, anthropometric measurements and HIV/AIDS related knowledge and attitude. Yet the present DHS has initiated collecting information on new topics such as information on malaria, use of mosquito nets and anemia of eligible respondents and their children, empowerment of women, orphan hood, use of alcohol and other narcotic drugs and information about some non communicable diseases. An effort was also made to incorporate as much as possible the standard questions recommended globally. The questionnaire included number of other topics which are highly relevant to Sri Lanka in the current context.

Field work of the survey was carried out in two phases ie., in Sinhala speaking housing units from September 2006 to May 2007 and Tamil speaking housing units from August 2007 to October 2007. It should be stated that there were about 200 blocks where there were a mixture of communities speaking Sinhala or Tamil for which both Sinhala and Tamil speaking teams were employed to do the survey. Training of Sinhala speaking field staff was done in mid July 2006 to mid August 2006 while Tamil Speaking Field staff was trained in July 2007. Prevailed unstable situations in the Eastern parts of the country affected the recruitment of Tamil field enumerators for the survey. Tamil field enumerators were recruited from the districts in which they reside to minimize the drop outs. Northern Province had to be excluded from the survey due to the unsettled conditions prevailed in the province at the time of the survey.

Data entry was completed in December 2007 and machine editing of the data file was completed in mid January 2008. A nationally representative sample of 21,600 housing units was selected and 19,872 households were enumerated to give District level estimates (Excluding Northern Province). Detailed information were collected from all ever married women aged 15-49 years and their children below 5 years at the time of the survey. Hemoglobin test was carried out in a separate visit to households due to unavailability of suitable medical officers at the time of the main survey, in Sinhala speaking areas. Thus there was a time gap of about 6 months from the implementing period of the main survey and the time when hemoglobin levels were taken. But in Tamil Speaking housing units, medical officers were sent with the survey teams to collect Hemoglobin information.

There are certain limitations in comparing the findings of this survey with that of 2000 SLDHS, as the earlier survey did not include Eastern Province while 2006/7 SLDHS survey included that province too.

2. SURVEY IMPLEMENTATION

2.1. Sample Design

The SLDHS sample was designed to produce key indicators for the country as a whole, for sectors and districts. Information was collected from 20 districts (Excluding 5 districts in Northern Province – Jaffna, Kilinochchi, Mannar, Vavuniya and Mullativu). Composition of the provinces is given below.

1 Western Province: Colombo, Gampaha, Kalutara
2 Southern Province: Galle, Matara, Hambanthota
3 Sabaragamuwa Province: Rathnapura, Kegalle
4 Uva Province: Badulla, Moneragala
5 Central Province: Kandy, Matale, Nuwara - Eliya
6 Eastern province: Ampara,Batticaloa,Trincomalee
7 North-Central Province: Anuradhapura, Polonnaruwa
8 North-Western Province: Puttalama, Kurunegala

The SLDHS used a stratified two-stage sample design. The sample was spread geographically in proportion to the population. The first stage involved selecting of 2500 enumeration areas (clusters) from the list of about 100,000 enumeration areas (EAs) formed in the 2001 Population Census in order to provide reasonably accurate estimates by National Level, Sector Level and District Level, and to provide estimates for Tsunami affected areas as well.

An enumeration area is a sub division of a Grama Niladari Area which consists of about 80 housing units in urban areas and about 65 units in rural or estate . The criteria used in the subdivision is that one enumerator can visit all the units in the area within six hours to take a count of all the units and the people residing therein .Lists of all these EAs (including information of housing units) with a map is available at DCS to be used as a frame for selection of samples for surveys.

The second stage of selection involved the systematic sampling of 10 households listed in each Enumeration Area. Thus the survey covered a total of 2500 clusters: 447 urban, 1818 rural and 235 estate. Finally information was collected from 2,106 clusters while remaining 394 clusters were not enumerated (clusters from Northern Province and few clusters from other areas) due to various reasons.

All ever married women aged 15-49 years and their children below 5 years of age at the time of the survey were eligible to be interviewed. They were either usual residents of the households or visitors present in the household on the night before the interview date.

2.2. Questionnaire

A questionnaire was used to collect information from households and eligible women. Information was collected through personal interviews. Model questionnaires developed by MEASURE DHS were used with some modifications to match the local situation. Additional questions were also included to satisfy the needs of the health sector and also to provide data for the compilation of Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) indicators. The complete questionnaire was pre-tested by a team of well experienced staff to test the feasibility, sequence, skipping and timing before it is being finalized. The questionnaire was prepared in Sinhalese and Tamil languages mainly and English version was used occasionally.

The questionnaire consisted of two sections namely household section and women's section. The household questionnaire served dual purposes. One was to list all the usual members and visitors in the selected household together with some basic information such as age, education, marital status,

nature of residence, relationship to the head of household, some information about non communicable diseases, inadequacy of basic requirements of school going children and information about orphan hood. This information was used to identify eligible women and children for main interviews and also give an estimate of the sample population to be used as denominators for some of the household characteristics. The second purpose was to collect information on characteristics of the household's dwelling unit, such as the source of drinking water, type of toilet facilities, materials used for the floor and roof of the house, tenure, garbage disposal, ownership of various durable goods, use of iodized salt and use of mosquito nets including treated nets.

The woman's questionnaire was used to collect information from all ever married women aged 15-49 years and covered the following topics:

- Background characteristics (education, marital status, media exposure, etc.)
- Anthropometric measurements and hemoglobin levels
- Reproductive history and child mortality
- Knowledge and use of family planning methods
- Antenatal, intra-natal, post-natal care and breastfeeding practices
- Vaccinations, childhood illnesses and nutrition status of mothers and children
- Marriage and sexual activity
- Fertility preferences
- Woman’s work and husband’s background characteristics
- Awareness about AIDS and other sexually transmitted infections (STIs)
- Use of drugs, alcohol by household members and other health issues

In addition calendar of events related to eligible respondent’s marriage, child births, information with regard to contraception was recorded in a specially designed chart for a five year period prior to the survey.

2.4. Training

Altogether SLDHS used 222 field workers. While majority was well experienced staff of DCS, about 80 female enumerators were hired to be employed to collect information in Tamil speaking housing units. In addition 12 office staff worked in the DHS unit to provide assistance in coordination activities of the survey. Many of the DCS staff had participated in either the SLDHS pretest or a prior survey of this nature. However DCS organized two training programs for Sinhala medium staff and for Tamil medium staff separately. Duration of main Sinhala medium training program was three weeks from 1st June 2006 to 21st June 2006 while for Tamil medium it was from 1st June to 21st June 2007. In addition an extra training for each medium was arranged due to high dropout rate of hired field enumerators. The Sinhala medium training was carried out by well experienced senior staff of the DCS and experts from Ministry of Healthcare and Nutrition, Family Planning Association as well as Water Board. Training in Tamil medium was conducted by a consultant hired for this purpose. Other than giving a complete description of each question and its purpose, the training consisted of mock interviews, special lectures giving background information and field trials. The training was further enhanced by giving instantaneous feed back to the field staff after thorough observations of their interviews by the expert who came from Macro to assist training. Additionally a special set of tables were generated and were used to measure the quality of field work. If any deviations from the expected targets are found, the teams were informed and instructed accordingly. This was a new feature added to improve the quality of field work.

The training of measurers and measurer assistants in obtaining height and weight measurements and medical officers in conducting hemoglobin test were done by the officers of the Medical Research Institute of Sri Lanka. The training comprised of field practice sessions as well.

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2.5. Fieldwork

A total of 24 teams (15 Sinhala teams and 9 Tamil teams) were formed for the data collection. Each comprised of one female supervisor, four female interviewers, one field editor, measurer (height and weight and GPS measurements) and field assistant. Senior staff of DCS was appointed as district coordinators and each was assigned to accomplish co-ordination work of the teams. The overall responsibility of the coordinators was to assure the smooth functioning of field work. This included the checking of filled questionnaires for quality control and also to attend to other logistics such as transport, accommodation etc. Data collection in areas other than the Eastern Province started in September 2006 and continued for 5 to 7 months. During this period field work had to be stopped temporarily for a period of about one month due to heavy rainfall in most parts of the country. The field work of areas covering Tamil speaking communities started much later due to various reasons. The field work which started in May 2007 continued up to October 2007.

2.6. Data Processing

The processing of the SLDHS data began a few weeks after the fieldwork commenced. Completed questionnaires were returned periodically from the field to the Data Processing Division in Colombo, where they were coded manually by specially trained staff for this task. Data entry was done by a group of experienced data entry persons of DCS. A Consultant from Macro assisted the Data Processing Division and DHS Unit staff in giving necessary guidance for manual coding and editing, data entry, verification, on line editing and machine editing. Data were entered using the CSPro computer package. All data were entered twice (100 percent verification). The concurrent processing of the data was a distinct advantage for data quality, since the Survey Unit was able to advise field teams of errors detected during data entry. Machine editing was done by two DCS staff members who were specially trained for this purpose. The data entry and editing phase of the survey was completed in early January 2008.

3. RESULTS OF THE SURVEY INTERVIEWS

3.1. Response Rates

Table 1. Results of the household and individual interviews (Excluding Northern Province)

Number of housing units, households, number of interviews, and response rates, according to residence sector, Sri Lanka 2006/7

Result	Residence (Sector) Urban	Rural	Estate	Total
Housing units selected	4,410	15,190	2,000	21,600
Household interviews				
Households identified	4,440	14,926	1,991	21,357
Households occupied	4,187	14,293	1,837	20,317
Households interviewed	4,025	14,046	1,791	19,862
Household response rate	96.1	98.3	97.5	97.8
Individual interviews: women				
Number of eligible women	3,149	10,570	1,349	15,068
Number of eligible women interviewed	3,034	10,361	1,297	14,692
Eligible women response rate	96.3	98.0	96.1	97.5

Table 1 shows response rates for the 2006/7 SLDHS. A total of 21,600 housing units were selected for the sample, from which 21,357 households were identified and 20317 were found to be occupied at the time of the survey. Of the existing households, 19,862 were successfully interviewed, yielding a household response rate of 97.8 percent. Household response rate is higher in the rural sector than in the urban and estate sectors.

Within the households interviewed, a total of 15,068 eligible women were identified, of whom 14,692 were successfully interviewed yielding a response rate of 97.5 percent. The eligible women's response rate is slightly higher in rural areas than urban and estate areas.

The principal reason for non-response among eligible women was the failure to meet them at home despite repeated visits to the households. There were very few partially completed cases, but refusals were very minimal.

3.2. Characteristics of Respondents

The distribution of women aged 15-49 years by background characteristics is shown in Table 2. It gives both the weighted and unweighted numbers. Unweighted numbers indicate the number of individuals actually interviewed in the particular category, while weighted numbers show the results so that they are in proportion to district level.

According to table 2 around 55 percent of the respondents are in the broad age group of 30- 44 and this reflects the middle age structure of the Sri Lankan population.

Nearly ninety four percent of women were currently married or in union while the balance six percent is widowed, divorced or separated.
The survey shows that majority (81.3 percent) of women live in rural areas followed by urban areas (13.1 percent) and estate areas (5.5 percent).

Majority (48.7 percent) of women have had six to ten years of formal education. Another one fifth of women have at least completed 12 years of formal education. On the contrary a little less than one fifth of women have had one to five years of formal education or no education.

Table 2. Background Characteristics of Respondents (Excluding Northern Province)

Percent distribution of ever married women by background characteristics, Sri Lanka 2006/7

Background characteristic	Women		
	Weighted percent	Weighted number	Unweighted number
Age			
15-19	2.2	325	328
20-24	9.3	1,371	1,391
25-29	16.5	2,419	2,444
30-34	17.9	2,637	2,595
35-39	18.5	2,719	2,694
40-44	18.4	2,708	2,692
45-49	17.1	2,514	2,548
Marital status			
Married	92.6	13,599	13,558
Living together	1.0	153	153
Divorced/separated	2.7	402	414
Widowed	3.7	538	567
Education			
No education	4.0	587	646
Primary	15.0	2,205	2,342
Secondary	48.7	7,159	7,072
Passed G.C.E (O/L)	11.2	1,646	1,595
Higher	21.1	3,095	3,037
Religion			
Buddhist	72.6	10,659	9,948
Hindu	9.2	1,356	1,753
Islam	10.8	1,594	1,699
Roman Catholic	6.1	896	1,073
Other Christian	1.2	183	216
Other	0.0	1	1
Missing	0.0	1	2
Ethnic group			
Sinhalese	77.7	11,413	10,832
Sri Lankan Tamil	6.8	998	1,228
Indian Tamil	4.5	657	909
Sri Lanka Moor	10.4	1,529	1,622
Burgher	0.3	42	44
Malay	0.3	41	46
Other	0.1	9	8
Missing	0.0	3	3
Residence			
Urban	13.1	1,929	3,034
Rural	81.3	11,951	10,361
Estate	5.5	812	1,297
District			
Colombo	12.6	1,851	1,851
Gampaha	10.7	1,565	1,565
Kalutara	5.7	844	844
Kandy	6.6	974	974
Matale	2.8	417	417
Nuwara Eliya	4.9	715	715
Galle	4.8	703	703
Matara	4.3	639	639
Hambantota	2.9	422	422

Batticaloa	3.4	493	493
Ampara	4.1	599	599
Trincomalee	2.4	356	356
Kurunegala	6.4	935	935
Puttalam	4.0	595	595
Anuradhapura	4.2	614	614
Polonnaruwa	3.2	465	465
Badulla	5.5	811	811
Moneragala	3.4	498	498
Ratnapura	4.5	668	668
Kegalle	3.6	528	528
Total	100.0	14,692	14,692

Note: **Level of Education:**
No Education – Never attended school
Primary - Passed either grade 1 or 2 or 3 or 4 or 5
Secondary – Passed either grade 6 or 7 or 8 or 9 or 10
O/L – Passed GCE O/L
Higher – Passed GCE A/L or above

The highest proportion of women (72.6 percent) are Buddhist followed by Islam women (10.8 percent), Hindu women (9.2 percent), Roman Catholic women (6.1 percent) and the balance is comprised of Other Christian women (1.2 percent).

Ethnic proportions of the ever married women in the sample denote a similar pattern. The highest proportion of women are Sinhalese (77.7 percent) and the next highest is Sri Lankan Moors (10.4 percent). Sri Lankan Tamils comprised of 6.8 percent and Indian Tamils 4.5 percent. Proportion of Burgher and Malay women in the sample were 0.3 percent in each group, whereas other ethnic groups represent only 0.1 percent.

3.3. Fertility

Measuring current fertility levels is an important indicator derived from this survey. Fertility data were collected in the survey by asking each of the woman interviewed for a history of her live births. The information obtained on each of the woman's births included the month and year of the birth. These data are used to calculate two of the most widely used measures of current fertility, the total fertility rate (TFR) and its component age-specific fertility rates (ASFR).

As indicated in Table 3, the total fertility rate for the entire country excluding Northern Province is 2.4. This means that on an average, a Sri Lankan woman who enters the childbearing age will give birth to 2.4 number of children by the end of her reproductive period, if fertility levels remain constant at the level observed in the three-year period prior to the survey (period is taken as 2004-2006). The value of TFR (2.4) does not change considerably when compiled excluding the Eastern Province and this figure is 2.3.

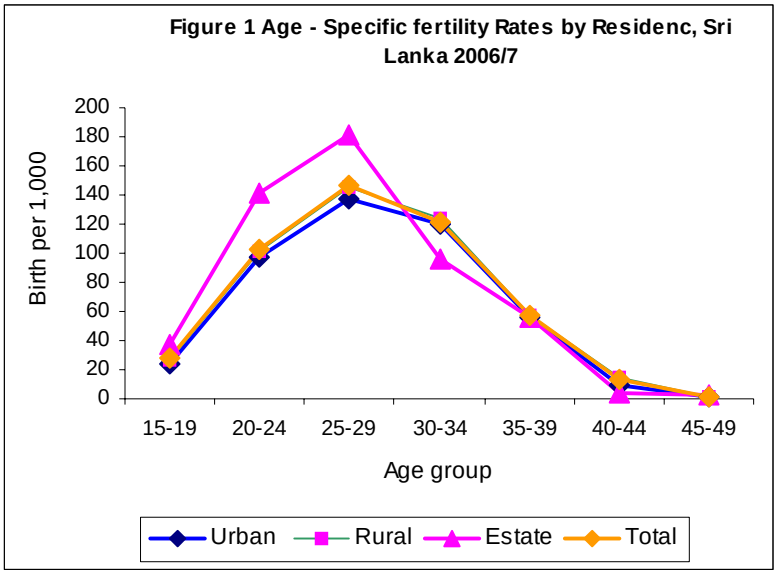
Table 3. Current Fertility (Excluding Northern Province)

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence sector, Sri Lanka 2006/7

Age group	Residence			
	Urban	Rural	Estate	Total
15-19	24	27	38	28
20-24	98	101	141	103
25-29	138	146	182	147
30-34	120	124	96	122
35-39	56	57	56	57
40-44	10	15	4	14
45-49	1	1	3	1
TFR	2.2	2.4	2.6	2.4
GFR	75.0	79.0	92.0	79.0
CBR	18.5	18.7	20.3	18.7

TFR: Total fertility rate for ages 15-49, expressed per woman
GFR: General fertility rate (births divided by the number of women age 15-49), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

When compare the sector wise data it can be observed that the TFR in estate areas (2.6 births) is slightly higher than the rate in urban and rural areas (2.2 and 2.4 respectively). Similarly age specific fertility rates for urban and rural resemble a similar pattern and this differs to some extent to the pattern of the estate sector (Figure 1). In fact till age group 25-29 all three sectors have a rising trend with estate sector having a comparatively high rate compared to other two sectors. For all three sectors the highest A.S.F.R. is recorded in the 25-29 age groups with remarkably high figure for estate sector. Additionally the estate sector marks a sharp decline from its peak age group to the next age group. In case of urban and rural this decline is moderate.



3.4. Family Planning

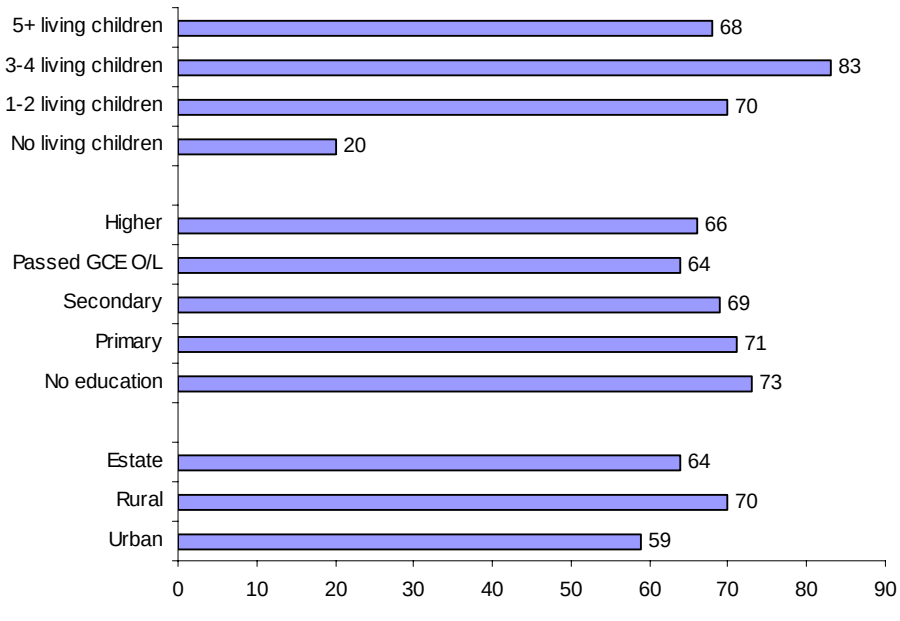
Information about awareness and use of contraceptive methods was collected from women by asking them to mention any ways or methods by which a couple can delay or avoid a pregnancy. For each method reported to be heard of the respondent was asked if she had ever used it. Women who reported they had ever used any method were asked if they or their partner were using a method at the time of the survey.

The level and differentials in the current use of contraception by method as reported by currently married women is given in Table 4. Contraceptive methods are grouped into two types namely modern and traditional methods. Modern methods include female and male sterilization, pill, IUD, injectables, norplant and male condom. Traditional methods include periodic abstinence (rhythm method), withdrawal and folk method.

Of currently married women 68 percent is currently using some method of contraception. Modern methods of contraceptives account for 53 percent of methods used by women (or the partner), versus 15 percent of traditional method users. Female Sterilization (16.9 percent) and Injectables (15 percent) are the most widely used methods by ever married women followed by periodic abstinence (9.6 percent).

As shown in Table 4 and Figure 2, majority of women in Sri Lanka use contraceptives. The proportion of women currently using any method of contraceptives rises with rising age of women. For instance, this proportion for the age group 15-19 is 53 percent, where as this is 75 percent for the age group 40-44, after which it declines. Married women in rural areas are considerably more likely to use contraception (70 percent) than those in urban (59 percent) and estate areas (64 percent).

Figure 2 Differentials in Contraceptive Use, Sri Lanka, 2006/7



Contraceptive use among currently married women is highest in Pollonnaruva District (78 percent) and lowest in Batticaloa District (35 percent). Women who did not acquire school education show the highest percentage (73 percent) of use of any modern or traditional method.

This trend decreases gradually for women with primary education (71 percent), secondary education (69 percent) and women who had education up to GCE OL (64 percent) and increases again for women with more than GCE OL qualification (66 percent).

It can be seen that use of contraception increases with the women without any living child up to women with 3 to 4 living children from 20 percent to 83 percent and decline to 68 percent for women with 5 more living children.

Table 4. Current use of contraception (Excluding Northern Province)

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Sri Lanka 2006/7

			Modern method									Traditional method					
Background characteristic	Any method	Any modern method	Female sterili-zation	Male sterili-zation	Pill	IUD	Inject-ables	Norplant	Male condom	LAM	Any tradi-tional method	Periodic absti-nence	With-drawal	Folk method	Not currently using	Total	Number of women
Age																	
15-19	53.3	44.7	0.0	0.0	12.0	4.9	23.9	0.4	3.5	0.0	8.6	4.0	4.7	0.0	46.7	100.0	318
20-24	57.6	49.7	0.1	0.0	11.2	6.3	27.1	0.7	4.3	0.1	7.9	3.7	4.1	0.1	42.4	100.0	1,340
25-29	63.6	53.3	3.0	0.0	9.2	7.5	26.4	0.4	6.6	0.2	10.2	5.8	4.4	0.1	36.4	100.0	2,365
30-34	69.6	56.9	8.9	0.0	11.1	8.3	20.5	0.5	7.6	0.1	12.7	7.8	4.9	0.0	30.4	100.0	2,544
35-39	74.0	56.6	21.0	0.2	9.2	7.5	11.8	0.3	6.5	0.2	17.4	11.0	6.2	0.1	26.0	100.0	2,579
40-44	75.2	54.0	31.0	1.0	5.0	5.8	5.9	0.1	5.1	0.0	21.3	14.7	6.5	0.0	24.8	100.0	2,462
45-49	64.0	44.6	33.7	2.8	2.0	2.1	1.6	0.0	2.3	0.0	19.4	12.7	6.7	0.0	36.0	100.0	2,142
Residence																	
Urban	59.2	43.5	13.1	0.6	6.4	4.5	11.8	0.4	6.5	0.2	15.7	11.1	4.6	0.0	40.8	100.0	1,780
Rural	69.6	53.7	15.9	0.6	8.4	6.9	16.0	0.3	5.6	0.1	15.9	9.9	6.0	0.1	30.4	100.0	11,220
Estate	64.2	61.0	41.1	1.4	5.0	2.5	9.0	0.0	2.0	0.1	3.2	2.0	1.1	0.2	35.8	100.0	751
District																	
Colombo	65.2	46.2	10.2	0.5	8.5	4.9	11.9	0.7	9.3	0.1	19.0	12.4	6.6	0.0	34.8	100.0	1,738
Gampaha	67.3	46.4	13.3	0.6	7.6	6.8	10.2	0.5	7.3	0.1	21.0	11.4	9.6	0.0	32.7	100.0	1,461
Kalutara	69.8	52.1	14.4	0.9	7.9	7.7	14.2	0.0	7.0	0.0	17.7	11.3	6.5	0.0	30.2	100.0	791
Kandy	69.1	57.1	18.6	1.1	9.4	6.4	14.7	0.0	6.6	0.4	12.0	7.3	4.6	0.1	30.9	100.0	922
Matale	70.7	60.4	20.1	0.6	8.2	9.3	16.6	0.0	5.5	0.2	10.2	6.2	4.1	0.0	29.3	100.0	391
Nuwara Eliya	69.5	63.2	37.5	0.7	5.6	4.2	12.1	0.0	3.1	0.0	6.3	3.8	2.6	0.0	30.5	100.0	673
Galle	73.6	48.9	13.1	0.6	9.4	6.0	12.6	0.4	6.5	0.3	24.7	18.3	6.4	0.0	26.4	100.0	656
Matara	68.8	49.0	8.6	0.4	9.4	7.2	15.2	0.0	8.1	0.1	19.8	14.2	4.9	0.7	31.2	100.0	603
Hambantota	69.5	47.0	11.8	1.3	7.2	8.4	12.5	0.0	5.9	0.0	22.4	14.4	8.1	0.0	30.5	100.0	402
Batticaloa	34.5	34.0	10.1	0.2	3.8	0.4	18.1	0.0	1.5	0.0	0.5	0.2	0.3	0.0	65.5	100.0	441
Ampara	55.7	49.9	20.0	0.1	5.0	3.0	19.0	0.0	2.4	0.3	5.9	4.4	1.5	0.0	44.3	100.0	543
Trincomalee	52.8	49.7	13.9	0.3	4.5	0.6	29.0	0.0	1.4	0.0	3.0	0.5	2.5	0.0	47.2	100.0	336
Kurunegala	75.5	58.0	16.0	1.2	9.3	7.5	17.6	0.2	6.1	0.1	17.6	12.2	5.4	0.0	24.5	100.0	869
Puttalam	66.1	52.5	16.5	0.1	8.2	4.9	17.2	2.4	3.1	0.0	13.5	10.5	3.1	0.0	33.9	100.0	541
Anuradhapura	74.0	62.6	18.6	1.6	9.5	8.0	21.2	0.0	3.7	0.0	11.3	5.4	5.8	0.2	26.0	100.0	581
Polonnaruwa	77.8	68.3	24.4	0.9	8.0	6.1	24.4	1.5	3.0	0.0	9.5	5.2	4.3	0.0	22.2	100.0	438
Badulla	72.4	62.0	30.7	0.0	9.0	7.7	11.3	0.0	3.3	0.1	10.4	6.9	3.4	0.2	27.6	100.0	769
Moneragala	71.1	57.4	21.5	0.9	3.6	11.1	17.8	0.0	2.6	0.0	13.7	5.8	7.9	0.0	28.9	100.0	474
Ratnapura	73.4	54.3	16.4	0.4	10.2	10.1	13.5	0.0	3.7	0.0	19.1	12.1	7.0	0.0	26.6	100.0	624
Kegalle	70.9	49.8	14.0	0.4	8.1	5.3	16.5	0.0	5.5	0.0	21.1	14.0	7.0	0.0	29.1	100.0	497
Education																	
No education	72.7	68.0	42.4	2.3	4.7	4.4	13.1	0.2	0.9	0.0	4.7	2.3	2.4	0.0	27.3	100.0	491
Primary	70.8	61.9	37.4	1.8	4.7	3.9	12.3	0.3	1.4	0.0	8.9	5.5	3.3	0.1	29.2	100.0	1,942
Secondary	68.7	55.0	15.6	0.5	9.1	6.6	18.5	0.4	4.2	0.1	13.7	7.9	5.8	0.0	31.3	100.0	6,718
Passed G.C.E (O/L)	63.5	44.7	9.3	0.2	7.9	6.0	13.3	0.2	7.6	0.2	18.9	13.0	5.8	0.1	36.5	100.0	1,579
Higher	66.2	43.9	6.6	0.2	7.9	7.7	10.3	0.3	10.8	0.2	22.3	15.5	6.8	0.1	33.8	100.0	3,022
Living Children																	
0	20.2	10.1	0.0	0.4	6.1	0.1	0.6	0.0	2.8	0.0	10.1	5.8	4.2	0.1	79.8	100.0	1,408
1-2	69.6	52.2	6.0	0.5	9.7	8.3	19.9	0.4	7.2	0.1	17.4	11.3	6.1	0.1	30.4	100.0	8,112
3-4	82.6	69.3	43.4	1.0	5.7	4.9	10.5	0.1	3.6	0.1	13.3	8.1	5.1	0.1	17.4	100.0	3,721
5+	67.7	60.2	43.6	0.7	1.5	1.9	10.6	0.8	0.9	0.1	7.5	4.2	3.3	0.0	32.3	100.0	511
Total	68.0	52.8	16.9	0.7	7.9	6.3	15.0	0.3	5.5	0.1	15.2	9.6	5.5	0.1	32.0	100.0	13,751

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhea method.

3.5. Fertility Preferences

Several questions were asked in the survey concerning women's fertility preferences. These questions included: a) whether the respondent wanted another child and b) if so, when she would like to have the next child. The answers to these questions allow for the estimation of the potential demand for family planning services either to limit or space births.

Table 5 and Figure 3 show there is considerable desire among Sri Lankan women to control the timing and number of births. Among currently married women, 18 percent would like to wait for two years or more for the next birth, and 60 percent either do not want to have another or are sterilized. 15 percent of married women would like to have a child soon (within two years). The remaining women are uncertain about their fertility desires or unable to get pregnant (infecundity).

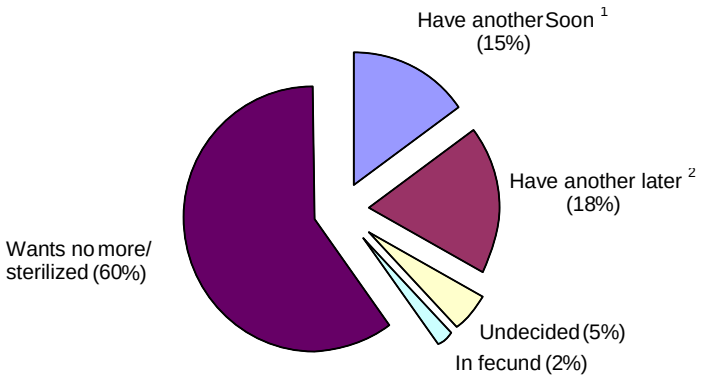
Table 5. Fertility preferences by number of living children (Excluding Northern Province)

Percent distribution of currently married women by desire for children, according to number of living children, Sri Lanka 2006/7

	Number of living Children [1]							
Desire for children	0	1	2	3	4	5	6+	Total
Have another soon [2]	76.7	26.2	6.3	1.8	1.3	0.8	1.8	15.1
Have another later [3]	9.7	44.4	12.6	3.4	2.7	2.4	2.6	17.5
Have another, undecided when	1.1	2.6	1.1	0.2	0.6	0.2	0.4	1.2
Undecided	3.5	5.4	4.9	1.5	1.2	2.0	2.1	3.8
Want no more	3.6	18.8	62.6	50.3	43.3	45.9	51.2	42.5
Sterilized [4]	0.6	1.0	10.2	40.8	48.8	46.1	38.4	17.6
Declare infecund	4.6	1.4	2.0	1.8	2.1	2.1	2.8	2.0
Missing	0.3	0.2	0.2	0.2	0.0	0.4	0.6	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,017	3,506	4,854	2,857	995	337	185	13,751

[1] Includes current pregnancy
[2] [4] Includes both male and female sterilization

Figure 3 Currently Married Women's Fertility Preferences, Sri Lanka 2006/7



[1] Wants next birth within 2 years
[2] Wants to delay next birth for 2 or more years

Fertility preferences are closely related to the number of living children a woman has. The vast majority of currently married women without a child (77 percent) would like to have one soon and on the contrary only 10 percent of women with no children want to delay their first birth. Thus, women of Sri Lanka show greater interest in controlling the pace of childbearing once they get their first child. The following information gives evidence to this fact. Around 44 percent of women with one child want to delay their next birth and another 19 percent wants no more. On the average interest in controlling the number of births starts with two children. More than 70 percent of mothers with two children have either got sterilized or say that they do not want any more children. At the same time around one fifth of mothers with two children wants to have another child. Further out of the mothers with three or more children, on the average 90 percent have got themselves either sterilized or say that they do not want anymore children.

3.6. Maternity Care

Proper care during pregnancy and delivery are important for the health of both the mother and the baby. In the SLDHS, women who had given birth in the five years preceding the survey were asked a number of questions about maternal and child health care. For the last live birth in that period, mothers were asked whether they had obtained antenatal care during the pregnancy and whether they had received tetanus toxoid injections while pregnant. For each birth in the same period, mothers were also asked what type of assistance they received at the time delivery.

Antenatal Care

Almost all the mothers (99 percent) have seen a health professional-a medical doctor including specialist or a mid wife -at least once for antenatal care for the most recent birth in the five-year period before the survey. This fact is true in urban, rural and estate areas. When compare across districts this indicator is slightly low in Trincomalee district (97).This indicator is again slightly low for mothers with no education.

Table 6. Maternal care indicators (Excluding Northern Province)

Percentage of women who had a live birth in the five years preceding the survey who received antenatal care from a health professional for the last live birth and whose last live birth was protected against neonatal tetanus, and among all live births in the five years before the survey, percentage delivered by a health professional and percentage delivered in a health facility, by background characteristics, Sri Lanka 2006/7

Background characteristic	Percentage with antenatal care from a health profes-sional [1]	Percentage whose last live birth was protected against neonatal tetanus	Number of women	Percentage delivered by a health profes-sional	Percentage delivered in a health facility	Number of births
Mother's age at birth						
<20	98.9	92.5	388	98.3	97.0	474
20-34	99.5	91.7	4,722	98.5	98.0	5,578
35+	99.2	84.1	937	98.7	97.7	1,000
Residence						
Urban	99.4	89.9	768	99.2	98.6	920
Rural	99.4	90.8	4,937	98.6	98.1	5,664
Estate	98.7	89.4	342	96.1	94.3	468
District						
Colombo	99.5	89.8	748	99.1	99.0	862
Gampaha	99.3	90.7	595	99.4	98.5	692
Kalutara	99.7	94.9	359	99.6	99.3	404

Kandy	99.5	84.2	396	99.3	98.5	462
Matale	100.0	95.5	164	98.3	99.8	186
Nuwara Eliya	99.3	93.6	291	95.8	95.0	366
Galle	100.0	89.1	267	99.5	99.4	326
Matara	99.8	99.1	289	98.7	96.6	337
Hambantota	100.0	95.3	191	99.0	99.0	217
Batticaloa	100.0	88.6	234	98.4	97.1	282
Ampara	98.0	74.4	271	96.8	96.0	347
Trincomalee	97.3	79.4	184	96.5	94.4	221
Kurunegala	98.4	89.4	371	97.7	97.9	410
Puttalam	99.5	94.2	237	99.3	96.3	270
Anuradhapura	100.0	96.1	250	98.1	98.1	276
Polonnaruwa	100.0	92.6	195	99.5	99.5	214
Badulla	99.2	85.2	309	96.0	95.8	384
Moneragala	98.7	92.8	206	99.2	98.0	235
Ratnapura	100.0	95.4	272	99.3	99.0	313
Kegalle	100.0	97.7	216	99.4	99.6	249
Education						
No education	97.4	79.4	151	93.8	91.2	179
Primary	98.6	82.7	585	96.7	95.3	726
Secondary	99.5	90.6	3,180	98.6	98.1	3,677
Passed G.C.E (O/L)	99.8	93.1	698	99.2	98.7	795
Higher	99.5	93.9	1,432	99.3	99.0	1,675
Total	99.4	90.6	6,047	98.5	97.9	7,051

[1] Medical Doctor including specialist and mid wife

Tetanus Toxoid

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus which can be a cause for infant deaths. Table 6 indicates that tetanus toxoid coverage is high among pregnant women in Sri Lanka, with about nine in ten babies fully protected against neonatal tetanus even though some groups of mothers show relatively low percentage of coverage. These groups are mothers with no education or only primary education. Certain districts like Ampara, Trincomalee, Kandy and Badulla have relatively low coverage.

Delivery Care

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that could cause the death or serious illness of the mother and/or the baby. Table 6 shows that nearly 99 percent of births in Sri Lanka are delivered by a health professional. Nearly 98 percent of deliveries take place in health facilities.

Differentials in delivery care by background characteristics of the mother are generally similar to those for antenatal care. Estate women and less educated women are less likely than others to receive medical assistance during delivery and to deliver in a health facility. Mothers in Trincomalee, Nuwara – Eliya and Badulla are less likely than mothers in other districts to receive medical assistance during delivery and to deliver in health facilities.

3.7. Child Health and Nutrition

Vaccination of Children

According to the World Health Organization, a child is considered fully vaccinated if he or she has received a BCG vaccination against tuberculosis, three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus (DPT), at least three doses of polio vaccine, and one dose of measles vaccine. These vaccinations should be received during the first year of life. The 2006/7 SLDHS collected information on the coverage of these vaccinations among all children born in the five years preceding the survey.

The information on vaccination coverage was obtained in two ways - from health cards and from mother's verbal reports. All mothers were asked to present the interviewer the health cards used for recording information on child's immunization. If the card was available, the interviewer copied the date of each vaccination given. If a vaccination was not recorded on the card as being given, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present a card for a child at all, she was further asked to recall whether the child had received BCG, DPT, polio, and measles. If she indicated that the child had received the DPT or polio vaccines, she was asked the number of doses the child was given. Table 7 presents information on vaccination coverage of children aged 12-23 months. This coverage includes the vaccination against the six preventable childhood illnesses mentioned before. The results are based both on the health card records and information provided by the mother.

The table 7 shows that 93 percent of children were with a health card. Of children aged 12-23 months 97 percent are fully vaccinated with BCG, measles, three doses of DPT and polio. In fact the percentages of children who have received BCG, DPT 1, 2, 3, and Polio 1, 2, 3, is 99 percent. But this is slightly low for measles. After all there are .3 percent of children without receiving any vaccination.

Table 7. Vaccinations by background characteristics (Excluding Northern Province)

Percentaqge of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card seen, by background characteristics, Sri Lanka 2006/7

Background characteristic	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All	No vacci-nations	Percent- age with a vacci-nation card	Number of children
Sex												
Male	99.5	99.7	99.5	99.2	99.7	99.5	99.2	96.9	96.6	0.3	91.9	725
Female	99.6	99.7	99.7	99.6	99.6	99.6	99.4	97.4	97.2	0.3	94.1	724
Residence												
Urban	99.4	99.6	99.6	99.4	99.4	99.4	99.2	96.6	96.4	0.4	92.1	192
Rural	99.7	99.8	99.8	99.7	99.8	99.8	99.7	97.4	97.4	0.2	94.5	1,157
Estate	97.2	97.6	97.6	96.2	97.6	97.6	95.5	94.5	92.6	2.4	77.2	99
District												
Colombo	99.6	99.6	99.6	99.6	99.6	99.6	99.6	95.0	95.0	0.4	94.9	183
Gampaha	100.0	100.0	100.0	99.7	99.7	99.7	99.4	98.5	98.5	0.0	93.1	144
Kalutara	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2	98.2	0.0	91.3	85
Kandy	99.6	100.0	100.0	100.0	100.0	100.0	100.0	98.8	98.3	0.0	94.1	101
Matale	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.7	95.7	0.0	96.8	39
Nuwara Eliya	97.9	97.9	97.9	96.1	97.9	97.9	95.2	97.0	95.2	2.1	81.7	79
Galle	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8	93.8	0.0	99.8	58
Matara	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	91.9	69
Hambantota	97.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7	0.0	87.7	43
Batticaloa	98.2	98.2	98.2	98.2	98.2	98.2	98.2	94.1	94.1	1.8	91.8	49
Ampara	100.0	100.0	98.9	98.9	100.0	98.9	98.9	96.0	96.0	0.0	93.8	82
Trincomalee	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.7	97.7	0.0	91.2	40
Kurunegala	99.5	100.0	100.0	100.0	100.0	100.0	100.0	98.6	98.2	0.0	96.7	90
Puttalam	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.0	94.0	0.0	98.0	44
Anuradhapura	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	94.7	57
Polonnaruwa	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	97.8	42
Badulla	97.5	97.5	97.5	97.5	97.5	97.5	97.5	96.0	96.0	2.5	89.3	71
Moneragala	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.1	96.1	0.0	93.7	51
Ratnapura	100.0	100.0	100.0	98.5	100.0	100.0	98.5	95.1	95.1	0.0	90.4	73

Kegalle	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1	99.1	0.0	92.4	48
Education												
No education	96.2	96.2	96.2	89.3	96.2	96.2	89.3	81.0	81.0	3.8	86.6	26
Primary	99.4	99.4	98.7	98.2	99.4	98.7	98.2	96.2	95.7	0.6	93.0	135
Secondary	99.7	99.8	99.8	99.8	99.8	99.8	99.7	97.5	97.3	0.2	93.2	755
Passed G.C.E (O/L)	99.6	99.6	99.6	99.3	99.6	99.6	99.3	98.4	98.4	0.4	93.4	152
Higher	99.4	99.8	99.8	99.8	99.7	99.7	99.7	97.4	97.0	0.2	92.9	380
Total	99.5	99.7	99.6	99.4	99.6	99.6	99.3	97.1	96.9	0.3	93.0	1,448

Differentials in coverage levels show that there is no variation by sex of the child. Although overall vaccination coverage is well high, still certain patterns could be discerned among districts by type of vaccine. Three districts namely Matara, Anuradhapura and Pollonnaruva have indicated full completion of vaccination. Most of the districts have not achieved full coverage specifically for Measles vaccination. Similarly there are 8 districts with slightly low coverage for BCG vaccination. Districts namely Colombo, Nuwera Eliya, Batticaloa and Badulla have recorded slightly less coverage for all vaccinations referred to. The level of completion of vaccination is less for children whose mothers are with no education or with some primary education compared to that of children whose mothers with an education above primary level.

Treatment of Childhood Illnesses

To obtain information on how childhood illnesses are treated, the mothers of each child under five years of age were asked whether the child had experienced the following symptoms in the two weeks before the interview date; cough with short, rapid breathing (symptoms of an acute respiratory infection), fever and diarrhoea. Fever is the most common illness among children in Sri Lanka (17.5 percent). The results also show that 4.4 and 3.5 percent of children under age five years have had symptoms of ARI and diarrhoea respectively. In case of ARI percentage for whom treatment was sought from a health facility/provider is 58 percent whereas this is fairly high for ARI with fever (85 percent) and diarrhoea (80 percent). It is also evident that seeking treatment for these three different ailments is high irrespective of the sex. On the contrary this is comparatively low in the estate sector.

Table 8. Prevalence of acute respiratory infection, fever, and diarrhea (Excluding Northern Province)

Percentage of children under five years who were sick with a cough accompanied by short, rapid breathing or with difficulty breathing due to chest congestion (symptoms of acute respiratory infection - ARI), fever, or diarrhea in the two weeks preceding the survey, Sri Lanka 2006/7

Illness	Percentage
ARI symptoms	4.4
Fever	17.5
Diarrhea	3.5
Number of children	6,924

Table 9 Treatment for acute respiratory infection, fever, and diarrhea (Excluding Northern Province)

Among children under five years who were sick with a cough accompanied by short, rapid breathing or with difficulty in breathing due to chest congestion (symptoms of acute respiratory infection-ARI) or with fever, in the two weeks preceding the survey, percentage for whom treatment was sought from a health facility or provider, and among children under five years who were sick with diarrhea during the two weeks preceding the survey, percentage for whom treatment was sought from a health facility or provider, percentage given a solution made from oral rehydration salt (ORS) packets or given prepackaged ORS liquids, and percentage given any oral rehydration therapy (ORT) by background characteristics, Sri Lanka 2006/7

	Children with symptoms of ARI		Children with fever		Children with diarrhea			
Background characteristic	Percent- age for whom treatment was sought from a health facility/ provider.	Number with ARI	Percent- age for whom treatment was sought from a health facility/ provider.	Number with ARI/ fever	Percent- age for whom treatment was sought from a health facility/ provider.	Percent- age given solution from ORS packet	Percent- age given any ORT	Number with diarrhea
Age in months								
<6	25.6	15	63.1	63	52.2	17.1	17.1	11
6-11	65.9	37	86.9	172	80.8	48.1	58.8	74
12-23	64.7	72	85.5	307	84.3	55.7	70.4	71
24-35	68.0	62	88.6	251	79.1	62.2	71.4	45
36-47	51.4	56	84.4	222	79.4	48.9	63.5	30
48-59	49.4	60	83.7	194	86.1	20.2	28.0	10
Sex								
Male	59.7	168	85.7	634	78.1	51.6	62.6	124
Female	56.0	134	83.5	575	82.4	49.1	61.1	117
Residence								
Urban	54.4	31	81.0	197	85.7	57.0	68.8	30
Rural	58.0	236	85.9	935	80.3	49.9	62.5	187
Estate	61.8	35	78.4	77	73.3	46.1	48.4	25
District								
Colombo	27.0	40	82.8	158	88.2	71.0	81.0	20
Gampaha	68.4	17	80.3	110	100.0	49.0	74.9	14
Kalutara	63.0	13	95.6	35	83.7	50.4	65.4	12
Kandy	58.2	8	86.1	87	100.0	59.3	87.3	12
Matale	77.9	12	69.5	50	100.0	0.0	31.9	3
Nuwara Eliya	67.2	23	84.8	53	73.2	58.8	58.8	18
Galle	55.7	15	86.4	55	100.0	41.7	100.0	5
Matara	74.2	8	90.4	47	90.2	24.7	47.7	5
Hambantota	62.1	23	88.7	55	64.1	13.8	13.8	7
Batticaloa	63.8	6	67.4	38	40.2	28.9	28.9	18
Ampara	75.6	14	79.5	81	46.3	51.4	69.6	28
Trincomalee	51.4	2	81.7	24	94.4	42.9	48.5	10
Kurunegala	71.9	15	93.1	77	100.0	71.0	71.0	7
Puttalam	33.1	3	90.2	41	100.0	51.1	63.4	10
Anuradhapura	64.0	18	83.0	50	70.4	31.2	48.2	14
Polonnaruwa	71.6	7	81.8	48	81.5	42.0	47.7	17
Badulla	49.4	31	81.9	75	90.7	29.7	38.9	13
Moneragala	44.4	9	98.0	43	100.0	91.5	91.5	11
Ratnapura	66.7	16	90.4	49	100.0	71.7	80.6	6
Kegalle	57.9	20	92.8	32	95.4	75.9	75.9	11
Education								
No education	69.2	10	88.2	38	68.6	16.6	28.1	9
Primary	65.4	52	81.9	170	81.4	46.9	56.1	45
Secondary	60.0	165	84.5	640	73.6	51.2	59.6	119
Passed G.C.E (O/L)	49.9	23	88.8	117	93.2	60.3	73.6	22
Higher	45.7	52	84.5	243	92.0	53.8	74.1	47
Total	58.0	302	84.7	1,209	80.2	50.4	61.8	241

Malaria Indicators

One of strongest weapons in the fight against malaria is the use of insecticide-treated mosquito nets (ITN) while sleeping. In the 2006/7 SLDHS, data were collected from households on availability of mosquito nets and questions were included about treatment of the nets. The data show that 62 percent of Sri Lankan households have a mosquito net. This figure is 54 percent in urban and 67 percent in rural areas (Table 9). But this figure is low in estate sector. Similarly 62 percent of children below 5 years have slept under a mosquito net the night before the interview date. This figure is high for rural sector (66.9percent) but very low in estate sector (22.5percent). One out of five women who gave birth in the five years preceding the survey said they took antimalarial medicine during the pregnancy for the most recent birth. Only 0.3 percent children who had fever in the two weeks before the interview date were reported to have taken an antimalarial medicine.

Table 10 Malaria indicators (Excluding Northern Province)

Possession and use of mosquito nets, preventive malaria treatment during pregnancy, and treatment of children with fever using antimalarial drugs, by residence sector, Sri Lanka 2006/7

	Residence							
	Urban		Rural		Estate			
Malaria indicators	%	Number	%	Number	%	Number	%	Number
Mosquito nets								
Percentage of household with at least one mosquito net (treated or untreated)	53.7	2,549	66.7	16,207	15.6	1,107	62.2	19,862
Percentage of household with at least one Insecticide Treated Net (ITN)	1.8	2,549	5.4	16,207	0.5	1,107	4.6	19,862
Percentage of children under 5 who slept under a mosquito net the night before the survey	53.1	955	66.9	5,808	22.5	506	62.0	7,269
Percentage of children under 5 who slept under an Insecticide Treated Net (ITN) the night before the interview	1.9	955	3.2	5,808	0.5	506	2.9	7,269
Percentage of pregnant women age 15-49 who slept under a mosquito net the night before the interview	42.1	94	50.4	746	14.4	58	47.2	899
Percentage of pregnant women age 15-49 who slept under an Insecticide Treated Net (ITN) the night before the interview	0.0	94	2.4	746	0.0	58	2.0	899
Preventive malaria treatment during pregnancy								
Percentage of last birth in the 5 years preceding the survey for which the mother took antimalarial drugs for prevention during the pregnancy	12.2	799	24.2	4,893	11.4	355	21.9	6,047

Treatment of fever								
Among children under age 5 with fever in the two weeks preceding the survey, percentage who took antimalarial drugs	0.0	199	0.3	931	0.0	78	0.3	1,209

Note: An Insecticide Treated Net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained within the last 12 months or a net that has been soaked with insecticide within the past 12 months.

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Breastfeeding and Supplementation

Breastfeeding practices and introduction of supplementary foods are important determinants of the nutritional status of children, particularly those under the age of three years. With improved nutritional status, the risk of mortality among children under three years can be reduced and their psycho-motor development enhanced. Breast milk is uncontaminated and contains all the nutrients needed by children in the first four to six months of life. Supplementing breast milk before four months of age is unnecessary and discouraged because of the likelihood of contamination, which may result in the risk of diarrheal diseases.

Table 11. Breastfeeding status by age (Excluding Northern Province)

Among youngest children under three years living with their mother, percent distribution by breastfeeding status and the percentage currently breastfeeding; Sri Lanka 2006/7.

	Breastfeeding and consuming:								
Age in months	Not breastfeeding	Exclusively breastfed	Plain water only	Non-milk liquids/ juice	Other milk	Comple-mentary food	Total	Percentage currently breast-feeding	Number of youngest children under three years
0-1	0.0	92.2	1.2	0.0	5.2	1.3	100.0	100.0	172
2-3	0.6	83.7	4.1	0.9	8.0	2.7	100.0	99.4	242
4-5	0.3	53.4	2.2	2.2	9.9	32.1	100.0	99.7	221
6-8	2.4	7.2	4.1	1.6	1.7	83.0	100.0	97.6	325
9-11	3.1	0.1	1.1	0.3	0.4	95.1	100.0	96.9	405
12-17	8.7	0.3	0.2	0.0	0.1	90.8	100.0	91.3	712
18-23	16.5	0.2	0.0	0.0	0.2	83.2	100.0	83.5	690
24-35	33.0	0.1	0.0	0.0	0.1	66.9	100.0	67.0	1,256
0-3	0.4	87.2	2.9	0.5	6.8	2.1	100.0	99.6	414
0-5	0.3	75.5	2.6	1.1	7.9	12.6	100.0	99.7	635
6-9	2.5	5.0	3.5	1.4	1.5	86.1	100.0	97.5	469
12-15	7.7	0.4	0.2	0.0	0.0	91.6	100.0	92.3	469
12-23	12.5	0.2	0.1	0.0	0.2	87.0	100.0	87.5	1,401
20-23	16.9	0.2	0.0	0.0	0.3	82.6	100.0	83.1	441

Note: The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

Table 11 shows that breastfeeding is very common in Sri Lanka and that the duration of breastfeeding is long. For example, 97 percent of children aged 9-11 months and 91 percent of those aged 12-17 months are still being breastfed. The results in Table 11 also indicate that supplementation of breast milk starts by the age of 4-5 months in Sri Lanka.

Child Nutrition

Malnutrition places children at increased risk of morbidity and mortality and has also been shown to be related to impaired mental development. Anthropometry provides one of the most important indicators of children's nutritional status. Height and weight measurements were obtained for children born in the five years before the survey interview date. The height and weight data are used to compute three summary indices of nutritional status: height-for-age; weight-for-height; and weight-for-age. These three indices are expressed as standardized scores (z-scores) or standard deviation units from the median for the international reference population that was recently developed by the World Health Organization (WHO, 2006). Children who fall more than two standard deviations below the reference median are regarded as undernourished, while those who fall more than three standard deviations below the reference median are considered severely undernourished. Moreover, in the SLDHS, some children's measurements were discarded due to implausibility. Table 12 shows the nutritional status among children below five years of age by selected background characteristics.

Table 12. Nutritional status of children (Excluding Northern Province)

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Sri Lanka 2006/7

Background characteristic	Height-for-age		Weight-for-height		Weight-for-age		Number of children
	Percentage below -3 SD	Percentage below -2 SD	Percentage below -3 SD	Percentage below -2 SD	Percentage below -3 SD	Percentage below -2 SD	
Age in months							
<6	2.5	9.7	6.8	15.8	2.8	12.1	548
6-8	2.2	9.5	2.6	10.4	1.9	12.0	309
9-11	4.5	15.6	2.2	11.9	4.7	15.6	398
12-17	5.0	18.6	1.8	13.4	2.3	18.5	695
18-23	5.3	22.7	2.9	15.9	4.2	22.9	677
24-35	5.1	21.9	3.1	14.6	4.2	23.4	1,339
36-47	3.8	19.8	2.4	15.1	4.0	24.9	1,363
48-59	3.6	15.7	2.7	17.5	4.3	25.3	1,318
Sex							
Male	5.0	18.7	3.2	16.4	3.9	22.3	3,436
Female	3.3	17.2	2.7	13.6	3.6	20.8	3,212
Residence							
Urban	2.9	13.7	3.4	14.9	3.0	16.6	855
Rural	3.5	16.7	2.8	15.2	3.5	21.7	5,348
Estate	15.3	42.2	3.6	12.6	8.7	29.7	446
District							
Colombo	1.4	8.4	2.1	13.2	1.5	14.1	831
Gampaha	1.2	10.0	2.4	10.9	2.3	11.6	675
Kalutara	3.1	15.9	1.8	12.1	4.3	16.9	357
Kandy	2.4	18.1	2.1	15.7	4.4	25.3	449
Matale	6.7	19.2	2.5	11.8	4.8	23.2	188
Nuwara Eliya	13.5	40.8	2.0	10.5	5.4	25.3	346
Galle	2.5	16.0	1.1	14.3	2.0	23.2	319
Matara	2.7	14.8	2.9	17.4	2.0	23.3	320
Hambantota	5.8	18.8	3.7	20.9	4.2	23.8	206
Batticaloa	7.7	24.4	6.7	19.4	5.5	27.5	272
Ampara	2.7	14.1	4.7	19.3	2.1	22.0	322
Trincomalee [1]	11.3	30.5	10.2	28.1	6.4	27.8	192
Kurunegala	4.2	18.6	2.8	13.3	3.9	20.6	381
Puttalam	1.4	14.0	1.2	11.7	1.9	19.2	236
Anuradhapura	2.5	15.3	3.4	14.6	2.9	25.0	264
Polonnaruwa	0.6	16.0	3.2	17.9	5.3	25.6	188
Badulla	8.7	33.1	3.7	17.5	7.0	32.8	352
Moneragala	7.4	21.7	3.9	19.8	7.8	26.6	230
Ratnapura	5.5	19.3	2.9	12.3	5.5	23.9	292
Kegalle	2.8	17.5	1.2	15.6	4.0	23.3	230
Education							
No education	10.4	42.0	2.4	15.9	7.2	34.9	161
Primary	9.6	29.8	4.3	19.0	7.0	33.7	654
Secondary	3.9	18.8	3.4	15.8	4.2	22.7	3,352
Passed G.C.E (O/L)	2.6	13.8	2.2	14.2	2.0	17.6	737
Higher	2.4	10.0	1.8	11.9	1.8	13.8	1,529
Missing	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	4.2	18.0	3.0	15.0	3.8	21.6	6,648

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO standards.

[1] It should be also noted that out of 65 clusters selected, the survey was conducted only in 45 clusters.

Children whose height-for-age is below minus two standard deviations from the median of the reference population are considered stunted or short for their age. Stunting is the outcome of failure to receive adequate nutrition over an extended period and is also affected by recurrent or chronic illness. According to the 2006/7 SLDHS findings, 18 percent of Sri Lankan children are stunted, with 4 percent being severely stunted. Stunting levels increase rapidly with age, peaking at 23 percent among children age 18-23 months. Stunting levels are slightly higher for boys than girls and for estate children than for urban and rural children. The prevalence of stunting varies by districts from 8 percent in Colombo to 41 percent in Nuwara-Eliya District. Children of mothers with some secondary or higher education are much less likely to be stunted than children whose mothers have achieved only primary level or have never attended school.

Children whose weight-for-height is below minus two standard deviations from the median of the reference population are considered wasted (or thin). Wasting represents the failure to receive adequate nutrition in the period immediately before the survey and typically is the result of recent illness episodes, especially diarrhoea, or of a rapid deterioration in food supplies. Table 12 shows that 15 percent of Sri Lankan children are wasted, with 3 percent severely wasted. Wasting levels are highest at ages 18-23 months. Wasting is high in Trincomalee District than elsewhere.

Children whose weight-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are considered underweight. The measure reflects the effects of both acute and chronic malnutrition. 22 percent of Sri Lankan children are underweight, with 4 percent classified as severely underweight. Percentage of children with underweight steadily increases with increase in the age of the children. Underweight is higher for boys than girls and for estate children than for children in urban and rural areas. By district, Badulla shows the highest proportion of underweight children. Proportion of children with under weight steadily decreases with increase of mother's level of education.

3.8. Infant and Child Mortality

Information on infant and child mortality is useful in identifying segments of the population that are at high risk so that programs can be designed to reduce it. Childhood mortality rate is also a basic indicator of a country's socio-economic level and quality of life. Caution should be taken in interpreting the mortality information presented in this report because it uses information from the birth history in the Woman's Questionnaire to construct the rates. It is known that in some communities, women are reluctant to discuss about their dead children, which could lead to underestimation of the childhood mortality rates.

Table 13 presents infant and under-five mortality rates from the 2006/7 SLDHS. The level of under-five mortality was 21 deaths per 1,000 births during the five-year period before the survey, implying that almost 2 in every 100 children born in Sri Lanka during the period died before reaching their fifth birthday. The infant mortality rate recorded in the survey was 15 deaths per 1,000 live births. What is interesting here is the proportion of neo-natal deaths to total infant deaths. It is noteworthy that neo-natal deaths account for 67 percent of total infant deaths.

Table 13 Early childhood mortality rates (Excluding Northern Province)

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Sri Lanka 2006/7

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
0-4	10	5	15	6	21
5-9	18	4	22	3	25
10-14	16	5	20	3	23

note:1 Computed as the difference between the infant and neonatal mortality rates

3.9. HIV/AIDS KNOWLEDGE AND BEHAVIOR

Acquired Immune Deficiency Syndrome (AIDS) can be a public health threat to any country. The SLDHS included a series of questions that inquired about respondents' awareness about AIDS and modes of transmission of the human immunodeficiency virus (HIV) that causes AIDS. In addition, respondents were asked if they knew of behaviors that can prevent the spread of HIV.

Table 14. Knowledge of AIDS (Excluding Northern Province)

Percentage of women who have heard of AIDS, by background characteristics, Sri Lanka 2006/7

Background characteristic	Women Has heard of AIDS	Number
Age		
15-24	91.1	1,696
..15-19	87.6	325
..20-24	91.9	1,371
25-29	94.2	2,419
30-39	92.8	5,356
40-49	87.6	5,221
Marital status		
Married or living together	91.5	13,751
Divorced/separated/widowed	83.7	941
Residence		
Urban	94.1	1,929
Rural	93.4	11,951
Estate	47.3	812
District		
Colombo	97.4	1,851
Gampaha	97.8	1,565
Kalutara	91.8	844
Kandy	88.6	974
Matale	91.3	417
Nuwara Eliya	64.0	715
Galle	93.6	703
Matara	94.4	639
Hambantota	93.5	422
Batticaloa	88.6	493
Ampara	85.9	599
Trincomalee	83.4	356
Kurunegala	98.1	935
Puttalam	89.1	595
Anuradhapura	92.7	614
Polonnaruwa	96.0	465
Badulla	83.3	811
Moneragala	87.6	498
Ratnapura	87.6	668
Kegalle	93.5	528
Education		
No education	51.7	587
Primary	71.7	2,205
Secondary	94.4	7,159
Passed G.C.E (O/L)	99.0	1,646
Higher	99.9	3,095
Total 15-49	91.0	14,692

na: Not applicable

Table 14 shows that more than nine out of ten respondents in Sri Lanka have heard of AIDS. Knowledge is slightly lower among younger and older women. It is also lower among those women living in estate areas, women with less education, and women in Nuwara Eliya District.

Table 15 shows that nearly 60 percent of women know that consistent use of condoms is a means of preventing the spread of HIV. Nearly eight in ten women know that limiting sexual intercourse to one faithful and uninfected partner can reduce the chances of contracting HIV. 55 percent of women know that using of condom and limiting sexual intercourse to one uninfected partner is a means of preventing the spread of HIV.

Table 15. Knowledge of HIV prevention methods (Excluding Northern Province)

Percentage of women age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, and by having one uninfected sex partner who has no other partners, by background characteristics, Sri Lanka 2006/7

	Women			
Background characteristic	Using condoms	Limiting sexual intercourse to one uninfected partner	Using condoms and limiting sexual intercourse to one uninfected partner	Number
Age				
15-24	57.1	78.1	53.9	1,696
..15-19	46.4	74.1	44.3	325
..20-24	59.7	79.1	56.1	1,371
25-29	62.6	81.2	59.3	2,419
30-39	62.1	80.6	59.1	5,356
40-49	50.6	74.8	48.2	5,221
Marital status				
Married or living together	58.5	79.1	55.6	13,751
Divorced/separated/widowed	42.6	67.3	40.1	941
Residence				
Urban	57.8	76.4	53.3	1,929
Rural	60.2	81.9	57.6	11,951
Estate	17.8	30.8	14.6	812
District				
Colombo	67.4	87.1	65.1	1,851
Gampaha	61.4	85.8	58.8	1,565
Kalutara	69.2	83.8	68.3	844
Kandy	57.2	81.9	56.1	974
Matale	51.5	82.7	49.8	417
Nuwara Eliya	32.8	50.8	28.9	715
Galle	73.2	89.7	72.4	703
Matara	67.6	84.5	64.9	639
Hambantota	62.2	84.0	60.3	422
Batticaloa	30.0	31.8	14.0	493
Ampara	33.4	52.1	26.2	599
Trincomalee	63.4	64.9	60.0	356
Kurunegala	65.8	85.4	59.8	935
Puttalam	48.5	77.2	46.6	595
Anuradhapura	57.3	85.6	56.6	614
Polonnaruwa	58.5	84.0	57.0	465
Badulla	42.7	69.6	41.0	811
Moneragala	52.0	75.6	50.0	498
Ratnapura	57.7	80.7	55.9	668
Kegalle	66.7	88.0	65.5	528
Education				

No education	17.5	31.8	15.7	587
Primary	26.5	51.7	24.1	2,205
Secondary	57.5	81.2	54.2	7,159
Passed G.C.E (O/L)	69.9	89.1	67.0	1,646
Higher	80.7	93.8	78.2	3,095
Total 15-49	57.5	78.3	54.6	14,692

Knowledge about AIDS and its transmission is lower among women in estate areas and those with less education. It also tends to be lower among women in Nuwara-Eliya, Badulla, Batticaloa, Ampara and Puttalam Districts.