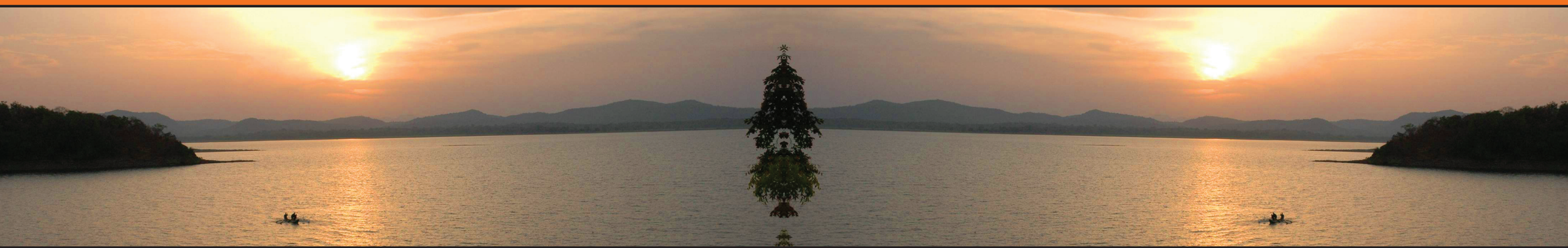
Sri Lanka 2006-07

Sri Lanka



Demographic and Health Survey

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Department of Census and Statistics
Colombo, Sri Lanka

Health Sector Development Project
Ministry of Healthcare and Nutrition
Colombo, Sri Lanka

April 2009

The 2006-07 Sri Lanka Demographic and Health Survey (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 in collaboration with The World Bank. Technical support for the survey was provided by Macro International Inc., USA. The objective of the survey was to provide data to monitor and evaluate the impact of population, health, and nutrition programmes implemented by different government agencies. Additionally the survey aimed at measuring the impact of interventions made under the HSDP in improving the quality and efficiency of health care services as a whole.

Additional information about the 2006-07 SLDHS may be obtained from the Department of Census and Statistics, 15/12 Maitland Crescent, Colombo 7, Sri Lanka, Telephone: (94) 11-268-2176 or (94) 11-269-2291; Fax: (94) 11-269-7594; Internet: www.statistics.gov.lk

Recommended citation:

Department of Census and Statistics (DCS) and Ministry of Healthcare and Nutrition (MOH). 2009. *Sri Lanka Demographic and Health Survey 2006-07.* Colombo, Sri Lanka: DCS and MOH.

CONTENTS

TABLES AND FIGURES

CHAPTER 5 FAMILY PLANNING

CHAPTER 6 OTHER PROXIMATE DETERMINANTS OF FERTILITY

CHAPTER 10 CHILD HEALTH

CHAPTER 11 NUTRITION OF CHILDREN AND WOMEN

CHAPTER 12 MALARIA

CHAPTER 13 HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR

CHAPTER 14 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH

APPENDIX A SAMPLE DESIGN

APPENDIX B ESTIMATES OF SAMPLING ERRORS

APPENDIX C DATA QUALITY TABLES

PREFACE

The Sri Lanka Demographic and Health Survey (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 in collaboration with the World Bank. Technical support for the survey was provided by Macro International Inc., USA. 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 the survey aimed at measuring the impact of interventions made under the HSDP in improving the quality and efficiency of health care services as a whole.

It is also expected that this survey 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.

A nationally representative sample of 21,600 housing units was selected for the survey and 19,872 households were enumerated to give district level estimates (excluding Northern Province). Detailed information was collected from all ever-married women aged 15-49 years and about their children below five years at the time of the survey. Within the households interviewed, a total of 15,068 eligible women were identified, of whom 14,692 were successfully interviewed.

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 attitudes. Yet the present DHS initiated collecting information on new topics such as malaria, use of mosquito nets by women and children, empowerment of women, use of alcohol and 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 a number of other topics which are highly relevant to Sri Lanka in the current context.

Haemoglobin testing was carried out as part of the survey. However, due to unavailability of suitable medical officers at the time of the main survey in Sinhala-speaking areas, the testing was done in a separate visit to households; thus there was a time gap of about 6 months from the main survey and the time haemoglobin levels were taken. In Tamil-speaking housing units, medical officers were sent with the survey teams to collect haemoglobin information. Due to the gap for Sinhala areas, the anaemia results will be published in a separate report.

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 the 2006-07 SLDHS survey included that province too. This is the first time that SLDHS published information by district levels.

The survey is the result of concerted effort on the part of various individuals and institutions, and it is with great pleasure that I would like to acknowledge the work to produce this useful document. The participation and cooperation that was extended by the staff of the Demographic and Health Survey Unit of the DCS and DHS experts from Macro International Inc. is greatly appreciated. I would like to extend my appreciation to the World Bank for providing financial support for the survey. I also would like to thank staff of the Ministry of Healthcare and Nutrition and Health Sector Development Project.

This report serves not only as a valuable reference, but is a call for effective action. It is my sincere wish that policy makers and researchers in the health sector would use this survey data extensively for the benefit of our nation.

D.B.P.S. Vidyaratne
Director General
Department of Census and Statistics

ACKNOWLEDGMENTS

We thankfully acknowledge the involvement of many organizations and individuals at different phases of the survey from planning to preparation of the final report.

We are extremely grateful to the Ministry of Healthcare and Nutrition (MoH), particularly Dr. Athula Kahandaliyanage, Secretary of MoH, Dr. Nihal Jayatilaka, Additional Secretary and Chairman of the Project Management Team of the Health Sector Development Project of MoH, Dr. S. M. Samarage, Deputy Director General (Planning) of MoH. We extend our appreciation to the former Project Director of the Project Office and staff of the Project Office for all the support they have rendered for the survey.

We express our deep sense of appreciation to the World Bank for providing the necessary funds for the survey, under the Health Sector Development Project of the Ministry of Healthcare and Nutrition. Our special thanks go to Dr. Kumari Navaratne, Public Health Specialist of the World Bank for her continuous support to make this survey a success.

We would like to extend our appreciation to Macro International Inc. especially Ms. Anne Cross, the country manager of the Sri Lanka Demographic and Health Survey and her experts who assisted DCS staff in Sri Lanka in different phases of the survey. We extend our appreciation to Ms. Anjushree Pradhan (Training Expert), Mr. Han Raggers (Data Processing Specialist), Mr. Andrew Inglis (GIS Specialist), Dr. Ann Evans (Report Writing Specialist), Ms. Sarah E. Bradley and Ms. Monica T. Kothari (Data Analysis Experts) for their technical guidance.

We are deeply grateful to Dr. Indra Thudawe of the UNICEF for providing two vehicles to DCS and for providing the measuring equipment and test kits for iodine testing as well as funding for two consultants.

The Director General of Census and Statistics, Mrs D.B.P.S Vidyaratne was the Chief Advisor of the survey, Director, Mrs. Padmini de Silva functioned as the Project Director and Deputy Director, Mrs. I.R. Bandara as the Project Manager and the Coordinator. We would like to extend our sincere thanks to all the members of the steering committee who provided overall guidance for the successful completion of the survey activities.

We are deeply thankful to Dr. Chandrani Piyasena and her staff of the Nutrition Division of the Medical Research Institute of Sri Lanka for training measurers and medical personnel for taking haemoglobin measurements; Dr. Neelamani Punchihewa, STD/AIDS unit of MoH, Dr. Loshan Munasinghe and Dr. Lalitha Rathnayaka of Family Health Bureau, Dr. G.N.C. Galappathi of the Anti-Malaria campaign unit of MoH, Mr. Sumathipala Senanayaka of the Water Board, and Staff of the DCS in conducting the training sessions.

The contribution of the former Director General, Mr. A.G.W. Nanayakkara is acknowledged with gratitude. We would extend our special thanks to Mrs. Radha Nimalaseena, retired Statistician of the DCS for work as the coordinator of the Tamil medium component of the survey.

We pay our gratitude to the Field Management Division and Census Division for providing assistance in arrangements and updating of the selected clusters. We also remember with much gratitude all the field staff (DCS and hired) who bore the burden of collecting the information under trying conditions. We are thankful to all heads of the divisions, branch and district offices of DCS who were kind enough to release staff to the survey field work.

The Sample Survey Division of the DCS was responsible for designing the sample for this survey. Our special thanks goes to Mr. Suba Wicrama, Statistician of the Sample Survey Division for his contribution for this. Data entry and computer editing of information collected at the survey was carried out by the Data Processing Division of the Department, under the direction of Ms. S.V. Nanayakkara, Director and Mr. S.A.S. Bandulasena, Deputy Director. The overall supervision of data entry and editing was done by Mrs. I.A.M. Fernando, Senior Systems Analyst/Programmer of the division with the assistance of Mrs. Sepali Sumanasekara, Systems Analyst.

We would like to mention our appreciation to the Chief Accountant, Mrs. K.G. Nandaseeli and her staff for guiding in financial matters of the survey. We also extend our gratitude to the staff of the Establishment Division for supporting us in various stages. Our special thanks go to the staff of the Mapping, Training and Transport Divisions and Stores for supporting us in make this survey a success.

A word of thanks for the invaluable contribution of the Director General, Mrs. D.B.P.S. Vidyarathne and hard work of the staff of the DHS Unit, especially Mrs. L.P. de Silva (Director) and Mrs. I.R. Bandara (Deputy Director) and Senior Statisticians Mrs. Dharma Dissanayaka and Mrs. Champika de Silva and all the staff of the DHS unit for their fullest cooperation at various stages of the survey. The DHS unit was also responsible for questionnaire design, training of interviewers, manual editing and coding of completed schedules and preparation of DHS Bulletins, preliminary report, presentations and the final report.

Finally, we wish to express our appreciation to all the respondents of the survey for their valuable co-operation.

SUMMARY OF FINDINGS

The 2006-07 Sri Lanka Demographic and Health Survey (SLDHS) is the fourth in a series of DHS surveys to be held in Sri Lanka—the first three having been implemented in 1987, 1993, and 2000. Teams visited 2,106 sample points across Sri Lanka and collected data from a nationally representative sample of almost 20,000 households and over 14,700 women age 15-49.

The Department of Census and Statistics (DCS) carried out the 2006-07 SLDHS for the Health Sector Development Project (HSDP) of the Ministry of Healthcare and Nutrition, a project funded by the World Bank. The objective of the survey is to provide data needed to monitor and evaluate the impact of population, health, and nutrition programmes implemented by different government agencies. Additionally, it also aims to measure the impact of interventions made under the HSDP towards improving the quality and efficiency of health care services as a whole.

All 25 districts of Sri Lanka were included at the design stage. The final sample has only 20 districts, however, after dropping the 5 districts of the Northern Province (Jaffna, Kilinochchi, Mannar, Vavuniya, and Mullativu), due to the security situation there.

FERTILITY

Survey results indicate that there has been a slight upturn in the total fertility rate since the 2000 SLDHS. The total fertility rate for Sri Lanka is 2.3, meaning that, if current age-specific fertility rates were to remain unchanged in the future, a woman in Sri Lanka would have an average of 2.3 children by the end of her childbearing period. This is somewhat higher than the total fertility rate of 1.9 measured in the 2000 SLDHS.

Fertility is only slightly lower in urban areas than in rural areas (2.2 and 2.3 children per woman, respectively); however, it is higher in the estate areas (2.5 children per woman). Interpretation of variations in fertility by administrative districts is limited by the small samples in some districts. Nevertheless, results indicate that Galle and Puttalam districts have fertility rates of 2.1 or below, which is at what is known as "replacement level" fertility, i.e., the level that is necessary to maintain population size over time. Differences in fertility by level of women's education and a measure of relative wealth status are minimal.

Research has demonstrated that children born too soon after a previous birth are at increased risk of dying. However, in Sri Lanka, only one in 10 children is born less than 24 months after a previous birth. The median interval between births is an exceptionally long 52 months—more than 4 years.

Childbearing begins relatively late in Sri Lanka. The median age at first birth is 25.1. Only 4 percent of young women age 15-19 have given birth.

Marriage patterns are important determinants of fertility levels. Almost two-thirds of women 15-49 are currently married. The median age at first marriage is 23.3 years for women age 25-49. Once marriages are entered into they tend to remain stable; divorce and separation are uncommon in Sri Lanka (2 percent of women 15-49).

There is a considerable desire among Sri Lankan women to control the number and timing of their births. Sixty percent of married women either do not want any more children or are already sterilized, while another 17 percent would like to wait at least two years before having their next child. Fifteen percent of married women want a birth soon, and most of these women presently have no children.

The survey shows that 9 percent of recent births were mistimed (wanted later) and 8 percent were not wanted at all. If Sri Lankan women could avoid all unwanted children, the total fertility rate would be 2.1 children, slightly less than the current rate of childbearing of 2.3 children per woman. These results indicate that there is still a need for family planning services.

FAMILY PLANNING

According to the survey findings, knowledge of any method of family planning is almost universal in Sri Lanka and there are almost no differences between ever-married and currently married women. Over 90 percent of currently married women have heard about pills, injectables, female sterilization, and the IUD. Eight out of ten respondents know about some traditional method of delaying or avoiding pregnancies.

Although the proportion of currently married women who have heard of at least one method of family planning has been high for some time, knowledge of some specific methods has increased recently. Since 1993, knowledge of implants has increased five-fold—from about 10 percent in 1993 to over 50 percent in 2006-07. Awareness about pill, IUD, injectables, implants, and withdrawal has also increased. On the other hand, awareness of male sterilization has dropped by 14 percentage points.

Almost 90 percent of currently married women have ever used a contraceptive method; however, only about two in three currently married women (68 percent) is currently using some method of contraception. Modern methods of contraception account for almost all the use, with 53 percent of married women reporting using a modern method, versus only 16 percent using a traditional method. The most commonly used methods are female sterilization (16 percent), injectables (15 percent), rhythm method (10 percent), and pills (8 percent). Overall, only 7 percent of married women in Sri Lanka have an unmet need for planning services.

Contrary to what is seen in most other developing countries, contraceptive use in the rural and estate sectors (70 percent and 65 percent, respectively) in Sri Lanka is slightly higher than in the urban sector (60 percent). The estate sector has the highest prevalence of modern method use as well; 61 percent of currently married women use some kind of modern method.

Contraceptive use ranges from a low of 35 percent of currently married women in Batticaloa district to a high of 78 percent of women in Polonnaruwa district. Another interesting finding of the 2006-07 SLDHS is the modest negative relationship between level of education and contraceptive prevalence, i.e., use declines as education level increases. Usually this association is positive. Similarly, women from the higher wealth quintiles are somewhat less likely to be using family planning than their less educated counterparts.

Three-quarters of women using modern contraceptives get their methods at a government facility, mostly from government hospitals and clinics. About one-quarter of women use the private medical sector to get their contraceptives.

Almost half of currently married women who are not using contraception say they intend to use family planning in the future, while 45 percent do not intend to use, and 6 percent are unsure. The most commonly cited reasons for not intending to use are inability to become pregnant (infecundity), infrequent sex, and health concerns.

CHILD HEALTH

The study of infant and child mortality is critical for assessment of population and health policies and programmes. Infant and child mortality rates are also regarded as indices reflecting the degree of poverty and deprivation of a population. Survey data show that for the most recent five-year period before the survey, the infant mortality rate is 15 deaths per 1,000 live births and under-five mortality is 21 deaths per 1,000 live births. Thus, one in every 48 Sri Lankan children dies before reaching age five. The neonatal mortality rate is 11 deaths per 1,000 live births and the postneonatal mortality rate is 5 deaths per 1,000 live births. The child mortality rate is 5 deaths per 1,000 children surviving to age one year.

Mortality rates at all ages of childhood show a strong relationship with length of the preceding birth interval. Under-five mortality is almost twice as high among children born less than two years after a preceding sibling than for those born four or more years after a previous child (40 vs. 22 per 1,000 births).

Survey results indicate that one reason for the low childhood mortality is that child health measures are apparently effective. For example, the survey shows that 97 percent of Sri Lankan children aged 12-23 months are fully vaccinated with BCG, measles and three doses of DPT and polio. Only 4 percent of children under age five years were reported to have had a cough with

short, rapid breathing in the two weeks before the survey; however almost six in ten children with symptoms were taken to a health facility or provider for treatment. Similarly, 85 percent of children with fever and 82 percent of those with diarrhoea are taken to a health facility or provider for treatment. Mothers reported that over two-thirds of the children with diarrhoea were treated with some form of oral rehydration therapy (ORT) or increased fluids, and over half were given a solution prepared using a packet of oral rehydration salts (ORS).

Reproductive Health

The survey shows that virtually all mothers (99 percent) in Sri Lanka receive antenatal care from a health professional (doctor specialist, doctor, or midwife). The proportion receiving care from a skilled provider is remarkably uniform across all categories for age, residence, district, woman's education, and household wealth quintile. Even in the estate sector, antenatal care usage is at the same high level. Although doctors are the most frequently seen provider (96 percent), women also go to public health midwives often for prenatal care (44 percent).

Almost all mothers (93 percent) have four or more antenatal visits. The survey also shows that women in Sri Lanka receive antenatal care services early during pregnancy; 92 percent have their first visit within the first three months of pregnancy.

Increasing the proportion of babies delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. SLDHS data show that almost all babies in Sri Lanka (98 percent) are delivered in health facilities, mostly public sector facilities. Similarly, 99 percent of births are delivered with the help of a health professional (i.e., doctor, nurse or midwife).

Postnatal care coverage is also high in Sri Lanka. According to the survey, 84 percent of mothers receive postnatal care within 24 hours of delivering.

Breastfeeding and Nutrition

Poor nutritional status is one of the most important health and welfare problems facing Sri Lanka today and particularly affects women and children. The survey data show that 17 percent of children under five are stunted or short for their age, while 15 percent of children under five are wasted or too thin for their height. Overall, 21 percent of children are underweight, which may reflect stunting, wasting, or both. As for women, at the national level, 16 percent of women are considered to be thin (with a body mass index < 18.5); however, only 6 percent of women are considered to be moderately or severely thin.

Poor breastfeeding and infant feeding practices can have adverse consequences for the health and nutritional status of children. Fortunately, breastfeeding in Sri Lanka is universal and generally of fairly long duration; 97 percent of newborns are breastfed within one day after delivery and 76 percent of infants under 6 months are exclusively breastfed, lower than the recommended 100 percent exclusive breastfeeding for children under 6 months. The median duration of any breastfeeding is 33 months in Sri Lanka and the median duration of exclusive breastfeeding is 5 months.

Infant and young child feeding (IYCF) practices include timely initiation of feeding solid and/or semisolid foods from age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older, while maintaining frequent breastfeeding. Guidelines have been established with respect to IYCF practices for children age 6-23 months. Overall, four in five Sri Lankan children are fed in accordance with IYCF practices.

Ensuring that children between 6 and 59 months receive enough vitamin A may be the single most effective child survival intervention. Survey results show that 92 percent of children age 6-35 months living with the mother consumed foods rich in vitamin A in the 24 hours preceding the survey and 74 percent consumed foods rich in iron. With regard to iron supplements, only 8 percent of children age 6-59 months received an iron supplement in the seven days preceding the survey.

As part of the 2006-07 SLDHS, interviewers tested the salt used for food preparation to see if it was sufficiently iodised. Salt in 97 percent of households was tested. The availability of iodised salt at the household level is satisfactory. Among households with tested salt, 92 percent had iodised salt.

HIV/AIDS

The HIV/AIDS pandemic is a serious health concern in the world today because of its high case fatality rate and the lack of a cure. Awareness of AIDS is almost universal among Sri Lankan adults, with 92 percent of ever-married women saying that they have heard about AIDS. Nevertheless, only 22 percent of ever-married women are classified as having "comprehensive knowledge" about AIDS, i.e., knowing that consistent use of condoms and having just one faithful partner can reduce the chance of getting infected, knowing that a healthy-looking person can be infected, and knowing that AIDS cannot be transmitted by sharing food or by mosquito bites. Such a low level of knowledge about AIDS implies that a concerted effort is needed to address misconceptions about HIV transmission. Programs might be focused in the estate sector and especially in Batticaloa, Ampara, and Nuwara Eliya districts where comprehensive knowledge is lowest.

Moreover, a composite indicator on stigma towards HIV-infected people shows that only 8 percent of ever-married women expressed accepting attitudes toward persons living with HIV/AIDS. Overall, only about one- half of ever-married women age 15-49 years know where to get an HIV test.

Women's Empowerment and Demographic and Health Outcomes

The 2006-07 SLDHS collected data on women's empowerment, their participation in decisionmaking, and attitudes towards wife beating. Survey results show that more than 90 percent of currently married women, either alone or jointly with their husband, make decisions on how their income is used. However, husbands' control over women's earnings is higher among women with no education (15 percent) than among women with higher education (4 percent).

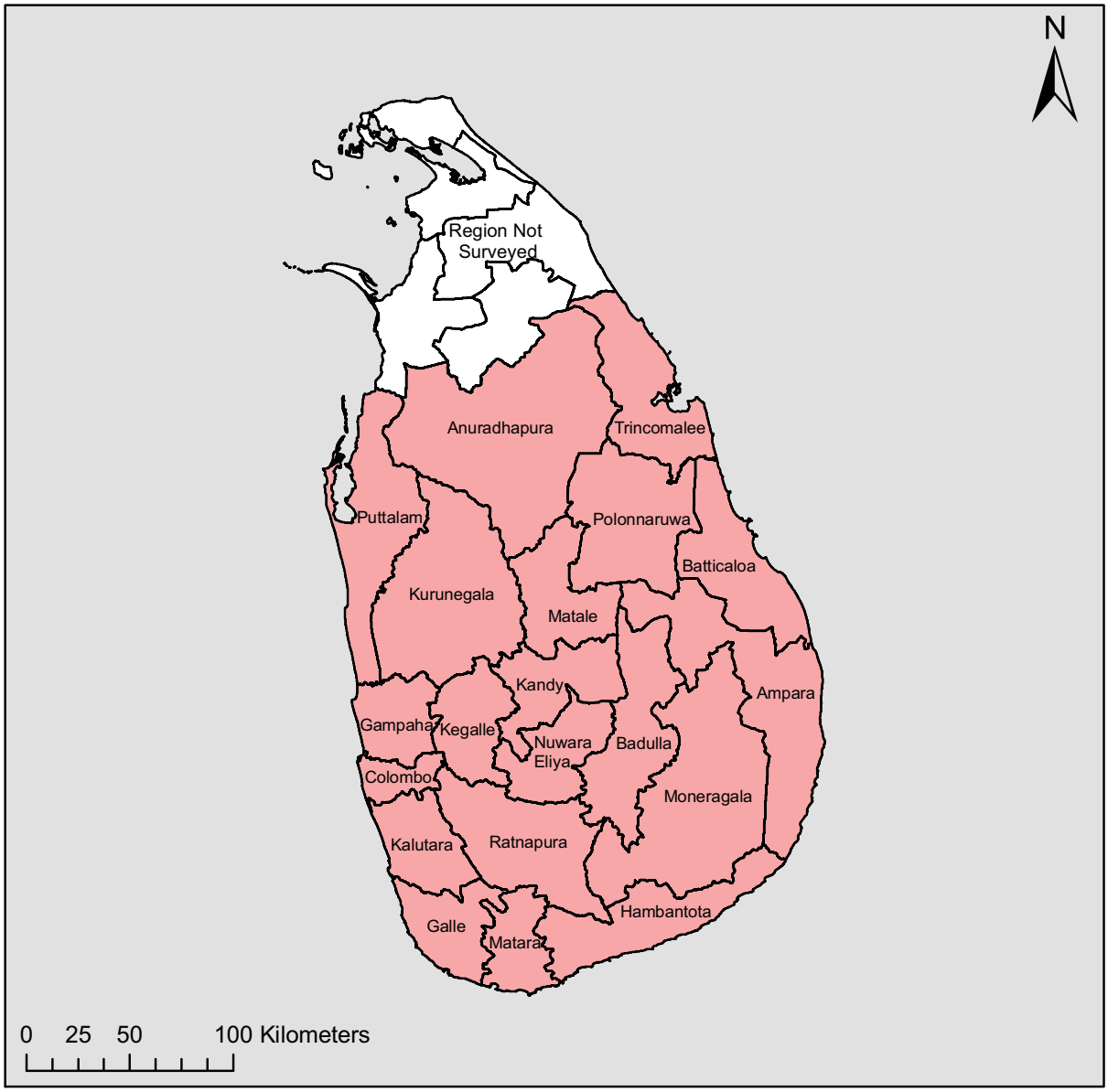
In Sri Lanka, the husband is usually the main source of household income; two-thirds of women earn less than their husband. Although the majority of women earn less than their husband, almost half have autonomy in decisions about how to spend their earnings.

The survey also collected information on who decides how the husband's cash earnings are spent. The majority of couples (60 percent) make joint decisions on how the husband's cash income is used. More than 1 in 5 women (23 percent) reported that they decide how their husband's earnings are used; another 16 percent of the women reported that their husband mainly decides how his earnings are spent.

To assess women's decision-making autonomy, information was sought on women's participation in four specific household decisions: the respondent's own health care, major household purchases, household purchases for daily needs, and visits to the respondent's family or relatives. The survey shows that women in Sri Lanka are actively involved in decisionmaking; 63 percent participate (alone or jointly with their husband) in all four of the specified decisions. However, the decisionmaking autonomy of women in the estate sector (38 percent) is substantially lower, compared with that of women in urban areas (63 percent) and women in rural areas (64 percent).

In this survey violence against women was measured by women's attitudes towards wife beating. Five possible reasons for wife beating were presented to the respondent: burns the food, argues with husband, goes out without telling husband, neglects the children, and refuses to have sexual intercourse with husband. About half (46 percent) of Sri Lankan women think that none of these reasons justify physical abuse of a wife by her husband. Only a small minority (11 percent) of women reported that all five reasons justify a husband hitting his wife. As respondent's level of education increases, acceptance of the rationales for violence against women decreases.

SRI LANKA


N
Region Not Surveyed
Anuradhapura
Trincomalee
Puttalam
Polonnaruwa
Batticaloa
Kurunegala
Matale
Kandy
Ampara
Gampaha
Kegalle
Nuwara Eliya
Badulla
Colombo
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INTRODUCTION 1

L.P. de Silva and I.R. Bandara

1.1 HISTORICAL BACKGROUND AND GEOGRAPHY OF THE COUNTRY

Sri Lanka is a beautiful, pear-shaped island situated in the centre of the Indian Ocean. It is separated from the southern part of the Indian subcontinent by a narrow strip of shallow water, which is about 35 kilometres wide, known as the Palk Straight. Sri Lanka lies between northern latitudes 5^0 55' and 9^0 50' and eastern longitudes 79^0 42' and 81^0 52' and has a tropical climate. Its greatest length is 435 kilometres from Point Pedro in the north and Dondra Point in the south. Its greatest width is 225 kilometres from Colombo to Sandamankanda in the east. Its total land area is 65,608 square kilometres.

Sri Lanka's location in the Indian Ocean and its natural harbours played a vital role in the history of naval activity. Travellers and traders from various parts of the world met in Sri Lanka to seek safe anchorage from the rough waters of the Indian Ocean and to exchange goods. The country has much natural scenic beauty, which attracts tourists. Beaches, the central hilly area, waterfalls, wildlife, and forests are some of the attractions.

Sri Lanka has a rich cultural heritage stretching back about 2,500 years. The land of Lanka, as it was called in the beginning, was inhabited by prehistoric peoples—the Yakkas and Nagas. The arrival of Prince Vijaya and his supporters from India laid the foundation for a civilization that flourished for several centuries. Such historical places as Sigiriya and the ancient cities of Polonnaruwa and Anuradhapura are evidence of the development of early civilizations. The present-day Sinhalese are descendants of these people.

Presently Sri Lanka has a multi-ethnic composition. The majority is Sinhalese, with 74 percent; another 18 percent are Tamils; another 7 percent, Muslims; and the remaining one percent consists of Burghers, Malays and other minor ethnic groups (DCS, 2007, p. 65).

Buddhism, which was introduced to Sri Lanka well over 2,550 years ago, remains the religion of the majority of Sri Lankans, while most Tamils are Hindu. Tamils consist of two groups: Sri Lanka Tamils—who are partly descendents of immigrants who arrived in Sri Lanka from very early times—and those who were brought by the British rulers from India as labourers to work on estates and plantations. Most Sri Lankan Muslims are descendents of Arab traders who settled here. Christians and Burghers are descended from early Europeans who came to the island (de Silva, 1997).

The history of small islands is often the story of adaptation to external influences. Sri Lanka is no exception. Due to its proximity to India, Sri Lanka has experienced many cultural and religious influences from that country. Since the 15^{th} century, foreigners from a number of countries have come to Sri Lanka. For example, the Portuguese ruled parts of the country from 1505 to 1608, and the Dutch from 1608 to 1796. From 1796 the British took over, and from 1815 they ruled the entire country until it regained its independence in 1948 (DCS, 2002).

The new leaders of independent Sri Lanka have sworn to maintain democracy. Historically, relations among the different ethnic groups have been generally peaceful. However, there has been a civil war in the country for the past 25 years involving a Tamil guerilla group. The Northern and Eastern Provinces are especially affected, but there has been violence in other parts of the country as well. The present government is trying to solve this problem soon to achieve its development targets.

1.2 CLIMATIC CONDITIONS

The climate of Sri Lanka is affected by seasonal monsoons. There are two major monsoons that bring rain at different times of the year to different regions of the island. The Northeast monsoon starts in November and ends in late February, bringing rain to the whole island. The Southwest monsoon brings rain in June and July, but it is limited to only the southwest regions and central highlands. During this period, the other parts of the island experience a dry season, although occasional rains fall in March, April, and May (Dissanayaka, 1992).

1.3 COUNTRY PROFILE

It is estimated that Sri Lanka had a population of 19.9 million in 2006 (DCS, 2008a). Its per capita income was only US$ 1,617 per annum in 2007 (Ministry of Finance and Planning, 2007). Inflation has been high (19 percent) in recent times (Ministry of Finance and Planning, 2007), while the unemployment rate in the third quarter of 2008 is reported as 5.2 percent (DCS, 2008b).

The Government of Sri Lanka continues to provide free education and medical facilities to people, resulting in a very high standard of living in terms of some social and demographic indicators. For instance, the country's crude birth rate (CBR) is 18.1 and the crude death rate (CDR) is 6.5 per 1,000 in 2005 (DCS, 2008c). The CBR declined from 36.6 in 1960 to 18.1 in 2005 (DCS, 2008c). Life expectancy at birth for females is 74.8 in 1991 and it is somewhat lower, 70.1 years, for males (DCS, 2008d).

1.3.1 Health Policies and Programmes

There has been considerable interest over the years in developing a new health policy in Sri Lanka. Political changes in the last decade have led to these major reviews of policies, although the overall policy has remained constant. The process was first initiated in 1992 by a Presidential Task Force, followed by a review of the policy and the issuing of a National Health Policy in 1996. In 2003, the cabinet endorsed a strategic framework for health development.

The 13th amendment to the constitution in 1987 saw devolution of some powers and functions to the Provincial Councils. The devolution functions involved administration and management of the provincial hospitals network and field health services and the Provincial Councils established their own Provincial Ministries and Departments to carry them out. This resulted in concomitant changes in the management structures, roles and responsibilities of the Central Ministry that had operated through a decentralized district health system before 1987 (Ministry of Healthcare and Nutrition, 2008a).

The government's health policy has two broad aims of relevance to aspects of health status presented in this report: to increase life expectancy and improve the quality of life. According to the health Master Plan of Sri Lanka, the Government is committed to ensuring a high-quality, accessible, and sustainable health system for the people of Sri Lanka. It aims to facilitate equity through ease of access to health services, to improve productivity, and to ensure that resources allocated to health result in a healthier population that is able to contribute to the economic and social wellbeing of the country (Ministry of Healthcare and Nutrition, 2008a). These aims focus on reducing preventable diseases and deaths due to both communicable and non-communicable diseases and emphasizing positive health behaviours through health promotion. In Sri Lanka, health care is provided free of charge in public-sector facilities, and the policy states continued commitment to this approach. The policy identifies improvement of preventive health programmes and early detection of preventable problems and complications (such as complications of pregnancy). With regard to services, the policy mentions improvements to facilities, as well as better accessibility—from an equity perspective—and quality of care (Ministry of Healthcare and Nutrition, 2008b).

The policy says that resources will be allocated to provinces and districts according to health needs in those areas and national priorities. Therefore, the Department of Census and Statistics planned this survey in order to provide district-level estimates for such health services management decisions.

1.3.2 Family Planning Policies and Programmes

The first family planning clinic in Sri Lanka opened in 1937, but closed soon thereafter. In 1965, family planning was integrated in the government's maternal and child health (MCH) programme, and in 1968 the Family Health Bureau was established to co-ordinate family planning under the Ministry of Health. The government's concern with population reduction was clearly expressed through the formulation of the Population Policy in 1977. However, it took about two decades for the National Family Planning Programme to be able to reach the remote rural areas.

The following are the 1998 Population and Reproductive Health Policy goals and approaches that directly address family planning:

1. Maintain current declining trends in fertility so as to achieve a stable population by the middle of the 21st century: provide family planning information, education and communication services through government, non-governmental, and private sector sources; and improve the quality of service delivery focusing on unmet need, especially among those in plantations, women employed in factories, internally displaced populations, and those in urban slums and underserved rural areas.
2. Address adolescent and youth-specific needs: ensure adequate information on population, reproductive health, family life, and sexuality in school curricula; strengthen youth worker education, especially on sex-related issues; and encourage counselling on human sexuality.
3. Increase public awareness of population and reproductive health issues: engage decision-makers and opinion leaders in advocacy; encourage policy-oriented and operations research into population and reproductive health problems; publish and disseminate updated information in national languages; encourage use of media for public discussion; and establish a system for continuous research, evaluation, dissemination and feedback.

Free family planning services are provided through primary care facilities and hospitals. This infrastructure is complemented by a network of public health nurses and midwives providing MCH and family planning services in rural areas. Oral contraceptives are available without prescription from pharmacies, and public health midwives (PHMMs), the health workers mainly responsible for field level service provision. Condoms are widely available through retail outlets and PHMMs. The PHMMs counsel clients on adopting a method and make referrals to appropriate service outlets. They sell oral contraceptives and condoms at nominal prices at the community level. The social marketing system in Sri Lanka includes roughly 8,000 outlets for sale of condoms and oral contraceptives. PHMMs also assist in the MCH and family planning clinics, and conduct regular follow-up with family planning users in the area (WHO, 2008).

The major non-governmental organizations are the Family Planning Association of Sri Lanka (FPA, established in 1953), the Sri Lanka Association of Voluntary Surgical Contraceptives (SLVSC, established in 1974), and Community Development Services (CDS, established in 1978). The family planning programme was further strengthened in 1973 with assistance from the United Nations Fund for Population Activities (UNFPA).

1.4 Demographic and Health Surveys in Sri Lanka

Sri Lanka has conducted several surveys related to fertility, family planning, and reproductive health. The first of this type was the World Fertility Survey conducted in 1975. The World Bank

Fertility Survey (1979), the Contraceptive Prevalence Survey (1980), and the Sri Lanka Contraceptive Prevalence Survey (1985) all followed after that first nationwide fertility survey. Then a series of Demographic and Health Surveys (DHS) was carried out in 1987, 1993, and 2000. DHS is an improved version of the earlier fertility surveys with additional modules to collect information on maternal and child health, nutrition, reproductive health and child survival, and other topics. The Sri Lanka Demographic and Health Survey (SLDHS) of 2006-07 is a continuation of the DHS series.

The objective of this report is to publish the final findings of the 2006-07 SLDHS. This final report provides information mainly on background characteristics of respondents, fertility, reproductive health and maternal care, child health, nutrition, women's empowerment, and awareness of HIV/AIDS and prevention. It is expected that the content of this report will satisfy the urgent needs of users of this information.

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

1.5 SURVEY IMPLEMENTATION

1.5.1 Sample Design

The 2006-07 SLDHS sample was designed to produce key indicators for the country as a whole, and for sectors (urban, rural, and estate) and districts. All 25 districts of Sri Lanka were included at the design stage. The final sample has only 20 districts, however, after dropping the 5 districts of the Northern Province (Jaffna, Kilinochchi, Mannar, Vavuniya, and Mullativu), due to the security situation there. The districts in the other 8 provinces are given below:

1 Western Province: Colombo, Gampaha, Kalutara
2 Southern Province: Galle, Matara, Hambantota
3 Sabaragamuwa Province: Ratnapura, Kegalle
4 Uva Province: Badulla, Monaragala
5 Central Province: Kandy, Matale, Nuwara Eliya
6 Eastern Province: Ampara, Batticaloa, Trincomalee
7 North Central Province: Anuradhapura, Polonnaruwa
8 North Western Province: Puttalam, Kurunegala

The SLDHS used a stratified two-stage cluster sample design. The sample was spread geographically more or less proportionally to the population. The first stage involved selecting 2,500 enumeration areas (clusters) from the list of about 100,000 enumeration areas (EAs) formed in the 2001 Population Census. The objectives of the sampling design were to provide reasonably accurate estimates at three levels—national, sector (urban, rural, estate), and district—and to provide estimates for tsunami-affected areas as well. In order to provide reliable estimates for these levels, some districts were oversampled. Therefore, the final sample is not self-weighting, and weighting factors were used to make the sample be proportional to the population. Weighted data are used throughout the report, unless otherwise noted.[1]

An enumeration area (EA) is a subdivision of a *Grama Niladari* area, which consists of about 80 housing units in urban areas and about 65 units in rural or estate areas. The criterion used in creating an EA 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. A household list of each EA (including information on

[1] Appendix B provides more information about the final sample allocation by district and sector.

housing units) along 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, 2,500 clusters were selected initially: 469 urban, 1,831 rural and 200 estate (see Appendix Table A.1). In the end, information was collected from 2,106 clusters. The remaining 394 clusters were not enumerated (340 clusters from Northern Province due to unsettled conditions prevailing in the province at the time of the survey, and 54 clusters from other areas).[2]

For the final sample (which excluded the Northern Province), 21,060 housing units were selected, and 19,862 households were interviewed. All ever-married women age 15-49 years living in these households were eligible to be interviewed. Eligible respondents were either usual residents of the households or visitors present in the household on the night before the interview date.

There are certain limitations in comparing the findings of this survey with those from the 2000 SLDHS. The earlier survey did not include the Eastern Province, whereas the 2006-07 SLDHS did include it. However, neither the 2000 DHS nor the 2006-07 DHS covered the Northern Province. Thus when comparisons are made to the 2000 SLDHS, the data for the current survey are shown with the Eastern Province also excluded.[3]

1.5.2 Questionnaire

The 2006-07 SLDHS questionnaire, which was used to collect information from households and eligible women through personal interviews, contained the topics mentioned below. An effort was made to incorporate globally recommended standard questions as much as possible. 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 UNICEF's World Fit for Children and Millennium Development Goals (MDG) indicators.

The questionnaire had two main sections, namely, a household section and a section on women and children. The first section served two purposes. One was to list all the usual members and visitors in the selected household together with some basic information about them—such as age, education, marital status, nature of residence, and relationship to the head of household. This information was used to identify eligible women and children for the main interview and also to provide denominators for analysis of some of the household characteristics. The second purpose was to collect information on characteristics of the household's dwelling. Information of this type included source of drinking water, toilet facilities, construction materials of the home, land tenure, garbage disposal, ownership of livestock and various durable goods, use of iodized salt, and use of mosquito nets (including treated nets). There were also questions about several non-communicable diseases, adequacy of basic requirements for school-going children, and information about orphanhood. Children under five and women 15-49 were eligible to be weighed and measured and have their haemoglobin level measured.

The second section, the questionnaire for ever-married women, covered the following topics:

- Background characteristics (education, marital status, media exposure, etc.)
- Marriage and sexual activity
- Reproductive history
- Knowledge and use of family planning methods

[2] The reasons for elimination were: temporary tsunami camps (5 clusters), unstable security conditions (45), and landslides that prevented access to the clusters (4).

[3] As a result, the statistics for 2006-07 in such tables may differ slightly from tables presenting the 2006-07 SLDHS data only.

- Antenatal, delivery, and postnatal care
- Child immunization and health
- Child and women's nutrition
- Sexual activity
- Fertility preferences
- Woman's work and husband's background characteristics
- Awareness about AIDS and other sexually transmitted infections (STIs)
- Use of drugs, tobacco, and alcohol by household members
- Other health issues

Respondents were also asked an extensive series of questions about their children below 5 years at the time of the survey. Topics covered were vaccinations, childhood illnesses, nutrition status, and breastfeeding. In addition, a calendar of events was used to record information related to respondent's marriage, pregnancies and births, and contraceptive use in a specially designed chart for a five-year period prior to the survey.

The complete questionnaire was pre-tested by a team of experienced staff to test the feasibility, sequence, skipping, and timing before it was finalized. The questionnaire was prepared in Sinhala and Tamil; an English version was used occasionally for a few interviews.

1.5.3 Training

Altogether SLDHS used 222 field workers. Although the majority consisted of DCS staff who were experienced in conducting surveys, about 80 female enumerators were hired to collect information for Tamil-speaking households. In addition, 12 office staff worked in the DHS unit to provide assistance in coordination of survey activities. Many of the DCS staff had participated in either the SLDHS pre-test or a prior survey of this nature.

DCS organized a three-week training program, offered separately for its Sinhala-speaking and Tamil-speaking staff. The training in Sinhala was carried out by senior staff of the DCS and experts from the Ministry of Healthcare and Nutrition, the Family Planning Association, and the Water Board. A consultant was hired to conduct the training of Tamil speakers.

Besides giving a complete description of each question and its purpose, the training included mock interviews, special lectures giving background information, and field trials. District coordinators for the fieldwork received a few days of training about their special duties and responsibilities in addition to the enumerator training.

Both the training and the fieldwork had two tracks defined by language—one for Sinhala speakers and the other for Tamil speakers. There were three trainings of Sinhala-speaking field staff. The first was in June 2006. The second training (in June 2007) was needed to replace enumerators who had dropped out. The third training took place in September 2007 in the Eastern Province, where local Sinhala-speaking women were hired as interviewers because enumerators from other parts of the country were reluctant to go there due to the security situation.

Two trainings of Tamil-speaking field staff took place in late March 2007 and mid-July 2007. The second training was necessary to replenish the enumerator pool and to be able to collect data in the Eastern Province. The delay in conducting the training, and therefore also the fieldwork, for predominantly Tamil-speaking areas was due to recruitment issues. The ongoing unstable situation in the eastern part of the country affected the recruitment of Tamil field enumerators among DCS staff. Instead, DCS recruited Tamil field enumerators locally from the districts in which they reside to minimize dropouts.

Officers of the Medical Research Institute of Sri Lanka trained measurers and their assistants in obtaining height and weight measurements and medical officers in conducting haemoglobin testing.

The training incorporated field practice sessions for these personnel as well. The measurers were trained before each enumerator training.

1.5.4 Fieldwork

Fieldwork in Sinhala-speaking communities was carried out in three phases. The first was from August 2006 to September 2007 in mainly Sinhala-speaking areas; the second was from February to September 2007 in districts where both Sinhala and Tamil are spoken; and the third was in September and October 2007 in Sinhala areas of Eastern Province.

Fieldwork in Tamil-speaking communities occurred from May to July 2007 and then from August through October 2007. In the sample there were about 200 blocks with a mixture of communities speaking Sinhala or Tamil, for which both Sinhala and Tamil-speaking teams were employed to do the survey. These interviews were concentrated in the second and third phases of the Sinhala fieldwork.

The very large sample meant that data collection spanned a longer period of time than is typically needed for this type of survey. Three-fourths of all the eligible respondents were interviewed in Sinhala by early April 2007. The remainder of the interviews took place over the next seven months. With a smaller sample size it is usually possible to complete data collection between the monsoon seasons in Sri Lanka. Fieldwork for the 2006-07 SLDHS had to be suspended for about six weeks in November and December 2006 due to rain and floods.

A total of 24 teams (15 Sinhala teams and 9 Tamil teams) were formed for data collection. Each team comprised one female supervisor, four female interviewers, one field editor, a measurer (for height and weight and GPS measurements), and a field assistant. Senior staff of DCS were appointed as district coordinators. The overall responsibility of the coordinators was to ensure the smooth implementation and good quality of fieldwork. Their tasks included checking completed questionnaires for quality and managing logistics, such as transport and accommodations. A survey expert from Macro also made two visits in 2006 (in August-September and late October-early November) to observe field work and review completed questionnaires and give feedback to interviewers.

A new feature was added to this round of the SLDHS to improve the quality of fieldwork. A special set of tables was generated, which were used to measure the quality of fieldwork. If any deviations from the expected targets were found, the teams were informed and instructed on remedial actions.

Haemoglobin tests for anaemia were to be carried out for mothers and their children under five at the time of the interview. However, suitable medical officers and equipment were unavailable until April 2007. In Tamil-speaking areas in the last few months of data collection, medical officers were sent with the survey teams to collect haemoglobin information, so there was no delay. Testing was done at the time of the interview in the three districts of the Eastern Province and in three 'mixed' districts (both Tamil- and Sinhala-speaking). In another seven mixed districts, the testing was done at the time of interview for Tamil-speaking households only. The interviews and testing for Sinhala-speaking households in these districts were done at different times. Testing was also done in a separate visit to households for the other seven Sinhala-speaking districts. Thus there was a time gap of 5 to 14 months between the time of household interviews done in 2006 to the time when haemoglobin levels were taken; and 2 to 9 months for interviews from January through May 2007. When a separate visit was required to do haemoglobin testing, some women and children could not be matched to the original interview information or were not found. Because of these various difficulties in tabulating and interpreting the data, it was decided to omit the results from the haemoglobin testing from this report until the data could be properly analyzed.

1.5.5 Data Processing

Processing 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 staff specially trained for this task. Processing the data concurrently with fieldwork was a distinct advantage for data quality, since the survey unit was able to advise field teams of errors detected during data entry.

A group of experienced data entry persons at DCS did data entry. Two consultants from Macro assisted the Data Processing Division and DHS Unit staff by giving necessary guidance for manual coding and editing, data entry, verification, online editing, and machine editing. Data were entered using the CSPro computer package. All data were entered twice (100 percent verification). Two DCS staff members who were specially trained for this purpose did machine editing. Data entry was completed in December 2007. DCS completed machine editing of the data file in mid-January 2008. A Macro Data Processing Specialist visited Colombo in February 2008 to work with DCS staff to produce the final data file and run preliminary tables.

1.6 RESULTS OF THE SURVEY INTERVIEWS

Table 1.1 shows response rates for the 2006-07 SLDHS. A total of 21,600 housing units were selected for the sample, from which 21,357 households were located, and 20,317 were occupied at the time of the survey. Of those existing households, 19,862 were successfully interviewed, yielding a household response rate of 98 percent. The household response rate is slightly higher in the rural sector than in the urban and estate sectors.

Within the households interviewed, a total of 15,068 eligible women (ever-married women age 15-49) were identified, of whom 14,692 were successfully interviewed, yielding a response rate of 98 percent. The eligible women's response rate is also 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, and refusals were very minimal.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Sri Lanka 2006-07

	Residence			
Result	Urban	Rural	Estate	Total
Housing units selected	4,410	15,190	2,000	21,600
Household interviews				
Households selected	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[1]	96.1	98.3	97.5	97.8
Interviews with ever-married women age 15-49				
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[2]	96.3	98.0	96.1	97.5

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

2

Dharma Dissanayake and C.D. de Silva

The purpose of this chapter is to provide a descriptive summary of some demographic and socio-economic characteristics of the population in the households sampled in the 2006-07 SLDHS. Such information is intended to facilitate interpretation of the key demographic, socio-economic, and health indicators presented later in the report. It is also intended to assist in the assessment of the representativeness of the survey sample.

For the purposes of the 2006-07 SLDHS, a household was defined as a person or a group of persons, related or unrelated, who live together and share a common source of food. The household questionnaire included a schedule collecting basic demographic and socio-economic information for all usual residents and visitors who spent the night preceding the interview. This method of data collection allows the analysis of the results for either the *de jure* (usual residents) or *de facto* (those who are there at the time of the survey) populations. The household questionnaire also obtained information on housing facilities and household possessions.

2.1 HOUSEHOLD POPULATION BY AGE AND SEX

Age and sex are important demographic variables and are the primary basis of demographic classification. Table 2.1 shows the distribution of the household population in five-year age groups, by sex. The female population is slightly larger (41,724) than the male population (38,135); and women constitute 52 percent of the population. The percentages of all males who are in the age groups up to age 20 are higher than those of females.

Table 2.1 Household population by age, sex, and residence

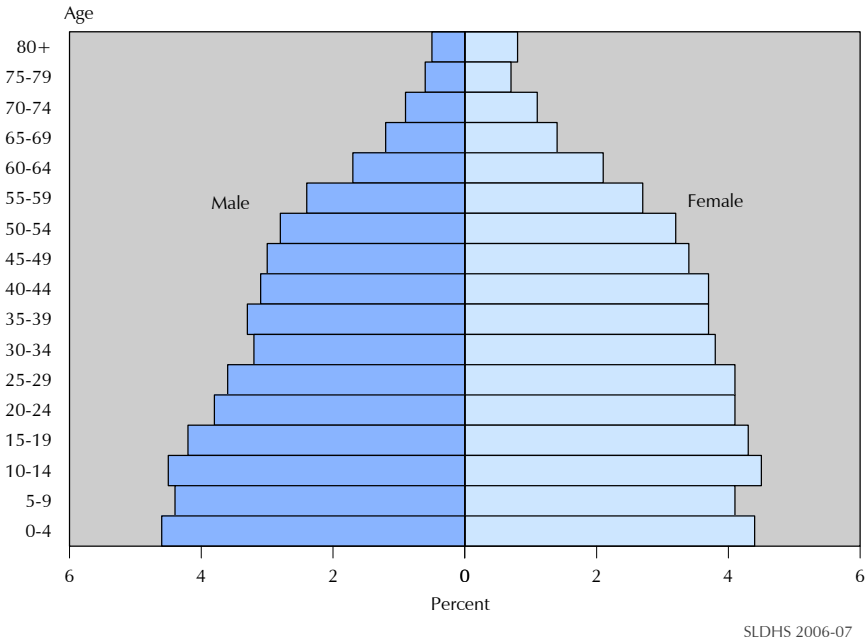
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Sri Lanka 2006-07

	Urban			Rural			Estate			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	9.7	8.0	8.8	9.6	8.3	9.0	11.4	10.2	10.8	9.7	8.4	9.0
5-9	8.3	7.2	7.7	9.2	8.0	8.6	9.6	8.8	9.2	9.1	7.9	8.5
10-14	8.9	7.8	8.3	9.4	8.7	9.0	9.6	9.1	9.3	9.3	8.6	9.0
15-19	9.2	8.1	8.6	8.7	8.3	8.5	8.4	8.4	8.4	8.7	8.3	8.5
20-24	8.5	8.5	8.5	7.8	7.7	7.7	8.5	8.4	8.4	7.9	7.8	7.9
25-29	8.3	8.5	8.4	7.4	7.7	7.6	8.0	8.9	8.5	7.6	7.9	7.7
30-34	6.7	6.8	6.8	6.6	7.4	7.0	6.7	5.6	6.1	6.7	7.3	7.0
35-39	6.8	7.2	7.0	7.0	7.1	7.1	5.8	5.7	5.8	6.9	7.1	7.0
40-44	6.4	6.9	6.7	6.6	7.1	6.9	6.0	6.0	6.0	6.5	7.1	6.8
45-49	6.8	7.0	6.9	6.4	6.4	6.4	5.2	7.0	6.1	6.4	6.5	6.5
50-54	5.5	6.7	6.1	5.9	6.1	6.0	5.4	6.2	5.8	5.9	6.2	6.0
55-59	5.2	5.5	5.3	5.0	5.0	5.0	5.2	5.9	5.6	5.0	5.1	5.1
60-64	3.3	4.0	3.7	3.5	4.0	3.8	4.1	5.0	4.6	3.5	4.0	3.8
65-69	2.4	2.9	2.7	2.5	2.7	2.6	2.9	2.2	2.5	2.5	2.7	2.6
70-74	1.6	1.9	1.7	1.9	2.2	2.0	1.7	1.2	1.4	1.8	2.1	2.0
75-79	1.3	1.2	1.3	1.3	1.4	1.3	0.6	1.0	0.8	1.3	1.4	1.3
80 +	0.8	1.7	1.3	1.1	1.6	1.4	0.7	0.6	0.6	1.1	1.5	1.3
Don't know/missing	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,980	5,561	10,542	31,206	34,114	65,323	1,949	2,048	3,997	38,135	41,724	79,862

Note: Total includes 3 persons whose sex was not stated.

The population pyramid (Figure 2.1) shows the slight edge of females in age groups 20 and over. It also reflects the declining fertility and low mortality in Sri Lanka over a long period of time, in that the youngest age groups at the base are not extended out and the middle range of age groups taper in only gradually.

Figure 2.1 **Population Pyramid**



The sex composition of the population does not show significant variation by residence. The sector-wise distributions show that the percentage of children under five years is slightly higher in the estate sector (11 percent), compared with 9 percent in the rural and urban sectors.

Table 2.2 shows that the percentage of children below five years increased slightly compared with the percentages from the 2000 SLDHS (excluding Eastern Province for comparability). Since 1971, the proportion of children below 15 years has declined, and the proportions of the working age and elderly populations have generally risen. There is also an increasing proportion of women in the reproductive age group up to 2000, with a decline in 2006-07. The overall dependency ratio (proportion under 15 and 65 and older divided by the proportion age 15-64) is 50.3. The child dependency ratio has declined from 69 to 39 and the old-age dependency ratio has gone up from 8 to 11.

Table 2.2 Trends in population by broad age groups

Percentage of the population in selected age groups from censuses and surveys, Sri Lanka 1971-2006-07

Age group	Census 1971	Census 1981	DHS[1] 1993	DHS[1] 2000	DHS[1] 2006-07
Children under 5 years	13.1	12.5	9.0	7.9	8.8
Children under 15 years	39.0	35.2	30.3	25.8	25.9
Women of reproductive age (15-49 years)	49.0	52.2	53.0	54.6	51.8
Working-age population (15-64 years)	56.8	60.5	63.5	67.1	66.5
Elderly population (65 years and over)	4.2	4.3	6.1	7.2	7.5
Ratio of persons under 15 to those age 15-64 (%)	68.6	58.2	47.8	38.3	39.0
Ratio of persons 65 and over to those age 15-64 (%)	7.5	7.2	9.6	10.7	11.3

[1] Excludes Northern and Eastern provinces
Source: DCS, 2002: Table 2.2; special tabulations of 2006-07 DHS data

2.2 HOUSEHOLD COMPOSITION

Information on key aspects of the composition of households, including the sex of the head of the household and the size of the household is presented in Table 2.3. These characteristics are important because they are associated with the welfare of the household. Economic resources are often more limited in larger households. Moreover, where the size of the household is large, crowding also can lead to problems.

As shown in Table 2.3, females are the head of almost one in four households in Sri Lanka. The proportion of female-headed households is highest in urban areas (25 percent) and lowest in the estate sectors (20 percent).

Table 2.3 Household composition

Percent distribution of households by sex of head of household, and by household size, and mean size of household, according to residence, Sri Lanka 2006-07

Characteristic	Residence			Total
	Urban	Rural	Estate	
Household headship				
Male	74.6	77.5	79.7	77.2
Female	25.4	22.5	20.3	22.8
Total	100.0	100.0	100.0	100.0
Number of usual members				
1	4.1	4.9	4.7	4.8
2	12.3	12.4	12.1	12.4
3	20.6	21.4	17.0	21.1
4	24.0	26.7	24.5	26.3
5	18.3	19.1	17.6	18.9
6	10.4	9.0	13.1	9.4
7	5.2	3.6	6.1	3.9
8	2.3	1.5	2.6	1.7
9+	2.7	1.3	2.1	1.5
Total	100.0	100.0	100.0	100.0
Mean size of households	4.2	4.0	4.3	4.0
Number of households	2,483	16,449	931	19,862

Note: Table is based on de jure household members, i.e., usual residents.

There is no marked difference by sector in the distribution of households by number of members. The overall mean household size reported is 4 persons per household, but households in the estate sector tend to be slightly larger (mean size of 4.3).

A trend towards decreasing household size has continued in Sri Lanka since 1981 in all but the estate sector, where the household size has fluctuated up and then down (Table 2.4). The urban sector has the largest decline from 2000 to 2006-07, dropping from 4.8 persons per household to 4.2.

Table 2.4 Trends in mean household size

Mean household size from censuses and surveys, according to residence, Sri Lanka 1981-2006-07

Source	Urban	Rural	Estate	Total
Census 1981	5.4	4.9	4.3	4.9
1993 DHS[1]	5.0	4.7	4.4	4.7
2000 DHS[1]	4.8	4.5	4.6	4.5
2006-07 DHS[1]	4.2	4.0	4.3	4.0

[1] Excludes Northern and Eastern provinces
Source: DCS, 2002: Table 2.3; special tabulation of 2006-07 data

2.3 EDUCATION OF HOUSEHOLD MEMBERS

Education is a key determinant of the lifestyle and status an individual enjoys in a society. Studies have consistently shown that educational attainment has a strong effect on health behaviours and attitudes. Results from the 2006-07 SLDHS can be used to look at educational attainment among household members and school attendance and dropout rates among youth.

For the purpose of the analysis presented below, the official age for entry into the primary level is six (completed five years). The official primary level of schooling consists of grades 1 through grade 5; finishing grade 10 marks completion of secondary school.

2.3.1 Educational Attainment

Tables 2.5.1 and 2.5.2 show the education status for male and female household members separately. They indicate a remarkable gender equity in educational attendance and attainment in Sri Lanka. The distribution of median years completed by age is quite similar for both sexes; in fact, it is slightly higher for females.

Table 2.5.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Sri Lanka 2006-07

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	6.0	92.5	0.9	0.4	0.0	0.0	0.2	100.0	2,588	1.5
10-14	0.5	12.1	18.7	68.0	0.5	0.0	0.3	100.0	3,599	5.9
15-19	0.7	1.0	0.7	23.3	41.5	32.6	0.2	100.0	3,461	9.6
20-24	1.5	2.1	1.4	14.2	29.3	51.4	0.2	100.0	3,261	10.2
25-29	1.9	2.8	1.8	15.3	34.9	43.2	0.2	100.0	3,283	9.8
30-34	2.9	6.9	3.4	16.8	31.1	38.6	0.3	100.0	3,030	9.7
35-39	4.3	10.2	5.6	19.8	24.9	35.1	0.1	100.0	2,950	9.5
40-44	6.3	14.0	6.9	20.6	18.6	33.4	0.2	100.0	2,943	9.3
45-49	6.7	14.3	7.5	23.4	19.9	27.9	0.2	100.0	2,723	9.1
50-54	8.1	16.9	8.9	24.3	17.2	24.0	0.6	100.0	2,594	7.9
55-59	10.7	19.3	8.8	22.2	15.6	22.2	1.2	100.0	2,141	7.7
60-64	16.0	21.7	9.8	20.5	10.4	20.5	1.2	100.0	1,685	6.8
65+	26.9	24.5	9.3	19.2	5.8	11.9	2.4	100.0	3,225	5.3
Residence										
Urban	4.2	13.5	6.3	23.4	17.4	34.5	0.7	100.0	5,033	9.2
Rural	6.2	16.8	6.2	23.0	20.8	26.6	0.5	100.0	30,669	9.0
Estate	19.9	29.0	10.2	22.3	11.3	6.4	0.9	100.0	1,796	5.0
District										
Colombo	3.6	11.6	5.0	22.3	17.4	39.2	0.9	100.0	4,688	9.5
Gampaha	3.1	12.2	5.6	22.9	20.3	35.4	0.5	100.0	4,620	9.4
Kalutara	4.8	14.5	6.5	22.8	22.6	28.6	0.2	100.0	2,201	9.1
Kandy	6.4	14.7	6.9	20.3	22.1	28.6	1.0	100.0	2,724	9.2
Matale	10.2	19.7	4.8	21.5	22.8	20.6	0.4	100.0	759	8.5
Nuwara Eliya	14.9	22.7	8.6	22.1	18.1	13.0	0.6	100.0	1,262	7.0
Galle	4.6	20.9	6.5	20.4	21.1	26.3	0.2	100.0	2,219	8.9
Matara	7.1	17.3	6.1	20.7	24.1	24.4	0.2	100.0	1,563	9.1
Hambantota	8.4	18.5	5.8	22.2	22.6	22.2	0.3	100.0	1,122	8.8
Batticaloa	12.5	21.7	8.4	24.6	13.9	18.8	0.2	100.0	989	7.0
Ampara	9.3	22.8	9.2	24.5	12.9	20.5	0.7	100.0	1,195	6.9
Trincomalee	11.2	24.7	7.4	30.4	13.6	12.5	0.3	100.0	643	6.7
Kurunegala	6.2	14.2	6.2	28.5	19.1	25.4	0.5	100.0	3,270	8.8
Puttalam	4.3	21.7	9.5	31.3	16.2	16.8	0.2	100.0	1,550	7.1
Anuradhapura	6.1	22.3	5.0	23.8	23.1	19.0	0.7	100.0	1,488	8.3
Polonnaruwa	6.3	21.4	5.8	23.5	23.2	19.5	0.3	100.0	768	8.2
Badulla	11.7	21.8	6.3	19.7	17.1	22.8	0.6	100.0	1,660	8.2
Moneragala	9.5	23.1	5.0	25.2	20.2	17.1	0.0	100.0	932	8.0
Ratnapura	10.3	17.1	6.3	20.8	21.8	23.4	0.4	100.0	2,148	9.0
Kegalle	5.4	15.0	7.0	18.9	23.0	30.2	0.5	100.0	1,697	9.3
Wealth quintile										
Lowest	14.0	25.8	8.4	26.9	16.5	7.9	0.5	100.0	7,193	6.3
Second	8.3	20.2	7.8	25.2	22.4	15.6	0.5	100.0	7,395	7.8
Middle	5.3	16.2	6.6	24.2	24.7	22.6	0.3	100.0	7,604	9.0
Fourth	3.4	12.7	5.1	21.9	21.8	34.6	0.4	100.0	7,623	9.4
Highest	2.4	10.3	4.0	17.3	14.1	51.1	0.8	100.0	7,683	10.1
Total	6.6	16.9	6.4	23.0	19.9	26.7	0.5	100.0	37,499	9.0

Note: Total includes 16 people for whom age is missing
[1] Completed grade 5 at the primary level
[2] Completed grade 10 at the secondary level

Table 2.5.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age six and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Sri Lanka 2006-07

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	6.8	92.0	0.7	0.2	0.0	0.0	0.3	100.0	2,777	1.5
10-14	0.6	12.1	19.9	67.0	0.3	0.0	0.1	100.0	3,555	5.8
15-19	0.8	1.2	1.8	29.5	42.0	24.6	0.1	100.0	3,332	9.4
20-24	1.5	3.3	2.5	17.5	33.6	41.3	0.3	100.0	3,028	9.8
25-29	1.7	4.3	3.2	20.7	33.7	35.9	0.5	100.0	2,896	9.6
30-34	1.9	7.6	4.0	22.2	29.6	34.5	0.2	100.0	2,536	9.5
35-39	3.5	10.7	5.4	23.1	24.2	32.6	0.4	100.0	2,633	9.4
40-44	4.0	15.6	6.8	23.9	19.1	30.3	0.3	100.0	2,492	9.1
45-49	4.5	15.6	8.6	25.3	16.8	28.6	0.6	100.0	2,435	8.6
50-54	3.8	17.8	8.5	28.8	15.6	25.0	0.4	100.0	2,237	7.8
55-59	3.7	15.7	9.0	25.3	14.2	31.2	0.9	100.0	1,911	8.3
60-64	5.1	20.8	10.6	25.0	9.5	27.1	1.8	100.0	1,345	7.2
65+	7.9	27.8	12.0	26.1	6.6	17.5	2.0	100.0	2,532	5.8
Residence										
Urban	2.6	13.8	5.8	23.7	18.4	35.0	0.6	100.0	4,404	9.3
Rural	3.1	18.4	6.9	27.0	20.2	23.9	0.5	100.0	27,633	8.3
Estate	8.0	28.2	14.3	29.1	11.9	7.1	1.2	100.0	1,687	5.4
District										
Colombo	2.3	12.2	4.4	21.9	19.8	38.6	0.9	100.0	4,188	9.5
Gampaha	1.4	12.1	5.1	24.0	21.0	35.9	0.6	100.0	4,189	9.4
Kalutara	3.4	15.6	7.2	25.8	22.2	25.5	0.3	100.0	2,033	8.8
Kandy	3.8	16.9	6.8	24.3	21.3	25.7	1.1	100.0	2,290	8.8
Matale	5.6	24.4	7.1	25.5	18.3	18.7	0.4	100.0	658	7.2
Nuwara Eliya	5.5	21.5	12.8	28.8	16.3	14.4	0.8	100.0	1,120	7.0
Galle	2.4	21.1	6.1	28.6	21.0	20.8	0.1	100.0	1,964	7.9
Matara	3.0	20.2	6.7	27.3	23.2	19.2	0.3	100.0	1,374	8.0
Hambantota	2.8	24.6	7.4	23.7	22.6	18.6	0.2	100.0	1,021	7.6
Batticaloa	8.0	22.2	9.1	26.1	14.4	20.1	0.2	100.0	917	7.2
Ampara	3.9	22.5	8.8	29.6	13.0	21.7	0.5	100.0	1,067	7.2
Trincomalee	6.2	20.7	9.9	32.7	13.5	16.7	0.3	100.0	586	7.0
Kurunegala	2.9	17.4	8.5	32.3	17.2	21.2	0.6	100.0	3,067	8.0
Puttalam	2.3	22.7	9.5	29.8	18.9	16.4	0.4	100.0	1,323	7.3
Anuradhapura	4.0	22.3	6.8	29.1	20.8	16.7	0.3	100.0	1,373	7.6
Polonnaruwa	4.1	22.4	5.9	30.4	22.5	14.4	0.4	100.0	718	7.6
Badulla	4.4	22.1	8.9	29.4	14.2	20.1	0.8	100.0	1,455	7.2
Moneragala	4.2	24.7	7.4	28.5	20.4	14.6	0.2	100.0	871	7.3
Ratnapura	4.6	21.4	8.2	26.8	20.5	18.3	0.2	100.0	2,058	7.7
Kegalle	2.5	18.3	6.8	24.5	21.1	26.1	0.8	100.0	1,452	8.7
Wealth quintile										
Lowest	7.1	28.0	11.0	33.0	13.6	6.7	0.5	100.0	6,758	5.9
Second	4.0	21.8	9.2	31.4	20.9	12.2	0.5	100.0	6,726	7.3
Middle	2.4	17.8	7.0	28.9	24.6	18.7	0.6	100.0	6,725	8.2
Fourth	1.8	13.8	5.1	23.5	23.2	32.2	0.4	100.0	6,782	9.3
Highest	1.2	10.1	3.2	16.8	15.4	52.7	0.6	100.0	6,733	10.2
Total	3.3	18.3	7.1	26.7	19.6	24.5	0.5	100.0	33,724	8.3

Note: Total includes 13 people for whom age is missing.
[1] Completed grade 5 at the primary level
[2] Completed grade 10 at the secondary level

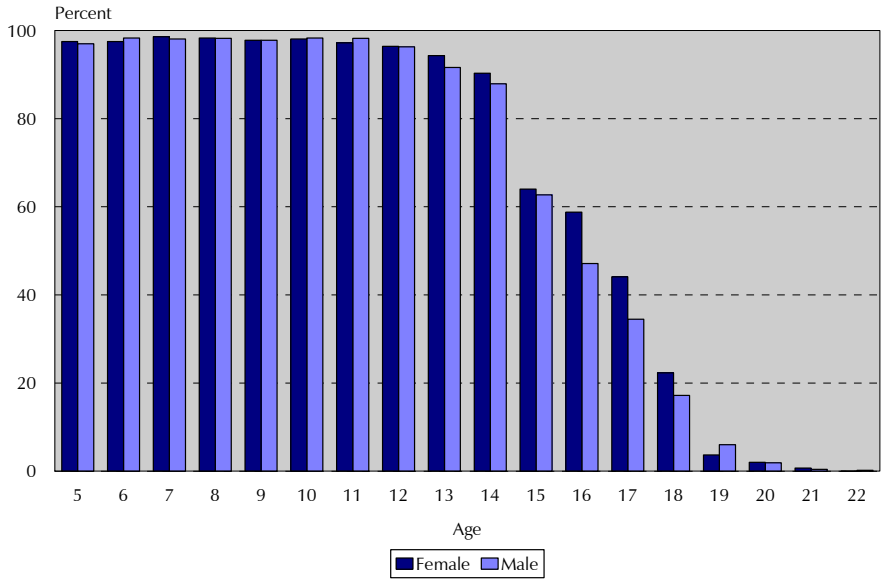
Differences by sector are apparent, however. The estate sector lags behind urban and rural sectors on median years completed. Furthermore, females in the estate sector are more likely to have no education (20 percent) than males (8 percent). Although there is no gender difference by residence for the highest education category, proportions continuing education beyond the secondary level are much lower in the estate sector (less than 10 percent) compared with about one-quarter of rural residents, and one-third of urban residents.

Only a very small proportion of the population six years or older has never gone to school. The percentage of males who never attended school is 3 percent, and the corresponding proportion for females is 7 percent. This difference is due to a wider gap between males and females age 40 years and above, which suggests that in the past, girls were somewhat less likely to go to school than boys.

2.3.2 School Attendance Rates

Figure 2.2 shows the percentage of males and females attending by single years of age up to 23. There is some decline in attendance at age 14, and an even bigger drop at age 15 and thereafter. However, an interesting pattern appears by gender in the second half of the age range. Through age 12, attendance levels are the same for boys and girls. However, girls actually stay in school longer than boys, and noticeably so from ages 16 to 18. Attendance drops below 50 percent for boys at age 16, but for girls this reduction doesn't happen until age 17.

Figure 2.2 **Age-Specific School Attendance Rates**



Note: Figure shows percentage of the de jure household

SLDHS 2006-07

2.4 HOUSEHOLD ENVIRONMENT

The physical characteristics of households are important indicators of health and the general socio-economic condition of the population. In the 2006-07 SLDHS, respondents were asked a number of questions about their household environment, including questions on sources of drinking water, type of toilet facility, housing construction materials, fuel used for cooking, number of rooms in the dwelling, possession of durable goods, and ownership of agricultural land. The results are presented both in terms of households and the *de jure* population.

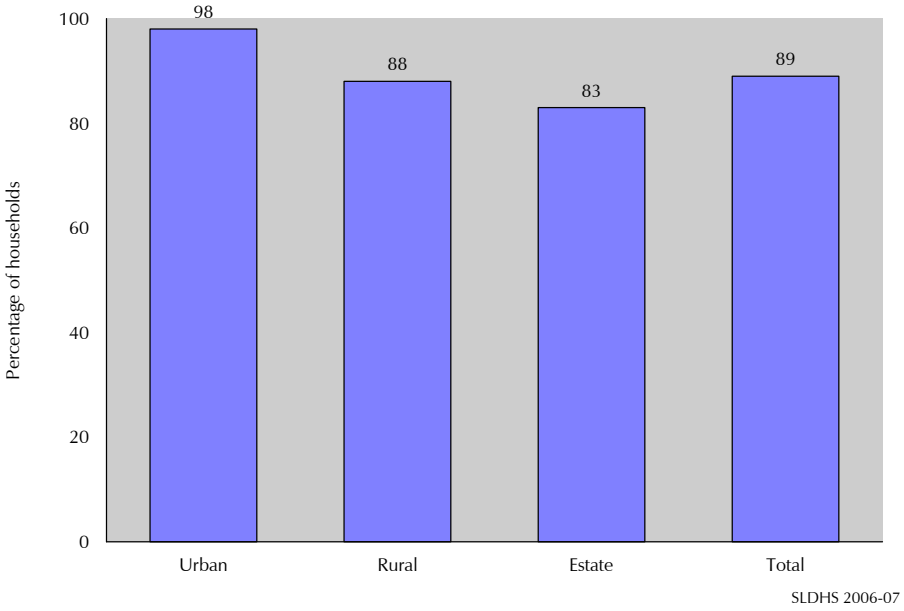
2.4.1 Drinking Water

Increasing access to improved drinking water is one of the Millennium Development Goals (MDG). The MDG target for Sri Lanka is to have 86 percent of households with access to improved drinking water by 2015 (Millennium Development Goals in Sri Lanka, 2008). Sources of drinking water vary in their suitability for drinking. Sources that are likely to provide safe drinking water are identified as improved sources in Table 2.6. They include a piped source within the dwelling or yard, a public tap, a tube well or borehole, and a protected well or spring. Lack of ready access to a water source may limit the quantity of suitable drinking water that is available to a household. Even if it is obtained from an improved source, water fetched from a source that is not immediately accessible to

the household may be contaminated during transport or storage. Another factor in considering the accessibility of water sources is the fact that the burden of going for water often falls disproportionately on female members of the household. Finally, home water treatment can be effective in improving the quality of drinking water.

The 2006-07 SLDHS collected information about the source of drinking water, time taken to collect water, the person who usually collects the water, and safe water treatment. Table 2.6 shows that almost 90 percent of households have an improved source, exceeding the MDG target. By residence sector, households in the urban areas have greater use of improved sources than in other areas, as Figure 2.3 illustrates.

Figure 2.3 **Percentage of Households with Improved Source of Drinking Water by Residence**



Overall, 25 percent of households have piped water into the dwelling or yard. The prominent type of improved source varies across the residence sectors. In urban areas, household-level piped water (62 percent) is most frequent, but in rural areas, protected dug wells (53 percent) are most frequent. In the estate sector, protected springs (33 percent), followed by public taps (23 percent) are the most common safe sources. Non-improved sources are used by 17 percent of households in the estate sector, but overall only 11 percent of households use risky sources of drinking water.

The majority of households do not need to collect water, as it is piped onto the premises. Overall, 24 percent of households have to travel to get water, but are able to obtain it within 30 minutes. Naturally, this percentage is higher for the estate sector (33 percent) because springs are a frequent source. Ten percent of estate-sector households spend 30 minutes or more to carry water home.

When water is not on the premises (about 28 percent of all households), a woman usually collects drinking water for the household. The findings show that females over 15 collect drinking water in 22 percent of all households. This proportion is higher in the estate sector (38 percent).

The incidence of water-borne diseases can be reduced by treating water for drinking. Table 2.6 shows that half of Sri Lankan households boil water before drinking. The percentage of households that boil water is much greater (72 percent) in the estate sector compared to the other two sectors. So, even though the sources in the estate sector may not have suitable water for drinking to begin with, households take appropriate action to make the water safe to drink.

Table 2.6 Household drinking water

Percent distribution of households and de jure population by source, time to collect, and person who usually collects drinking water; and percentage of households and population by treatment of drinking water, according to residence, Sri Lanka 2006-07

Characteristic	Households				Population			
	Urban	Rural	Estate	Total	Urban	Rural	Estate	Total
Source of drinking water								
Improved source	**98.2**	**87.9**	**82.9**	**89.0**	**98.4**	**88.1**	**83.2**	**89.1**
Piped water into dwelling/yard/plot	61.9	20.5	11.0	25.3	63.2	21.5	11.4	26.4
Public tap/standpipe	17.7	4.1	23.4	6.7	17.6	4.0	24.3	6.8
Tube well or borehole	4.2	4.8	1.3	4.5	3.4	4.6	1.2	4.3
Protected dug well	12.3	53.2	13.4	46.3	12.3	52.8	13.2	45.5
Protected spring	0.3	4.4	33.4	5.2	0.2	4.3	32.8	5.1
Neighbour's tap	0.8	0.9	0.4	0.8	0.7	0.8	0.3	0.8
Bottled water, improved source for cooking/washing[1]	1.0	0.1	0.0	0.2	1.0	0.1	0.0	0.2
Non-improved source	**1.8**	**12.1**	**16.9**	**11.0**	**1.6**	**11.9**	**16.6**	**10.8**
Unprotected dug well	0.4	8.0	4.3	6.9	0.4	7.9	4.4	6.7
Unprotected spring	0.0	1.8	7.8	1.8	0.0	1.7	7.5	1.8
Rainwater	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Bowser/tanker truck	1.4	0.4	0.0	0.5	1.2	0.4	0.0	0.5
Surface water	0.0	1.8	4.7	1.7	0.0	1.8	4.6	1.7
Missing	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)								
Water on premises	87.7	70.9	57.1	72.4	88.1	72.2	57.8	73.6
Less than 30 minutes	10.1	25.4	32.6	23.8	9.7	24.2	32.2	22.7
30 minutes or longer	1.6	3.4	9.7	3.5	1.8	3.3	9.4	3.4
Don't know/missing	0.6	0.3	0.6	0.3	0.5	0.2	0.6	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Person who usually collects drinking water								
Adult female 15+	9.4	22.8	37.8	21.9	9.3	22.5	38.1	21.5
Adult male 15+	2.2	5.6	4.2	5.1	2.0	4.7	3.2	4.3
Female child under age 15	0.1	0.2	0.3	0.2	0.1	0.3	0.3	0.2
Male child under age 15	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1
Water on premises	87.7	70.9	57.1	72.4	88.1	72.2	57.8	73.6
Missing	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[2]								
Boiled	57.5	48.0	72.4	50.4	57.3	48.1	72.3	50.5
Bleach/chlorine	2.4	1.5	0.1	1.6	2.6	1.8	0.0	1.8
Strained through cloth	5.6	11.7	9.3	10.8	5.7	11.9	10.0	11.0
Ceramic, sand or other filter	5.0	2.3	0.8	2.5	4.6	2.3	0.8	2.6
Solar disinfection	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Other	0.6	0.5	0.3	0.5	0.5	0.6	0.2	0.5
No treatment	37.3	42.1	25.3	40.8	37.2	41.8	25.4	40.4
Percentage using an appropriate treatment method[3]	62.0	57.4	74.4	58.8	62.1	57.8	74.3	59.2
Number	2,483	16,449	931	19,862	10,495	65,765	3,999	80,260

[1] Because the quality of bottled water is not known, households using bottled water for drinking are classified as using an improved or non-improved source according to their water source for cooking and washing. No households using bottled water reported non-improved sources for cooking and washing.

[2] Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent.

[3] Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

2.4.2 Household Sanitation Facilities

Ensuring adequate sanitation facilities is another goal of the Sri Lankan government. Table 2.7 shows that 83 percent of households have improved toilets and 17 percent have non-improved toilets or no toilet at all. The most common type of toilet is an unshared, pour/flush toilet (78 percent). Only 2 percent of households do not have access to any toilet facility, though this percentage is as high as 9 percent in the estate sector.

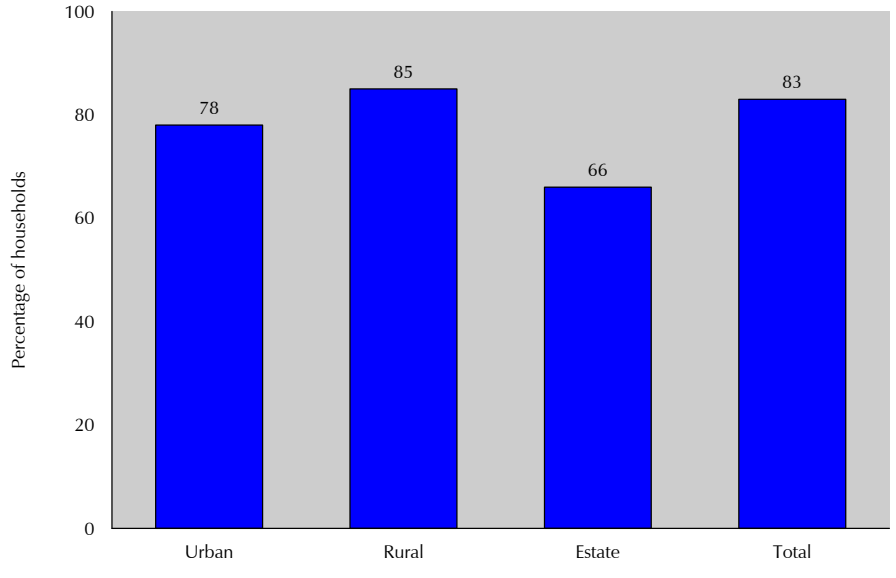
Table 2.7 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Sri Lanka 2006-07

Type of toilet/latrine facility	Households				Population			
	Urban	Rural	Estate	Total	Urban	Rural	Estate	Total
Improved, not shared facility	**77.6**	**84.7**	**66.3**	**83.0**	**79.8**	**86.9**	**69.1**	**85.1**
Flush/pour flush to piped sewer system	9.2	0.4	0.7	1.5	9.7	0.5	0.7	1.7
Flush/pour flush to septic tank	10.3	4.5	1.4	5.1	10.6	4.5	1.3	5.1
Flush/pour flush to pit latrine	57.0	75.0	54.5	71.8	58.3	77.2	56.2	73.7
Ventilated improved pit (VIP) latrine	0.1	3.0	0.9	2.5	0.1	2.9	1.0	2.4
Pit latrine with slab	1.0	1.8	8.6	2.0	1.0	1.8	9.7	2.1
Composting toilet	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0
Non-improved/no facility	**22.0**	**15.1**	**31.6**	**16.7**	**19.7**	**13.0**	**28.8**	**14.7**
Any facility shared with other households	20.7	11.9	21.4	13.4	18.4	10.1	19.4	11.7
Flush/pour flush not to sewer/septic tank/pit latrine	0.9	0.1	0.7	0.2	0.9	0.1	0.7	0.2
Pit latrine without slab/open pit	0.0	0.8	0.5	0.7	0.1	0.7	0.5	0.6
No facility/bush/field	0.4	2.3	9.0	2.4	0.3	2.1	8.2	2.2
Other	0.1	0.1	1.0	0.1	0.1	0.1	1.0	0.1
Missing	0.3	0.2	1.1	0.2	0.3	0.1	1.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,483	16,449	931	19,862	10,495	65,765	3,999	80,260

Figure 2.4 indicates that sanitary facilities vary among the sectors. In the estate sector, only 66 percent of households have improved facilities, compared with 78 percent and 85 percent in urban and rural sectors, respectively.

Figure 2.4 **Percentage of Households with Improved, Not Shared, Sanitation Facilities by Residence**



SLDHS 2006-07

2.4.3 Housing Characteristics

Characteristics of the dwelling reflect a household's socio-economic situation. They also may influence environmental conditions, for example, use of biomass fuels, which affect the health and welfare of household members. In the 2006-07 SLDHS, respondents were asked about access to electricity, flooring material, rooms used for sleeping, type of cooking fuel, etc.

Table 2.8 shows that overall, 80 percent of households in Sri Lanka have electricity. This proportion is as high as 95 percent in the urban sector, but is rather lower (67 percent) in the estate sector.

Table 2.8 Household characteristics

Percent distribution of households and de jure population by housing characteristics and percentage using solid fuel for cooking, according to residence, Sri Lanka 2006-07

Housing characteristic	Households				Population			
	Urban	Rural	Estate	Total	Urban	Rural	Estate	Total
Electricity								
Yes	95.3	78.5	67.0	80.0	96.0	79.9	69.5	81.5
No	4.7	21.5	32.8	19.9	4.0	20.0	30.3	18.4
Missing	0.0	0.1	0.2	0.1	0.0	0.1	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material								
Earth, sand	0.3	0.6	0.4	0.5	0.4	0.6	0.3	0.5
Dung	1.0	11.5	21.8	10.6	0.8	10.5	20.2	9.7
Wood/planks	0.2	0.1	0.0	0.1	0.2	0.1	0.0	0.1
Parquet or polished wood	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.1
Ceramic tiles	17.4	6.3	0.6	7.4	17.8	6.4	0.6	7.6
Cement	80.5	81.4	77.1	81.1	80.3	82.3	78.8	81.9
Other	0.3	0.1	0.1	0.1	0.3	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping								
One	33.4	28.9	55.9	30.8	26.2	22.1	50.0	24.0
Two	40.0	41.3	35.3	40.8	41.0	41.7	39.0	41.5
Three or more	25.6	29.2	8.2	27.7	31.9	35.7	10.6	33.9
Missing	1.0	0.6	0.6	0.7	0.9	0.6	0.4	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Place for cooking								
In the house	84.7	68.4	62.0	70.2	85.9	69.1	61.2	70.9
In a separate building	3.3	7.7	24.6	7.9	3.3	7.8	26.3	8.2
Outdoors	1.1	0.9	0.7	0.9	1.0	0.9	0.6	0.9
Temporary hut	7.8	21.4	11.0	19.2	8.2	21.6	11.0	19.3
Missing	3.1	1.5	1.7	1.7	1.6	0.5	1.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel								
Electricity	0.6	0.2	0.1	0.2	0.6	0.2	0.1	0.2
LPG/natural gas/biogas	48.9	12.7	1.9	16.7	49.3	12.4	1.6	16.7
Kerosene	12.8	1.4	0.7	2.8	12.2	1.2	0.7	2.6
Wood	34.6	84.2	96.3	78.5	36.3	85.5	97.4	79.6
No food cooked in household	2.7	1.4	0.9	1.6	1.1	0.5	0.3	0.6
Other	0.3	0.1	0.1	0.1	0.4	0.1	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	34.6	84.2	96.3	78.5	36.3	85.5	97.4	79.6
Number of households	2,483	16,449	931	19,862	10,495	65,765	3,999	80,260

LPG = Liquid petroleum gas

[1] In Sri Lanka, households using solid fuel use only wood.

Almost 90 percent of households in Sri Lanka have some type of durable flooring (cement, tiles, or finished wood). The remaining 11 percent have rudimentary flooring, such as earth, sand, and pounded earth coated with dung. The percent with permanent flooring is higher in urban areas than elsewhere, and 22 percent of households in the estate sector have earthen floors with dung.

The number of rooms used for sleeping gives an indication of the extent of crowding in the household. The most commonly reported number of rooms for sleeping is two (41 percent), and the overall percentage of households using only one room is 31 percent. This percentage is much larger in the estate sector (56 percent) than in the other two residential sectors.

Households were asked about cooking fuel and the place used for cooking. Overall 70 percent of households cook in the house, whereas 21 percent of households in the rural sector cook in a temporary hut, and 25 percent of estate-sector households use a separate building. The vast majority (79 percent) of households uses wood for cooking, and there is wide variation by residence. Almost all households in the estate sector (96 percent) and most of those in the rural sector (84 percent) use wood. About half of urban households use LP gas or natural gas; only one-third of urban households use wood. LP gas is used much less frequently in rural areas, and negligibly by estate households.

2.5 HOUSEHOLD POSSESSIONS

The availability of durable consumer goods is a good indicator of a household's socio-economic status. Moreover, particular goods have specific benefits. In the 2006-07 SLDHS, information on the possession of selected consumer goods was asked; results are shown in Table 2.9. There is a vast difference between urban and rural households, with urban households much more likely to own these durable consumer items than rural households. Information on household's ownership of selected assets has a strong association with poverty levels.

Looking first at consumer goods, almost 80 percent of the households have a radio and a television in their home. Possession of other household items, such as mobile and land phones, and refrigerators is higher in the urban sector than other sectors. With regard to means of transportation, many households own a bicycle (41 percent) and over 20 percent have a motorcycle or scooter. Some urban households (16 percent) own a car or similar motor vehicle, but the percentage is considerably lower elsewhere.

Table 2.9 Household durable goods

Percentage of households and de jure population possessing various household effects, means of transportation, agricultural land, and livestock/farm animals by residence, Sri Lanka 2006-07

	Households				Population			
Possession	Urban	Rural	Estate	Total	Urban	Rural	Estate	Total
Radio	82.3	79.4	65.1	79.1	83.9	81.0	67.1	80.7
Television	84.9	77.1	63.7	77.4	87.3	79.7	66.8	80.1
Mobile telephone	58.0	36.4	23.1	38.5	60.9	38.6	25.5	40.9
Non-mobile telephone	50.3	32.0	16.3	33.5	51.9	33.6	17.4	35.2
Refrigerator	57.8	34.4	5.7	36.0	60.0	36.1	6.0	37.7
Bicycle	35.8	44.5	8.5	41.7	39.1	47.4	9.0	44.4
Motorcycle/scooter	20.4	24.5	4.4	23.1	22.2	26.5	4.4	24.8
Trishaw	6.6	5.5	1.8	5.4	7.6	6.4	2.4	6.3
Car/van/bus/truck	16.2	7.2	1.0	8.1	16.8	7.8	1.2	8.7
Boat with a motor	0.5	0.1	0.0	0.1	0.5	0.1	0.0	0.2
Ownership of agricultural land	8.0	43.3	13.6	37.5	7.8	43.0	14.6	37.0
Ownership of farm animals[1]	2.7	11.0	10.4	10.0	3.2	12.2	11.8	11.0
Tractor/Land master[2]	0.3	3.7	0.1	3.1	0.3	4.0	0.2	3.3
Solar power	1.4	2.4	0.7	2.2	1.4	2.5	0.6	2.3
Number	2,483	16,449	931	19,862	10,495	65,765	3,999	80,260

[1] Cattle, buffaloes, goats, chickens, and pigs
[2] Diesel fueled machine that turns over paddy fields before planting

The survey reveals that ownership of agricultural land is highest (43 percent) in the rural sector. Ten percent of households, mostly in rural and estate areas, own farm animals. Two percent of households report that they have solar power facility.

2.6 WEALTH INDEX

The wealth index is a socio-economic indicator that is used throughout the report as a proxy for long-term standard of living of the household. It is based on data on the household's ownership of consumer goods; dwelling characteristics; type of drinking water source; toilet facilities; and other characteristics that are related to a household's socio-economic status. To construct the index, each of these assets was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest). A single asset index was developed on the basis of data from the entire country sample and this index is used in all the tabulations presented (Rutstein and Johnson, 2004).

Table 2.10 shows the distribution of the *de jure* household population into the five wealth quintiles, by residence. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic areas. Table 2.10 illustrates that almost half of the population in urban areas (49 percent) is in the highest wealth quintile. These results further confirm that poverty is more concentrated in the estate sector, where almost two-thirds of the population is in the lowest quintile. Table 2.10 further shows that higher percentages of people in Colombo and Gampaha districts, which are relatively more urbanized, are in the highest quintile, whereas over a third of the population in districts like Nuwara Eliya, Moneragala, Badulla, and Trincomalee fall into the lowest wealth quintile. Several districts have a fairly balanced distribution across all quintiles, namely, Kalutara, Kandy, Galle, Batticaloa, and Ampara.

Table 2.10 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, according to residence and district, Sri Lanka 2006-07

Residence/district	Wealth quintile					Total	Number of population
	Lowest	Second	Middle	Fourth	Highest		
Residence							
Urban	8.3	9.9	12.4	20.1	49.2	100.0	10,495
Rural	19.2	21.3	22.0	21.0	16.5	100.0	65,765
Estate	64.0	26.4	5.8	2.5	1.3	100.0	3,999
District							
Colombo	5.4	8.3	11.1	20.6	54.7	100.0	9,840
Gampaha	6.1	13.1	19.6	26.3	34.9	100.0	9,954
Kalutara	13.5	17.2	22.9	27.8	18.7	100.0	4,734
Kandy	19.3	23.3	17.4	19.8	20.2	100.0	5,628
Matale	32.9	21.6	18.7	17.8	9.1	100.0	1,598
Nuwara Eliya	52.2	29.6	9.1	5.7	3.5	100.0	2,714
Galle	15.8	21.2	25.1	21.2	16.8	100.0	4,659
Matara	14.8	23.7	27.3	21.4	12.9	100.0	3,348
Hambantota	17.7	24.1	28.8	20.7	8.8	100.0	2,464
Batticaloa	24.8	19.3	22.5	18.1	15.2	100.0	2,201
Ampara	25.6	21.9	20.8	17.6	14.1	100.0	2,618
Trincomalee	35.1	22.3	17.3	15.7	9.6	100.0	1,434
Kurunegala	25.1	21.0	24.2	19.5	10.1	100.0	6,983
Puttalam	23.3	19.3	21.8	23.9	11.7	100.0	3,271
Anuradhapura	22.6	22.5	23.7	20.8	10.4	100.0	3,245
Polonnaruwa	28.2	21.2	24.5	18.6	7.5	100.0	1,686
Badulla	38.2	27.7	16.4	11.6	6.1	100.0	3,527
Moneragala	40.7	27.0	15.8	11.3	5.3	100.0	2,045
Ratnapura	27.2	29.8	20.5	13.4	9.1	100.0	4,780
Kegalle	18.1	24.2	23.9	23.5	10.2	100.0	3,531
Total	20.0	20.0	20.0	20.0	20.0	100.0	80,260

2.7 BIRTH REGISTRATION

Registration of births is the inscription of the facts of a birth into a government record kept at the birth registrar's office. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. Birth registration is basic to ensuring a child's legal status and thus, basic rights and services (UNICEF, 2006; United Nations General Assembly, 2002).

It is a human right for a child to know who his/her parents are and to have a nationality through registration. Apart from being the first legal acknowledgment of a child's existence, the registration of births is fundamental to the realization of a number of rights and practical needs, including access to health care. Up-to-date birth registration is useful for national-level planning and implementation of health, education, and other services in the country. In the 2006-07 SLDHS, questions on birth registration were asked for all children born since January 2001.

Table 2.11 gives the percentage of children under five years of age whose births were officially registered and the percentage who had a birth certificate at the time of the survey. Not all children who are registered have certificates, since some may have been lost or were never issued. However, all children with a certificate have been registered.

It is clearly shown in Table 2.11 that the births of 97 percent of children under five years are registered in Sri Lanka. There is no considerable difference in birth registration by background characteristics of the children, except relatively lower percentages are reported in the estate sector and from Badulla and Ampara districts.

Table 2.11 Birth registration of children under age five

Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage of children whose births are registered: Had birth certificate	Did not have birth certificate[1]	Total registered	Number of children
Age				
<2	76.1	20.7	96.8	2,872
2-4	82.7	14.8	97.5	4,293
Sex				
Male	80.4	17.0	97.4	3,673
Female	79.7	17.3	97.0	3,492
Residence				
Urban	78.5	17.9	96.5	918
Rural	82.1	15.5	97.6	5,821
Estate	55.3	38.0	93.3	427
District				
Colombo	86.1	11.1	97.2	857
Gampaha	81.8	15.1	96.9	839
Kalutara	87.1	10.2	97.4	404
Kandy	64.3	32.9	97.2	495
Matale	40.7	58.5	99.2	134
Nuwara Eliya	56.0	41.9	97.9	262
Galle	90.6	7.1	97.7	381
Matara	88.1	7.6	95.7	302
Hambantota	89.9	7.2	97.1	235
Batticaloa	89.2	10.8	100.0	254
Ampara	64.8	29.3	94.1	284
Trincomalee	93.0	3.4	96.4	166
Kurunegala	90.4	7.7	98.1	573
Puttalam	82.3	14.3	96.6	290
Anuradhapura	83.4	15.9	99.3	315
Polonnaruwa	87.0	11.2	98.2	158
Badulla	69.7	22.4	92.1	326
Moneragala	83.7	14.3	98.0	194
Ratnapura	72.6	25.1	97.7	406
Kegalle	72.8	26.1	99.0	288
Wealth quintile				
Lowest	75.5	21.2	96.8	1,532
Second	77.0	20.4	97.5	1,475
Middle	82.9	14.6	97.5	1,339
Fourth	82.8	14.0	96.8	1,433
Highest	82.7	14.9	97.6	1,386
Total	80.1	17.2	97.2	7,165

[1] Births of these children were registered with local birth registrar.

CHARACTERISTICS OF RESPONDENTS 3

D.B.P.S. Vidyaratne

This chapter provides information about basic demographic characteristics of women who were interviewed in the 2006-07 SLDHS. The characteristics covered here are age, marital status, residential sector, education, religion, and ethnicity. Thereafter, detailed information on educational attainment, literacy, exposure to mass media, employment status, occupation, and type of employment is discussed. Three new topics that were introduced for the first time in this DHS survey—health insurance coverage, knowledge and attitudes concerning tuberculosis, and use of tobacco—are discussed at the end the chapter. Analysis of these variables provides the socio-economic context within which demographic and reproductive health issues are examined in subsequent chapters.

3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 presents information on selected background characteristics of women interviewed in this survey. Twenty-eight percent of the ever-married respondents are under 30 years of age. The majority of women are currently married, with only 3 percent divorced or separated and 4 percent widowed. Living together as if married is not a popular option in this country; only 1 percent of ever-married women are in this category.

The distribution of respondents by residential sector reveals that the vast majority of the respondents (82 percent) live in rural areas of the country. The district-wise distribution shows that 12 percent of respondents are from Colombo, where the national capital is situated. The Western Province, consisting of Colombo and two adjacent districts (Gampaha and Kalutara), accounts for 30 percent of all respondents.

Education in Sri Lanka is almost universal. Only 4 percent of ever-married women have never been to school, and 82 percent of women have studied beyond the primary level, including 22 percent with some post-secondary education.

The majority of the respondents (74 percent) are Buddhist. Islam (10 percent), Hinduism (8 percent), and Roman Catholicism (7 percent) are the other religions with notable proportions. The distribution of ethnicity parallels the pattern for religions, with three-quarters (76 percent) of the respondents being Sinhalese, followed by Sri Lankan Moors (10 percent), Sri Lankan Tamil (7 percent), and Indian Tamil (4 percent).

3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Table 3.2 presents the percent distributions of ever-married women by highest level of schooling according to other background characteristics. Just 4 percent of respondents have had no education at all and over 60 percent of ever-married women 15-49 have completed secondary school, with one-third having some post-secondary education. Figure 3.1 shows that younger women (age 20-29) are more likely to have completed secondary education than women age 30 and older. The proportion declines with successively older cohorts. Table 3.2 also shows that the percent of women with some post-secondary education had been rising consistently since about 1980 (the 40-49 cohort) and peaked around 1998 with those now 30-34 at the time of the survey. Since then, however, it has apparently dropped off slightly, as evidenced by the lower percents for those 25-29 and 20-24 when the survey took place. Likewise, the mean number of years of completed education has levelled off at 9.6 years.

Table 3.1 Background characteristics of respondents

Percent distribution of ever-married women age 15-49 by selected background characteristics, Sri Lanka 2006-07

Background characteristic	Weighted percent	Weighted	Unweighted
Age			
15-19	2.2	321	328
20-24	9.3	1,364	1,391
25-29	16.4	2,411	2,444
30-34	18.0	2,642	2,595
35-39	18.6	2,728	2,694
40-44	18.4	2,702	2,692
45-49	17.2	2,524	2,548
Marital status			
Married	92.5	13,591	13,558
Living together	1.1	157	153
Divorced/separated	2.7	404	414
Widowed	3.7	540	567
Residence			
Urban	12.9	1,893	3,034
Rural	82.3	12,095	10,361
Estate	4.8	703	1,297
District			
Colombo	12.2	1,796	1,851
Gampaha	12.5	1,839	1,565
Kalutara	5.7	837	844
Kandy	7.1	1,037	974
Matale	2.0	299	417
Nuwara Eliya	3.4	504	715
Galle	5.5	802	703
Matara	3.8	559	639
Hambantota	3.0	445	422
Batticaloa	3.0	434	493
Ampara	3.2	476	599
Trincomalee	1.8	266	356
Kurunegala	8.7	1,281	935
Puttalam	4.3	628	595
Anuradhapura	4.4	645	614
Polonnaruwa	2.3	335	465
Badulla	4.5	665	811
Moneragala	2.7	398	498
Ratnapura	5.7	840	668
Kegalle	4.1	605	528
Education			
No education	3.7	538	646
Primary	14.3	2,102	2,342
Secondary	49.0	7,200	7,072
Passed G.C.E (O/L)	11.4	1,672	1,595
Higher	21.7	3,181	3,037
Wealth quintile			
Lowest	19.5	2,864	3,175
Second	20.0	2,944	2,894
Middle	20.0	2,937	2,735
Fourth	20.5	3,014	2,834
Highest	20.0	2,933	3,054
Religion			
Buddhism	74.0	10,876	9,948
Hinduism	8.1	1,189	1,753
Islam	10.1	1,488	1,699
Roman Catholicism	6.5	959	1,073
Other Christian	1.2	178	216
Other/Missing	0.0	2	3
Ethnicity			
Sinhalese	79.6	11,700	10,832
Sri Lankan Tamil	6.3	923	1,228
Indian Tamil	3.7	548	909
Sri Lanka Moor	9.7	1,424	1,622
Other/Missing	0.7	97	101
Total 15-49	100.0	14,692	14,692

Note: Education categories refer to the highest level of education at which the respondent passed at least one grade, whether or not that level was completed.

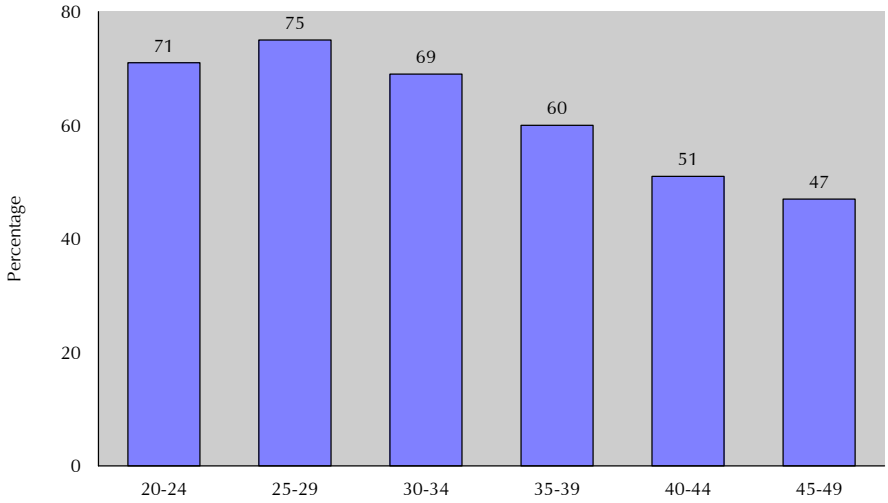
Table 3.2 Educational attainment

Percent distribution of ever-married women age 15-49 by highest level of schooling and median grade completed, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary[1]	Completed primary[2]	Some secondary[1]	Completed secondary[3]	More than secondary			
Age									
15-24	1.4	3.3	1.8	23.9	39.0	30.5	100.0	9.5	1,684
..15-19	1.3	2.9	1.4	31.9	45.2	17.4	100.0	9.3	321
..20-24	1.4	3.4	1.9	22.1	37.6	33.6	100.0	9.6	1,364
25-29	1.9	3.4	2.1	17.9	39.7	35.0	100.0	9.6	2,411
30-34	2.3	6.8	3.7	18.1	31.9	37.1	100.0	9.6	2,642
35-39	3.6	10.5	5.9	20.0	25.7	34.3	100.0	9.4	2,728
40-44	5.6	14.9	7.0	21.3	18.9	32.5	100.0	9.1	2,702
45-49	6.3	14.8	7.7	23.9	19.6	27.8	100.0	8.5	2,524
Residence									
Urban	2.2	6.4	5.0	22.7	22.0	41.7	100.0	9.6	1,893
Rural	3.0	8.8	4.4	20.3	30.2	33.2	100.0	9.4	12,095
Estate	18.3	27.3	14.2	20.8	13.3	6.1	100.0	4.3	703
District									
Colombo	1.7	3.9	3.6	19.3	24.7	46.8	100.0	9.9	1,796
Gampaha	1.4	3.7	3.5	18.9	27.3	45.2	100.0	9.8	1,839
Kalutara	1.6	7.6	4.3	19.3	30.8	36.5	100.0	9.6	837
Kandy	3.2	5.6	4.9	16.3	35.1	34.9	100.0	9.6	1,037
Matale	5.1	10.8	3.4	15.4	36.2	29.1	100.0	9.4	299
Nuwara Eliya	11.7	17.9	10.9	20.1	25.4	14.1	100.0	7.0	504
Galle	2.9	10.8	3.8	18.2	29.4	34.8	100.0	9.5	802
Matara	3.9	8.3	4.1	17.1	36.7	30.0	100.0	9.5	559
Hambantota	2.9	12.8	4.3	17.4	32.3	30.4	100.0	9.4	445
Batticaloa	9.7	16.6	8.1	26.2	17.7	21.7	100.0	7.1	434
Ampara	9.2	17.2	8.3	22.3	17.9	25.2	100.0	7.7	476
Trincomalee	7.2	18.4	8.4	29.1	19.6	17.2	100.0	7.4	266
Kurunegala	2.0	6.7	4.5	27.9	29.0	29.9	100.0	9.3	1,281
Puttalam	3.8	13.1	8.0	34.4	20.6	20.0	100.0	7.8	628
Anuradhapura	1.9	14.7	3.5	25.7	32.2	22.0	100.0	9.1	645
Polonnaruwa	2.8	14.2	4.5	21.5	32.4	24.6	100.0	9.2	335
Badulla	7.6	14.7	4.5	16.9	25.1	31.2	100.0	9.3	665
Moneragala	5.0	16.8	4.5	23.1	29.4	21.2	100.0	9.0	398
Ratnapura	5.6	10.4	5.6	17.5	31.4	29.5	100.0	9.3	840
Kegalle	1.5	7.1	5.2	14.2	32.4	39.6	100.0	9.7	605
Wealth quintile									
Lowest	10.7	21.3	8.3	26.6	23.7	9.4	100.0	6.7	2,864
Second	4.5	11.8	6.8	24.0	34.2	18.6	100.0	9.1	2,944
Middle	2.0	8.4	4.7	23.7	34.9	26.2	100.0	9.3	2,937
Fourth	0.8	4.3	3.1	18.6	30.2	43.1	100.0	9.8	3,014
Highest	0.5	1.5	1.9	10.6	18.4	67.0	100.0	10.9	2,933
Total	3.7	9.4	4.9	20.7	28.3	33.0	100.0	9.4	14,692

[1] Completed at least one grade at that level, but did not complete the level.
[2] Completed grade 5 at the primary level and did not continue
[3] Completed grade 10 at the secondary level and did not continue.

Figure 3.1 Ever-married Women 20-49 with Completed Secondary Education or Higher



SLDHS 2006-07

Women in the urban sector show the highest percentage with some education above the secondary level (42 percent), compared with only 6 percent for women in the estate sector. Women living in estate areas are half as likely to have at least some secondary education (40 percent versus 84 percent and 86 percent for rural and urban women, respectively). In the estate areas, women tend to start to work after some years of education rather than to continue to higher levels of education. (See Section 3.5 for information about employment among women in estate areas.)

The percentage of women with some post-secondary education varies across districts as well. The lowest percentage (14) was reported from women in Nuwara Eliya district, where tea plantations are predominant.

As one would expect, levels of education and literacy are positively correlated. Although literacy is very high (90 percent of ever-married women 15-49) in Sri Lanka, sector-wise and district-wise disparities exist, as shown in Table 3.3. Only 59 percent of women residing in the estate sector, where large plantations exist, are literate.

Table 3.3 Literacy

Percent distribution of ever-married women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/ visually impaired	Missing	Total	Percentage literate[1]	Number
Age									
15-19	94.5	0.8	2.0	2.1	0.0	0.6	100.0	97.3	321
20-24	93.3	1.6	1.1	3.8	0.0	0.1	100.0	96.0	1,364
25-29	92.6	1.4	1.4	4.3	0.1	0.3	100.0	95.4	2,411
30-34	87.2	3.1	2.6	6.8	0.0	0.3	100.0	92.9	2,642
35-39	80.0	5.1	4.0	10.5	0.1	0.3	100.0	89.1	2,728
40-44	72.6	7.4	5.7	13.6	0.4	0.4	100.0	85.6	2,702
45-49	71.2	7.8	5.8	13.4	1.3	0.5	100.0	84.8	2,524
Residence									
Urban	86.4	3.3	2.8	6.6	0.3	0.5	100.0	92.6	1,893
Rural	83.8	4.7	3.2	7.7	0.3	0.3	100.0	91.7	12,095
Estate	40.3	6.0	12.9	39.3	0.8	0.8	100.0	59.1	703
District									
Colombo	90.8	2.6	1.9	4.0	0.3	0.3	100.0	95.4	1,796
Gampaha	91.4	3.7	1.0	3.4	0.0	0.4	100.0	96.1	1,839
Kalutara	86.5	3.7	2.1	7.1	0.3	0.3	100.0	92.3	837
Kandy	86.2	2.0	3.0	8.4	0.2	0.2	100.0	91.3	1,037
Matale	80.7	3.8	2.6	12.8	0.0	0.0	100.0	87.2	299
Nuwara Eliya	59.6	5.4	8.3	25.3	1.3	0.1	100.0	73.3	504
Galle	82.4	5.0	2.4	9.6	0.2	0.4	100.0	89.8	802
Matara	83.7	5.6	2.5	7.4	0.3	0.5	100.0	91.8	559
Hambantota	80.0	7.4	3.2	8.9	0.5	0.0	100.0	90.6	445
Batticaloa	65.6	7.1	10.3	16.8	0.0	0.2	100.0	83.0	434
Ampara	65.4	8.2	6.8	18.1	1.4	0.1	100.0	80.4	476
Trincomalee	65.9	8.5	13.9	10.4	0.5	0.8	100.0	88.3	266
Kurunegala	86.9	2.6	5.2	4.9	0.1	0.4	100.0	94.6	1,281
Puttalam	75.1	7.0	4.3	12.3	1.0	0.4	100.0	86.4	628
Anuradhapura	79.9	6.6	2.6	10.7	0.2	0.0	100.0	89.1	645
Polonnaruwa	78.5	7.6	3.4	10.3	0.3	0.0	100.0	89.5	335
Badulla	73.2	4.0	6.1	15.6	0.4	0.8	100.0	83.2	665
Moneragala	73.7	7.0	5.0	13.8	0.3	0.1	100.0	85.7	398
Ratnapura	78.4	5.5	3.3	11.9	0.4	0.5	100.0	87.3	840
Kegalle	86.2	4.3	1.9	6.5	0.3	0.6	100.0	92.5	605
Wealth quintile									
Lowest	59.7	6.8	7.7	24.4	0.8	0.5	100.0	74.3	2,864
Second	76.9	6.1	4.7	11.5	0.3	0.5	100.0	87.7	2,944
Middle	84.9	5.0	3.3	6.1	0.3	0.4	100.0	93.2	2,937
Fourth	91.8	3.5	1.7	2.6	0.3	0.1	100.0	97.0	3,014
Highest	96.1	1.5	1.0	1.3	0.1	0.1	100.0	98.5	2,933
Total	82.0	4.6	3.6	9.1	0.3	0.3	100.0	90.3	14,692

[1] Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence

3.3 ACCESS TO MASS MEDIA

The 2006-07 SLDHS collected information on the exposure of respondents to various mass media. Respondents were asked how often they watched television, listened to the radio, or read a newspaper during the reference week. This information could be used effectively in determining the optimal media to use in passing health messages and other information to the public, and specifically to target populations.

Table 3.4 shows that television is the most popular mass media (78 percent) among ever-married women, followed by radio (59 percent). Reading the newspaper seems to be less popular (35 percent) than the other two media. It is also important to note that 22 percent of women are exposed to all three media, and 12 percent are not exposed to any media at all. The latter percentage is highest in the estate sector (23 percent) and Trincomalee district (34 percent), followed closely by Ampara (28 percent) and Batticaloa (27 percent).

Exposure to all three media increases somewhat by age (from 18 to 24 percent) and more strongly by education (from 1 percent for those with no education to 44 percent for the highest education group). There is also a strong positive association with the wealth index.

Table 3.4 Exposure to mass media

Percentage of ever-married women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Sri Lanka 2006-07

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No media at least once a week	Number
Age						
15-19	30.1	71.5	63.7	18.4	12.3	321
20-24	29.9	79.7	62.4	19.3	10.8	1,364
25-29	34.0	79.7	58.5	20.9	10.0	2,411
30-34	36.7	79.5	56.8	21.6	11.0	2,642
35-39	36.0	75.8	58.3	23.0	13.1	2,728
40-44	35.2	75.4	57.8	22.5	13.6	2,702
45-49	35.5	77.4	61.5	24.4	12.4	2,524
Residence						
Urban	45.3	84.8	55.4	27.9	8.0	1,893
Rural	34.5	77.2	60.0	22.0	12.0	12,095
Estate	13.2	64.7	52.5	8.8	22.7	703
District						
Colombo	55.5	90.8	55.7	33.6	4.3	1,796
Gampaha	48.3	90.6	54.5	28.8	5.0	1,839
Kalutara	42.7	79.8	70.1	32.3	8.9	837
Kandy	35.7	82.0	66.3	21.9	7.3	1,037
Matale	28.5	72.0	55.7	14.1	11.7	299
Nuwara Eliya	19.3	73.2	55.2	12.9	16.8	504
Galle	40.2	78.5	60.5	23.3	8.9	802
Matara	35.4	79.1	66.5	24.8	9.5	559
Hambantota	21.9	68.1	57.9	15.2	17.7	445
Batticaloa	25.3	64.4	55.9	20.6	27.2	434
Ampara	16.1	58.6	44.4	10.5	28.2	476
Trincomalee	14.0	60.1	46.7	12.6	34.2	266
Kurunegala	27.8	71.5	53.9	18.1	16.8	1,281
Puttalam	27.5	75.2	59.9	16.3	12.7	628
Anuradhapura	19.6	75.0	56.7	11.6	13.9	645
Polonnaruwa	18.7	66.5	58.3	11.9	18.7	335
Badulla	23.1	68.8	59.2	15.1	18.6	665
Moneragala	28.9	61.1	69.3	17.4	14.9	398
Ratnapura	30.6	74.7	67.4	20.3	8.9	840
Kegalle	40.3	79.6	65.2	25.7	10.8	605
Education						
No education	2.3	46.7	37.4	0.5	40.0	538
Primary	6.1	60.4	49.8	3.2	25.4	2,102
Secondary	27.0	77.2	59.4	16.8	11.6	7,200
Passed G.C.E (O/L)	52.7	86.3	64.1	34.1	5.2	1,672
Higher	67.7	90.3	65.3	43.8	2.6	3,181
Wealth quintile						
Lowest	13.0	42.2	44.2	4.6	34.5	2,864
Second	23.3	68.4	56.4	11.1	14.6	2,944
Middle	29.2	88.9	63.4	19.7	5.5	2,937
Fourth	43.6	92.9	66.4	31.2	3.5	3,014
Highest	64.5	94.1	64.2	43.3	2.5	2,933
Total	34.9	77.6	59.0	22.1	12.0	14,692

3.4 EMPLOYMENT

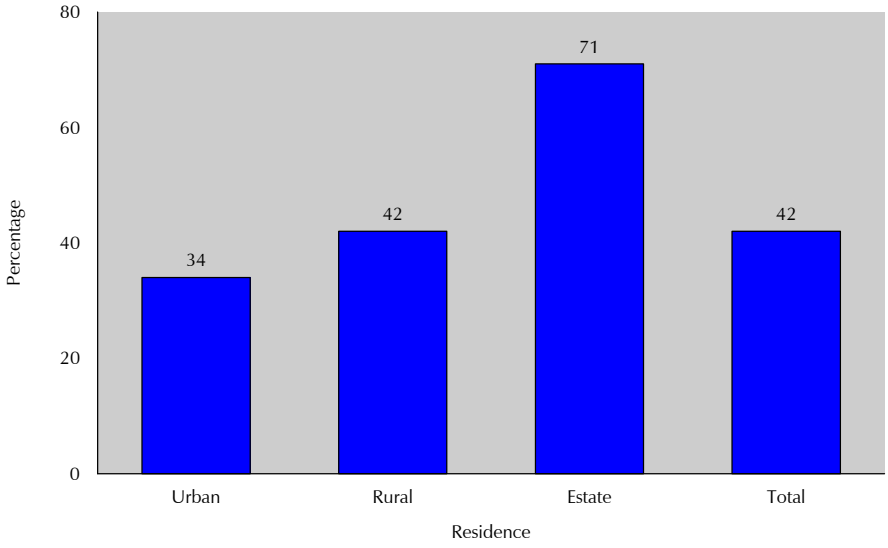
In the 2006-07 SLDHS, respondents were asked if they were engaged in any economic activity, regardless of whether they received any remuneration, separately for the 7 days and the 12 months preceding the interview. Economic activity includes both wage employment and other activities that produce economic goods and services, which may or may not be remunerated, as well as seasonal work. Forty-two percent of women are economically active (currently employed or worked in last 12 months[1]), and almost all of those women are currently employed (working in the last 7 days).

Notable variation in economic activity occurs by category for age, marital status, and residence. With increasing age, the percentage of women who worked in the previous year rises, from 17 percent for those age 15-19 to a high of 53 percent for women 40–44. Formerly married women (61 percent) are more likely to work than currently married women (41 percent).

As Figure 3.2 shows, women in the estate sector show the highest percentage of women engaged in economic activities (71 percent), compared with women in the urban (34 percent) and rural sectors (42 percent). It is understandable that the highest percentage of economically active women is in Nuwara Eliya (68 percent), because there are many estates and plantations in this district. Badulla (53 percent), Ratnapura (54 percent), and Moneragala (60 percent) also have levels of economically active women higher than the overall average. The lowest levels of women's employment are in Trincomalee (10 percent), Batticaloa (17 percent), and Ampara (21 percent).

Women's economic activity by level of education reveals an unusual pattern. Although more than half of women with no education, primary, and higher education are working, women with only some secondary education or a pass on secondary exams are much less likely to work.

Figure 3.2 **Economic Activity of Women by Residence**



Note: Economic activity includes women currently employed and employed in past 12 months

SLDHS 2006-07

[1] All percentages given in this section combine women employed in the last 7days and the last 12 months, which are shown separately in Table 3.5.

Table 3.5 Employment status

Percent distribution of ever-married women age 15-49 by employment status in the 12 months before the survey, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Employed in the past 12 months		Not employed in past 12 months	Total	Number of women
	Currently employed[1]	Not currently employed			
Age					
15-19	14.1	2.4	83.5	100.0	321
20-24	22.6	4.3	73.2	100.0	1,364
25-29	27.7	3.0	69.2	100.0	2,411
30-34	36.8	2.0	61.2	100.0	2,642
35-39	45.1	1.8	53.1	100.0	2,728
40-44	52.1	1.3	46.5	100.0	2,702
45-49	49.9	1.3	48.8	100.0	2,524
Marital status					
Married or living together	38.8	2.0	59.1	100.0	13,748
Divorced/separated/widowed	58.6	2.7	38.5	100.0	944
Number of living children					
0	36.5	5.6	57.9	100.0	1,499
1-2	38.8	1.9	59.4	100.0	8,684
3-4	44.2	1.4	54.4	100.0	3,974
5+	41.9	1.3	56.8	100.0	534
Residence					
Urban	32.3	1.5	66.1	100.0	1,893
Rural	39.6	2.2	58.2	100.0	12,095
Estate	69.7	1.7	28.6	100.0	703
District					
Colombo	37.3	2.7	59.9	100.0	1,796
Gampaha	38.9	1.6	59.5	100.0	1,839
Kalutara	37.9	1.5	60.7	100.0	837
Kandy	30.9	3.7	65.3	100.0	1,037
Matale	45.1	3.4	51.5	100.0	299
Nuwara Eliya	66.3	1.7	31.9	100.0	504
Galle	44.7	3.1	52.2	100.0	802
Matara	43.7	0.7	55.6	100.0	559
Hambantota	37.6	1.5	60.9	100.0	445
Batticaloa	16.7	0.4	82.9	100.0	434
Ampara	19.9	1.2	78.9	100.0	476
Trincomalee	9.4	0.3	90.3	100.0	266
Kurunegala	44.3	2.6	53.2	100.0	1,281
Puttalam	35.5	2.5	62.0	100.0	628
Anuradhapura	41.5	1.9	56.5	100.0	645
Polonnaruwa	32.7	2.6	64.7	100.0	335
Badulla	51.7	0.8	47.3	100.0	665
Moneragala	54.8	4.8	40.4	100.0	398
Ratnapura	52.6	1.6	45.8	100.0	840
Kegalle	44.2	1.2	54.6	100.0	605
Education					
No education	54.2	1.7	44.2	100.0	538
Primary	50.9	2.0	47.0	100.0	2,102
Secondary	34.3	2.6	63.1	100.0	7,200
Passed G.C.E (O/L)	28.2	1.5	70.3	100.0	1,672
Higher	50.1	1.3	48.5	100.0	3,181
Wealth quintile					
Lowest	46.9	2.5	50.6	100.0	2,864
Second	41.2	2.3	56.5	100.0	2,944
Middle	36.8	2.4	60.8	100.0	2,937
Fourth	35.9	1.7	62.4	100.0	3,014
Highest	40.1	1.6	58.3	100.0	2,933
Total	40.1	2.1	57.8	100.0	14,692

[1] Currently employed is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

3.5 OCCUPATION

Table 3.6 presents the distribution of economically active, ever-married women by occupation and background characteristics. Over one-third of employed women work are unskilled manual workers (including agricultural labourers), while one-fifth work in skilled manual jobs and almost as many work in professional, technical, or managerial positions (17 percent).

Table 3.6 Occupation: Women

Percent distribution of ever-married women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Sri Lanka 2006-2007

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Market-oriented farmers and fishery workers	Missing	Total	Number of women
Age									
15-19	0.0	0.0	1.9	42.3	42.6	13.1	0.0	100.0	53
20-24	8.8	3.0	5.7	37.9	33.7	10.8	0.0	100.0	366
25-29	13.8	4.9	11.5	29.1	30.6	10.0	0.2	100.0	742
30-34	22.1	4.9	11.0	19.6	30.8	11.4	0.2	100.0	1,024
35-39	19.1	5.4	10.0	17.4	36.4	11.6	0.1	100.0	1,279
40-44	17.7	3.8	11.5	16.2	38.9	11.7	0.3	100.0	1,444
45-49	13.3	2.4	11.9	15.3	40.6	16.3	0.3	100.0	1,292
Marital status									
Married or living together	17.7	4.3	10.3	19.9	35.0	12.6	0.2	100.0	5,621
Divorced/separated/ widowed	6.8	1.6	15.3	19.9	46.7	9.4	0.3	100.0	579
Number of living children									
0	23.1	7.3	10.1	33.2	19.2	6.3	0.7	100.0	631
1-2	20.6	5.3	11.5	21.2	30.2	11.2	0.1	100.0	3,526
3-4	8.9	1.0	9.8	13.8	50.6	15.6	0.2	100.0	1,811
5+	0.0	0.2	8.9	10.7	59.5	20.1	0.6	100.0	231
Residence									
Urban	29.6	6.1	17.4	24.3	21.1	1.2	0.2	100.0	640
Rural	16.4	4.2	10.8	20.9	32.7	14.8	0.2	100.0	5,058
Estate	2.4	0.6	1.6	3.7	89.9	1.6	0.1	100.0	502
Region									
Colombo	26.7	7.5	19.0	27.0	18.5	1.3	0.1	100.0	719
Gampaha	22.5	6.6	13.8	32.0	21.5	3.5	0.3	100.0	744
Kalutara	20.9	5.2	13.1	26.6	29.5	4.7	0.0	100.0	329
Kandy	19.4	4.2	10.7	20.6	34.3	10.7	0.0	100.0	359
Matale	11.3	2.5	10.9	15.6	41.1	18.5	0.0	100.0	145
Nuwara Eliya	7.4	1.5	1.8	5.8	74.1	9.2	0.1	100.0	343
Galle	15.3	4.2	7.2	23.1	45.4	4.5	0.4	100.0	383
Matara	10.2	4.5	9.6	16.2	57.4	2.0	0.0	100.0	248
Hambantota	23.7	3.7	8.2	18.2	21.2	25.0	0.0	100.0	174
Batticaloa	33.0	6.9	7.5	37.4	15.2	0.0	0.0	100.0	74
Ampara	24.9	4.8	8.8	13.8	28.6	17.0	2.0	100.0	100
Trincomalee	(11.0)	(11.5)	(21.3)	(28.1)	(17.5)	(10.6)	(0.0)	100.0	26
Kurunegala	15.5	3.2	10.6	25.4	26.1	19.1	0.0	100.0	600
Puttalam	8.2	1.8	13.9	14.7	45.0	15.5	1.0	100.0	238
Anuradhapura	11.4	2.7	8.5	6.6	38.8	32.0	0.0	100.0	281
Polonnaruwa	19.7	1.2	13.5	8.3	39.3	18.0	0.0	100.0	118
Badulla	11.4	2.0	6.5	6.5	52.9	20.6	0.3	100.0	349
Moneragala	8.6	1.8	5.4	7.2	20.3	56.9	0.0	100.0	237
Ratnapura	11.0	1.3	8.0	14.5	53.9	11.1	0.3	100.0	456
Kegalle	13.7	4.8	11.1	23.6	42.2	4.1	0.4	100.0	275
Education									
No education	0.0	0.2	7.4	4.3	74.0	13.9	0.2	100.0	300
Primary	0.0	0.1	7.9	10.1	65.2	16.5	0.2	100.0	1,113
Secondary	2.8	0.6	13.1	28.0	39.9	15.4	0.2	100.0	2,655
Passed G.C.E (O/L)	16.9	7.3	16.3	29.3	19.2	10.8	0.2	100.0	496
Higher	53.6	12.2	7.8	13.3	8.4	4.6	0.1	100.0	1,635
Wealth quintile									
Lowest	1.8	0.4	5.4	14.4	61.0	16.9	0.1	100.0	1,416
Second	4.1	1.4	9.5	20.2	47.3	17.2	0.4	100.0	1,280
Middle	8.3	2.2	10.5	28.6	35.7	14.3	0.5	100.0	1,150
Fourth	23.9	6.0	13.7	22.8	23.2	10.3	0.0	100.0	1,133
Highest	48.3	11.1	15.8	14.9	7.9	1.9	0.1	100.0	1,221
Total	16.7	4.1	10.8	19.9	36.1	12.3	0.2	100.0	6,200

Note: Numbers in parentheses are based on 25-49 unweighted women.

Women's occupation varies by age. Women under 20 and 35 and older are slightly more likely to work in unskilled manual jobs (over 35 percent) than women of other ages. The percentage of women working in professional, technical, and managerial occupations is highest (22 percent) among women 30-34 years.

The type of occupation is strongly associated with the number of children a woman has. Women with two or fewer children tend to have professional, managerial, and technical jobs or skilled manual jobs more often than women with larger families. The percentage of women working in unskilled manual jobs and market-oriented farming and fishing occupations increases as family size gets larger.

Women living in urban areas have mainly professional, managerial, and technical or skilled manual occupations. Naturally, unskilled manual work predominates as the occupation of women in the estate sector (90 percent). Occupations of rural women are mixed, although one-third work in unskilled manual jobs.

Level of education has a high correlation with occupation. Nearly three-quarters of women with the highest level of education work in professional/technical/managerial, sales and services, and clerical jobs. As education level increases, the percentage with unskilled manual jobs drops rapidly. Over half (54 percent) of women with the highest level of education have professional, technical, and managerial jobs, dramatically higher than any of the other education levels. There is a similar, strong relationship between occupation and wealth quintile, with most women in the lowest quintile working in unskilled manual occupations and almost half of those in the highest quintile working in professional, technical, or managerial professions.

3.6 EARNINGS AND TYPE OF EMPLOYMENT

Not all women who work get paid. Eighty-one percent of ever-married working women work for cash or cash and in-kind; less than one in five (18 percent) work without any payment, perhaps in a family enterprise or as a household worker. This situation is more common in the agricultural sector where only 53 percent of women get paid in cash, compared with 88 percent in the non-agricultural sector.

Nine percent of women are employed by a family member, and another 59 percent are employed outside the family; 30 percent of women are self-employed. Seasonality affects women's employment. Twenty percent of economically active women work according to season. In the agricultural sector, over 40 percent of women have seasonal jobs.

Table 3.7 Type of employment

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Sri Lanka 2006-07

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	53.1	88.1	76.1
Cash and in-kind	8.5	2.7	4.7
In-kind only	3.4	0.1	1.2
Not paid	35.0	9.1	17.9
Total	100.0	100.0	100.0
Type of employer[1]			
Employed by family member	na	9.0	na
Employed by nonfamily member	na	59.0	na
Self-employed	na	30.1	na
Total	na	100.0	na
Continuity of employment			
All year	54.4	87.9	76.4
Seasonal	41.7	8.6	19.9
Occasional	3.9	3.5	3.6
Total	100.0	100.0	100.0
Number of women employed during the past 12 months	2,119	4,069	6,200

na = Not applicable
Note: Total includes 12 women with missing information on type of employment who are not shown separately, as well as women who are missing type of earnings, type of employer, and continuity of employment.
[1] Asked only of women employed in non-agricultural jobs

3.7 HEALTH INSURANCE COVERAGE

In Sri Lanka, health services are provided to the public free of charge through a network of government hospitals. Although some private hospitals exist in the capital and other major towns, mainly rich people and paid employees who are provided health insurance by their employers use these facilities, especially as inpatients. Therefore, purchasing health insurance is neither very popular nor necessary for a large segment of the population.

This situation is clearly shown in the survey results. Table 3.8 shows that a total of 16 percent of ever-married women use some form of health insurance. Only 7 percent of women purchase commercial insurance on their own, while another 9 percent are provided health insurance through their employer. Almost all women in the estate sector (96 percent) have no health insurance coverage because they use government and estate health facilities. In contrast, slightly less than 20 percent of women in urban and rural areas have some form of health insurance. District disparities are also clearly shown. Colombo, Galle, Anuradhapura, Ratnapura, and Kegalle show higher percentages with health insurance than other districts.

The table also reveals that education influences the purchase of a health insurance policy. As a woman becomes more educated, there is a greater chance to have better employment and a higher salary; therefore, she would be more likely to have health insurance coverage. One-third of women in the highest education category have some form of health insurance.

Table 3.8 Health insurance coverage

Percentage of ever-married women age 15-49 with specific types of health insurance coverage, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Other employer-based insurance	Privately purchased commercial insurance	None	Number
Age				
15-19	2.6	3.6	93.8	321
20-24	4.2	4.8	90.9	1,364
25-29	6.8	7.3	86.1	2,411
30-34	10.7	7.7	82.3	2,642
35-39	11.0	7.5	82.0	2,728
40-44	11.3	7.1	82.1	2,702
45-49	9.5	6.0	85.0	2,524
Residence				
Urban	9.6	8.8	82.0	1,893
Rural	9.6	6.8	84.0	12,095
Estate	1.6	2.6	95.8	703
District				
Colombo	10.8	8.6	81.0	1,796
Gampaha	7.1	6.9	86.7	1,839
Kalutara	7.9	10.2	83.8	837
Kandy	4.5	5.7	90.3	1,037
Matale	4.9	7.1	88.0	299
Nuwara Eliya	4.1	5.8	90.5	504
Galle	24.2	10.5	65.8	802
Matara	8.7	7.9	83.9	559
Hambantota	8.3	5.3	86.6	445
Batticaloa	1.6	1.9	96.5	434
Ampara	5.2	4.0	91.5	476
Trincomalee	2.6	2.6	95.3	266
Kurunegala	8.7	7.3	84.2	1,281
Puttalam	8.6	9.4	82.2	628
Anuradhapura	10.6	7.0	82.4	645
Polonnaruwa	5.5	6.2	88.3	335
Badulla	5.7	3.5	90.8	665
Moneragala	4.2	4.4	91.4	398
Ratnapura	19.0	5.3	75.3	840
Kegalle	16.5	6.1	77.8	605
Education				
No education	2.7	2.3	95.0	538
Primary	3.8	2.1	93.9	2,102
Secondary	5.1	5.3	89.6	7,200
Passed G.C.E (O/L)	8.4	9.2	82.8	1,672
Higher	23.7	12.9	65.2	3,181
Wealth quintile				
Lowest	3.9	2.2	93.9	2,864
Second	5.9	4.0	90.1	2,944
Middle	6.9	5.0	88.2	2,937
Fourth	11.3	8.5	80.7	3,014
Highest	18.1	14.3	69.1	2,933
Total	9.2	6.8	84.3	14,692

3.8 KNOWLEDGE AND ATTITUDES CONCERNING TUBERCULOSIS

The 2006-07 SLDHS introduced a new set of questions to collect data on women's knowledge and attitudes concerning tuberculosis (TB). Results show that almost all women (90 percent) have heard of tuberculosis (TB), irrespective of age. There are disparities among residential sectors and districts, however. Women in the estate sector show a very low awareness of TB (38 percent) compared with women in other two sectors (over 90 percent). Similarly, districts such as Nuwara Eliya, Trincomalee, and Badulla show lower percentages than other districts. Two of these districts (Nuwara Eliya and Badulla) predominantly consist of tea plantations. As women's education rises, TB awareness also increases.

A similar pattern by residence is observed for two of the other variables as well: knowledge of the mechanism of TB transmission and ability to cure TB. Despite the fact that TB can be treated and cured without risk of further transmission, 17 percent of women said that they would want to keep it a secret that a family member has TB. This percentage varies by woman's age. Older women want to keep this as a secret somewhat less often than women of younger ages.

Table 3.9 Knowledge and attitudes concerning tuberculosis

Percentage of ever-married women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentages who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Sri Lanka 2006-07

	Among all respondents		Among respondents who have heard of TB			
Background characteristic	Percentage who have heard of TB	Number	Percentage who report that TB is spread through the air by coughing	Percentage who believe that TB can be cured	Percentage who would want a family member's TB kept secret	Number
Age						
15-19	85.0	321	71.7	82.5	24.0	273
20-24	87.7	1,364	81.1	84.1	20.7	1,196
25-29	90.5	2,411	81.7	86.9	18.3	2,183
30-34	92.2	2,642	83.7	88.0	16.7	2,436
35-39	91.3	2,728	81.1	83.7	16.5	2,491
40-44	91.2	2,702	80.0	82.9	15.3	2,465
45-49	90.8	2,524	78.8	82.5	15.0	2,292
Residence						
Urban	92.0	1,893	85.1	86.0	16.2	1,742
Rural	93.6	12,095	80.5	85.0	17.0	11,326
Estate	38.1	703	71.0	64.6	16.5	268
District						
Colombo	95.3	1,796	86.8	90.9	15.1	1,711
Gampaha	96.7	1,839	84.0	91.0	22.5	1,779
Kalutara	92.8	837	88.1	89.9	6.1	776
Kandy	87.7	1,037	78.3	84.1	19.9	909
Matale	91.2	299	72.8	77.0	14.7	273
Nuwara Eliya	53.2	504	71.4	76.9	14.6	268
Galle	96.0	802	77.5	86.4	11.2	770
Matara	94.4	559	78.5	86.0	11.1	527
Hambantota	95.2	445	72.4	78.0	15.8	424
Batticaloa	85.3	434	78.3	46.6	11.8	370
Ampara	86.0	476	78.2	69.3	15.5	409
Trincomalee	77.6	266	98.3	89.9	26.2	206
Kurunegala	96.3	1,281	83.9	88.1	18.3	1,234
Puttalam	85.0	628	77.6	80.6	11.7	534
Anuradhapura	93.5	645	76.9	82.2	21.3	603
Polonnaruwa	95.8	335	77.9	81.3	21.9	320
Badulla	78.8	665	68.6	78.7	16.5	524
Moneragala	91.9	398	80.8	80.0	15.4	366
Ratnapura	89.3	840	84.2	86.6	21.1	750
Kegalle	96.1	605	75.7	89.6	21.4	582
Education						
No education	57.3	538	57.0	59.0	17.0	308
Primary	74.8	2,102	64.7	63.8	16.5	1,572
Secondary	92.6	7,200	78.4	83.9	16.0	6,665
Passed G.C.E (O/L)	97.4	1,672	88.6	92.3	17.5	1,629
Higher	99.4	3,181	92.4	95.2	18.5	3,162
Wealth quintile						
Lowest	77.2	2,864	71.4	72.3	16.9	2,211
Second	88.6	2,944	75.2	80.3	16.3	2,609
Middle	94.7	2,937	79.7	85.1	15.9	2,783
Fourth	95.9	3,014	84.6	89.8	17.3	2,891
Highest	96.9	2,933	90.6	92.8	17.9	2,842
Total	90.8	14,692	80.9	84.7	16.9	13,336

3.9 SMOKING

This section was also newly introduced in the 2006-07 SLDHS. The survey found that less than 1 percent of ever-married women in Sri Lanka smoke cigarettes or use tobacco products (data not shown).

FERTILITY LEVELS, TRENDS, AND DIFFERENTIALS 4

H.R. Gunasekera

4.1 INTRODUCTION

A major objective of the 2006-07 Sri Lanka Demographic and Health Survey (SLDHS) is to assess the fertility levels, trends, and differentials in Sri Lanka. Data on fertility were collected in several ways. Ever-married women were asked to report the total number of live births they had given birth to during their lifetime. To minimize bias in misreporting, each woman was asked a series of questions such as the number of sons and daughters living with her, the number living elsewhere, and the number who had died. A follow-up question was also asked to ascertain whether the total number of children stated by the respondent was correct.

To obtain more details, a complete birth history approach was utilized, in which information was collected for each live birth on: birth order, whether the birth was single or multiple, sex, date of birth, survival status, current age, age at death (for dead children), and whether the child was living with the respondent (for surviving children). At the end of the birth history section of the questionnaire, a final check was done to ensure that the number of births in the birth history matched the total live births recorded in the first procedure. Birth history information provides a richer set of data for fertility analysis. This information was used to calculate measures of current fertility and fertility trends, as well as cumulative measures of the number of children ever born. Maximum precautions were taken during the interviews to obtain accurate dates of birth. The interviewers were trained to check any available documents such as a birth certificate or health card before recording the date of birth and also to probe carefully with regard to reported intervals between births that were implausibly short or long.

This chapter presents current fertility, differentials and trends in fertility, cumulative fertility, the length of birth intervals, the age at which women initiate childbearing, and childbearing among adolescents. Information on current and cumulative fertility is essential in monitoring population growth. The data on birth intervals are important, since short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and wellbeing of both the mother and the child.

4.2 CURRENT FERTILITY

The level of current fertility is one of the most important indicators in this report because of its direct relevance to population policies and programs. Current fertility can be measured using age-specific fertility rates (ASFR), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). The ASFRs provide the age pattern of fertility, while the TFR refers to the average number of live births that a woman would have if she were subject to the current ASFRs throughout the reproductive ages (15-49 years). ASFRs are calculated by dividing the number of births to women in a specific age group by the number of woman-years lived during a given period.[1]

[1] Numerators for the age-specific rates are calculated by summing the births that occurred during the 1-36 months preceding the survey, classified by the age group of the mother at the time of birth in 5-year age groups. The denominators are the number of woman-years lived in each 5-year age group during the 1-36 months preceding the survey. Because rates must be based on all women and in Sri Lanka only ever-married women were interviewed, the number of interviewed women was increased using a factor based on all de facto women listed in the household who had never been married. The 'all women' factors were based on age in the household and background information available at the household level.

The GFR is expressed as the number of live births per 1,000 women of reproductive age and the CBR is expressed as the number of live births per 1,000 population. The measures of fertility presented in this chapter refer to the three-year period prior to the survey. This generates a sufficient number of births to provide robust and current estimates.

Current estimates of fertility levels are presented in Table 4.1 by place of residence. The table provides information on the current fertility levels for Sri Lanka as a whole and for urban, rural, and estate areas. The TFR for Sri Lanka is 2.3, meaning that, if current age-specific fertility rates were to remain unchanged in the future, a woman in Sri Lanka would have an average of 2.3 children by the end of her childbearing period.

The TFR is lowest for women in urban areas (2.2 children) and highest for women in estate areas (2.5 children). The age pattern of fertility indicates that fertility rates peak among women age 25-29. At the current ASFRs, a woman in Sri Lanka will have given birth to about 1.4 children by age 30. ASFRs are consistently lower in urban than rural areas. In contrast, ASFRs in estate areas are higher than in rural areas up to age 30, after which the pattern generally reverses.

The GFR for Sri Lanka is 79, which means that there were 79 births for every 1,000 women of reproductive age during the three-year period preceding the survey. The CBR for the period is 18.7 per 1,000 population. Both the GFR and CBR indicate the same pattern as TFR by residence.

Table 4.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Sri Lanka 2006-07

	Residence			
Age group	Urban	Rural	Estate	Total
15-19	24	28	37	28
20-24	98	100	138	102
25-29	138	146	178	147
30-34	120	123	91	122
35-39	55	57	55	57
40-44	11	15	5	14
45-49	1	1	2	1
TFR	2.2	2.3	2.5	2.3
GFR	75	79	90	79
CBR	18.5	18.6	20.0	18.7

Notes: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview. Because rates are based on all women and survey interviews were conducted only with ever-married women, the number of ever-married women was increased using a factor based on all de facto women listed in the household who had never been married. The 'all women' factors were based on age in the household and background information available at the household level.
TFR: Total fertility rate expressed per woman
GFR: General fertility rate expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

4.3 FERTILITY DIFFERENTIALS BY BACKGROUND CHARACTERISTICS

Fertility is known to vary by residence, educational background, and other background characteristics of a woman. Table 4.2 shows three indicators of fertility: the total fertility rate, the percentage of women age 15-49 who were pregnant at the time of the survey, and the mean number of children ever born to women age 40-49.

Table 4.2 Fertility by background characteristics

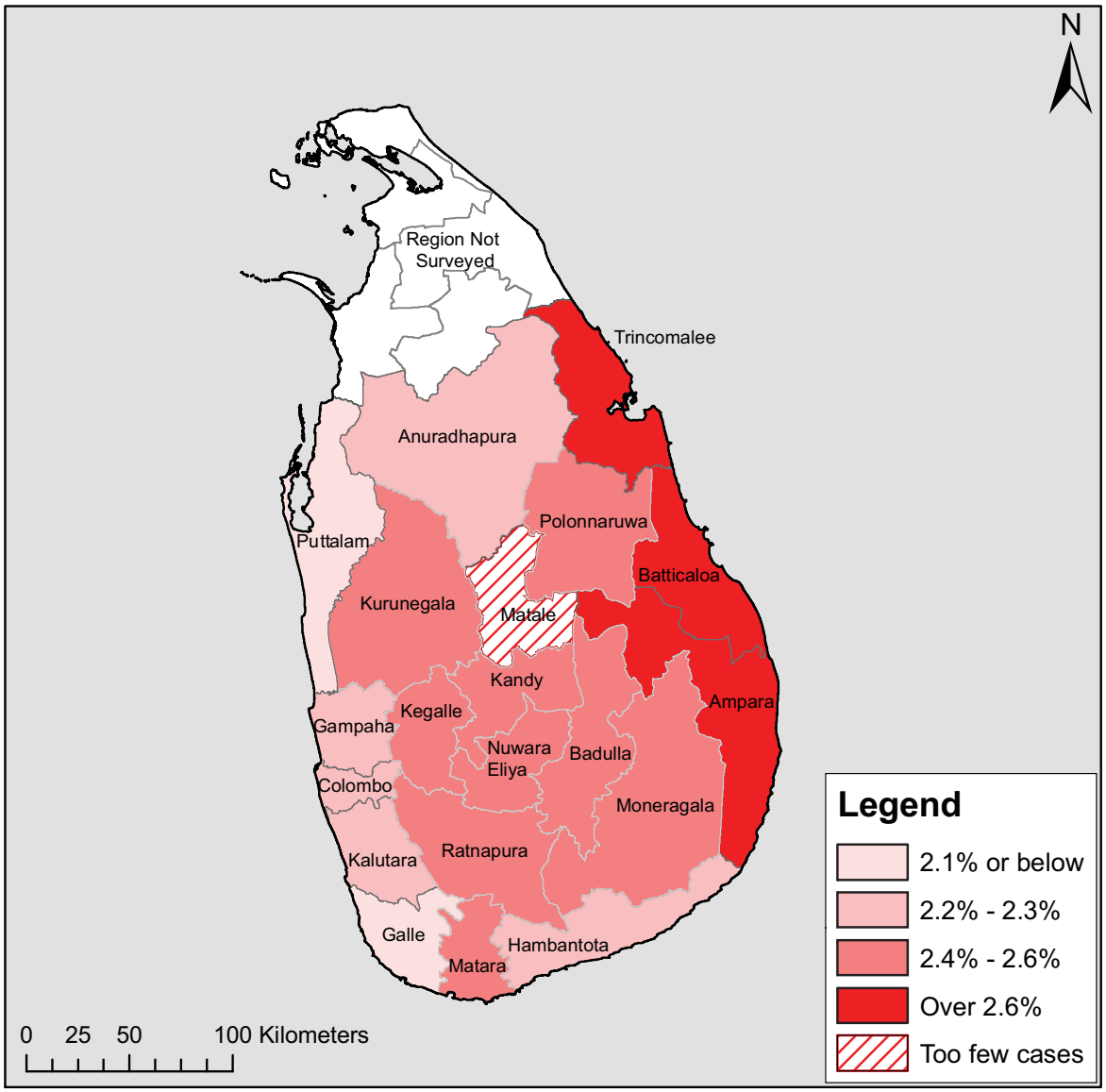
Total fertility rate for the three years preceding the survey, percentage of all women age 15-49 currently pregnant, and mean number of children ever born to all women age 40-49 years, by background characteristics, Sri Lanka 2006-07

Background characteristic	Total fertility rate	Percentage of all women age 15-49 currently pregnant	Mean number of children ever born to all women age 40-49
Residence			
Urban	2.2	3.2	2.3
Rural	2.3	4.3	2.6
Estate	2.5	5.1	2.8
District			
Colombo	2.2	3.3	2.1
Gampaha	2.2	3.7	2.2
Kalutara	2.2	3.8	2.2
Kandy	2.4	4.4	2.6
Matale	*	3.4	2.6
Nuwara Eliya	(2.6)	5.1	2.8
Galle	2.1	3.1	2.7
Matara	(2.4)	5.1	2.9
Hambantota	(2.3)	6.0	3.1
Batticaloa	(2.8)	3.5	3.1
Ampara	(2.9)	5.3	3.5
Trincomalee	(2.9)	6.2	3.8
Kurunegala	2.5	4.1	2.5
Puttalam	2.0	4.1	2.9
Anuradhapura	(2.3)	4.3	2.8
Polonnaruwa	(2.5)	3.8	2.7
Badulla	2.4	5.0	2.7
Moneragala	(2.5)	5.7	3.5
Ratnapura	2.4	3.6	2.6
Kegalle	(2.5)	5.5	2.2
Education			
No education	1.9	1.8	3.0
Primary	2.8	2.4	3.2
Secondary	2.6	4.6	2.6
Passed G.C.E. (O/L)	2.5	5.5	2.2
Higher	2.3	5.1	1.9
Wealth quintile			
Lowest	2.4	4.1	3.0
Second	2.3	4.1	2.8
Middle	2.2	3.8	2.6
Fourth	2.3	4.7	2.4
Highest	2.4	4.2	2.1
Total	2.3	4.2	2.6

Note: Total fertility rates (TFRs) are for the period 1-36 months prior to interview. They are based on all women, regardless of marital status (see note in Table 4.1). TFRs in parentheses are based on 500-750 unweighted (all) women; an asterisk represents a TFR based on fewer than 500 unweighted women that has been suppressed.

Interpretation of variations in fertility by administrative districts is limited by the small samples in some districts. Nevertheless, results indicate that Galle and Puttalam districts have TFRs of 2.1 or below, which is at what is known as "replacement level" fertility, i.e., the level that is necessary to maintain population size over time. The three districts in the Eastern province—Trincomalee, Batticaloa, and Ampara—have the highest current fertility levels (Figure 4.1).

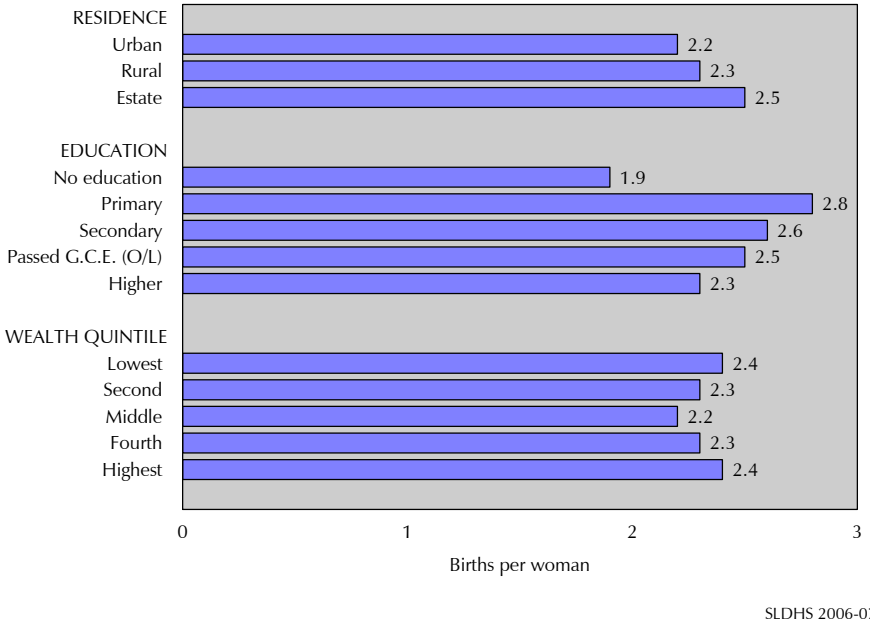
Figure 4.1 Current Fertility Levels



In most countries, there is a pattern of declining fertility with increasing level of education of women. However, as seen in Figure 4.2, Sri Lankan women with no education are an exception to the pattern, since they have the lowest TFR of 1.9. Further analysis is needed to explain this unexpected finding. There is little variation by wealth quintile.

The percentage of women who reported themselves as currently pregnant is also given in Table 4.2. The percentage pregnant provides a useful additional measure related to current fertility. Since women in the early stages of pregnancy may not be aware that they are pregnant and because some women may not want to reveal that they are pregnant, this percentage may be underestimated.

Figure 4.2 Total Fertility Rates by Residence, Education, and Wealth



SLDHS 2006-07

Four percent of women reported they were pregnant at the time of the survey. The percentage pregnant by place of residence is consistent with the pattern of current fertility levels as measured by TFR; estate women have both the highest fertility rate and the highest percentage of women currently pregnant, while urban women have the lowest levels for both indicators. This pattern is not as consistent by district, with some discordance between the rankings by TFR level and percentage pregnant. The variation across education categories is interesting. The percentage pregnant is lowest for women with no education, as is the TFR; but, in contrast, it increases as the level of education increases, except for the higher education category. In fact, the percentage pregnant is more than twice as high for women who passed G.C.E (O/L) as for women with only primary education.

Table 4.2 also shows the mean number of children ever born (CEB) to women age 40-49. It is an indicator of completed fertility; it reflects the fertility performance of relatively older women who are nearing the end of their reproductive period. If fertility remains stable over time, the two fertility measures, TFR and mean CEB, tend to be very similar. If fertility is declining, then the TFR should be lower than mean CEB. Hence comparison of these two indicators provides some understanding about fertility change.

Overall, the results in Table 4.2 suggest that there has been a decline of about 12 percent in fertility levels over the past 15-20 years. In contrast, Colombo and Kegalle districts show higher values for the TFR than for the mean CEB, which implies an increase in fertility in those two districts, though the differences are small and the TFR for Kegalle is based on a small number of women. On similar grounds, it is interesting to see recent increases in fertility levels for more educated women (with G.C.E. (O/L) and above) and for women belonging to the highest wealth quintile.

4.4 FERTILITY TRENDS

Trends in fertility can be examined by observing a time series of estimates produced from different demographic surveys conducted over the last three decades. These are shown in Table 4.3 and Figure 4.3. Interpretation of the measures should be undertaken with caution since some of the estimates are based on data from the entire country and calculated for a single year (e.g., 1975 WFS and 1982 CPS), while other estimates are based on data excluding the Northern and Eastern provinces (e.g., all four DHS surveys). For comparison with recent surveys, the information presented in Table 4.3 for the 2006-07 DHS also excludes both the Northern and Eastern provinces; for this reason, it differs from the rates given in Table 4.1.

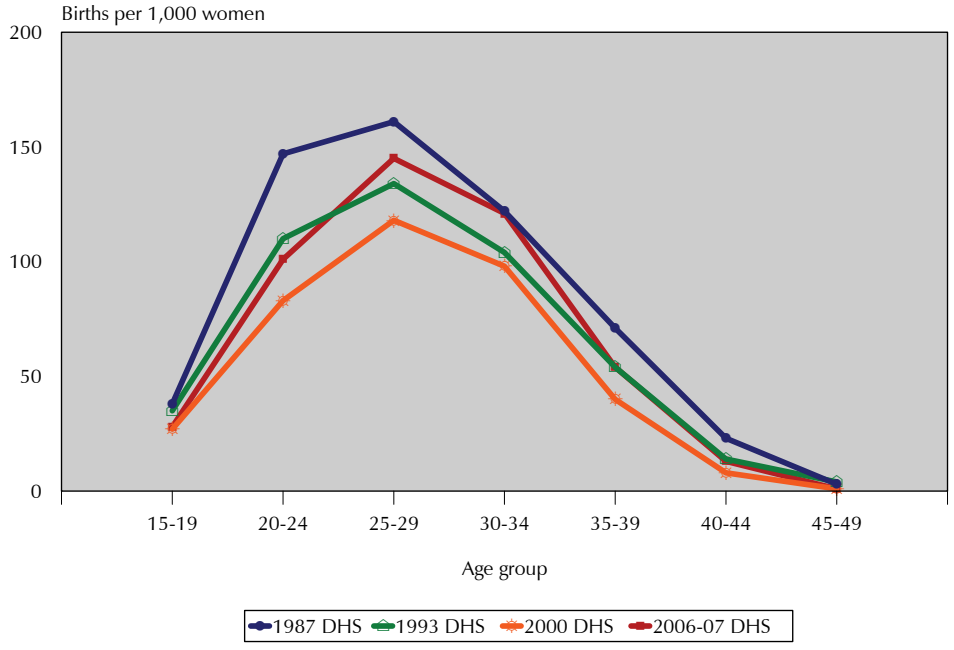
Table 4.3 Trends in fertility

Age-specific fertility rates and total fertility rates, selected sources, Sri Lanka, 1974 through 2006-07

	Survey and approximate reference period					
Age group	1975 WFS (1974)	1982 CPS (1981)	1987 DHS[1] (1982-87)	1993 DHS[1] (1988-93)	2000 DHS[1] (1995-2000)	2006-07 DHS[1] (2003-06)
15-19	31	34	38	35	27	28
20-24	146	172	147	110	83	101
25-29	161	222	161	134	118	145
30-34	158	177	122	104	98	121
35-39	126	99	71	54	40	54
40-44	43	37	23	14	8	13
45-49	6	0	3	4	1	1
TFR	3.4	3.7	2.8	2.3	1.9	2.3

WFS = World Fertility Survey; CPS = Contraceptive Prevalence Surveys
Sources: DCS, 1978, Table 5.14.1; DCS and IRD, 1988, Table 3.2; DCS, 2002, Table 4.1; special tabulation for 2006-07
[1] Excludes Northern and Eastern provinces

Figure 4.3 Trends in Age-Specific Fertility Rates



Note: All data exclude the Northern and Eastern provinces.

Table 4.3 reveals that after a temporary increase in fertility between 1974 and 1981, the TFR declined steadily from 3.7 in 1981 to 1.9 during 1995-2000. Another increase is clearly seen between 1995-2000 and 2003-06, when the TFR increased by 21 percent from 1.9 to 2.3. During this period, ASFRs have increased for all age groups except 45-49. Furthermore, ASFRs for ages 25-34 are even higher than the corresponding values for the period 1988-1993. Identifying the exact reasons for this recent fertility increase needs further analysis and is beyond the scope of this report.

Fertility trends can also be investigated using retrospective age-specific fertility rates calculated from a single survey. Table 4.4 uses information from the retrospective birth histories obtained from DHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. The rates for older age groups become progressively more truncated for periods more distant from the survey date because birth histories were not collected for women over age 50. For example, rates cannot be calculated for women age 45-49 for the period 5-9 years or more prior to the survey, because women in that age group would have been 50 years or older at the time of the survey. Caution should be exercised when interpreting data because of possible recall lapses resulting in omission or incorrect dating of events, especially by older women and for distant time periods.

Table 4.4 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Sri Lanka 2006-07

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	28	33	41	37
20-24	102	100	118	129
25-29	142	133	140	147
30-34	117	106	103	[114]
35-39	57	47	[59]	
40-44	13	[19]		
45-49	[1]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

Table 4.4 reveals that fertility has generally declined during the 20 years preceding the survey. For example, summing rates for women age 15-29, fertility declined by 13 percent, from 1.6 births per woman during the period 15-19 years before the survey to 1.4 births per woman during the period 0-4 years before the survey. The largest decline in fertility (11 percent) took place between 10-14 and 5-9 years before the survey, versus only a 5 percent decline in fertility between 15-19 and 10-14 years before the survey. In contrast, Table 4.4 indicates that fertility has increased between 5-9 and 0-4 years before the survey. For example, among women 15-39 years of age, fertility has increased from 2.1 births per woman 5-9 years before the survey to 2.2 births per woman during the period 0-4 years before the survey. This finding of a recent increase in fertility confirms the trend shown from previous surveys as discussed earlier in this section, although the magnitude of the increase is lower.

4.5 CHILDREN EVER BORN AND LIVING

As explained above, the number of children ever born is an indicator of cumulative fertility, that is, the accumulation of births to women over their entire reproductive period. Such data therefore have limited reference to current fertility levels, particularly when a country has experienced a decline in fertility. However, the information on children ever born is useful in examining the variation across age groups to understand the momentum of childbearing and for observing the level of primary infertility. Table 4.5 presents the distribution of all women and currently married women by the number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born and mean number of living children.

The data show that early childbearing is rare in Sri Lanka; less than 5 percent of girls age 15-19 have given birth. Even among women age 20-24, almost 70 percent are childless. A relatively high 10 percent of all women in Sri Lanka remain childless at the end of the childbearing period.

Table 4.5 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, mean number of children ever born and mean number of living children, according to age group, Sri Lanka 2006-07

Age	Number of children ever born							Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6+				
ALL WOMEN											
15-19	95.7	4.1	0.2	0.0	0.0	0.0	0.0	100.0	3,486	0.05	0.04
20-24	69.7	23.2	6.6	0.4	0.2	0.0	0.0	100.0	3,162	0.38	0.38
25-29	36.8	31.4	23.8	6.6	1.1	0.2	0.1	100.0	3,255	1.05	1.03
30-34	17.7	22.9	36.3	17.6	4.1	1.1	0.3	100.0	2,963	1.72	1.68
35-39	10.2	14.7	37.4	24.3	9.2	2.8	1.3	100.0	2,914	2.22	2.16
40-44	9.5	10.9	33.0	27.2	12.1	3.8	3.5	100.0	2,879	2.49	2.40
45-49	10.2	10.2	27.2	27.4	14.6	6.4	4.0	100.0	2,676	2.64	2.52
Total	38.0	16.8	22.7	14.0	5.5	1.9	1.2	100.0	21,336	1.43	1.39
CURRENTLY MARRIED WOMEN											
15-19	52.9	44.5	2.4	0.2	0.0	0.0	0.0	100.0	314	0.50	0.48
20-24	29.9	53.6	15.3	0.9	0.3	0.0	0.0	100.0	1,332	0.88	0.87
25-29	14.5	42.3	32.4	8.8	1.5	0.3	0.1	100.0	2,356	1.42	1.39
30-34	7.6	25.3	41.1	19.7	4.7	1.3	0.3	100.0	2,549	1.94	1.90
35-39	3.9	15.4	40.4	26.3	9.5	3.1	1.4	100.0	2,589	2.38	2.32
40-44	3.5	10.7	35.3	30.0	12.5	4.2	3.8	100.0	2,456	2.67	2.58
45-49	4.6	9.7	30.1	29.6	15.3	6.8	4.0	100.0	2,152	2.81	2.68
Total	10.1	24.5	33.3	20.2	7.6	2.7	1.6	100.0	13,748	2.06	2.00

The mean number of children ever born gradually increases with the age of the women, reflecting the family building process. Women in their late 20s have given birth to more than one child on average, while women in their late 30s have had more than two births and those age 45-49 have borne an average of 2.6 children each.

Table 4.5 suggests that mortality of children is very low, since the mean number of children living is only very slightly lower than the mean number ever born.

Figures for currently married women are similar to those for all women, except that young married women are much more likely than all young women to have had at least one child. This difference in the tempo of childbearing can be explained by the presence of many young and unmarried women in the all women category, who are presumed to be childless.

Voluntary childlessness is rare in Sri Lanka, and currently married women in their late forties with no births are likely to be those who are unable to bear children. The level of childlessness among married women age 45-49 can therefore be used as an indicator of the level of primary infertility. Table 4.5 suggests that the primary infertility among currently married women age 45-49 is about 5 percent. The corresponding values from the 1993 and 2000 DHS surveys are 3 percent each (DCS, 1995; DCS, 2002).

A comparison of the mean number of children ever born from the 2006-07 SLDHS with previous surveys is presented in Table 4.6. The comparison does not highlight the recent changes in fertility, but rather is an indication of the cumulative changes in fertility over the two decades preceding 2006. The mean number of children ever born has declined from 3.0 in 1987 to 2.0 in 2006-07. The rate of decline, however, has slowed between 2000 and 2006-07, with no decline at age group 15-19. In general, the decline is greater for age groups above 30 years.

Table 4.6 Trends in mean number of children ever born

Mean number of children ever born for currently married women by age group, selected sources, Sri Lanka 1987-2006

Age group	DHS 1987[1]	DHS 1993[1]	DHS 2000[1]	DHS 2006-07[1]
15-19	0.6	0.5	0.5	0.5
20-24	1.3	1.1	1.0	0.9
25-29	2.1	1.8	1.5	1.4
30-34	2.8	2.4	2.0	1.9
35-39	3.4	2.9	2.5	2.3
40-44	4.4	3.3	2.8	2.6
45-49	5.1	4.0	3.2	2.8
Total	3.0	2.6	2.2	2.0

Sources: DCS and IRD, 1988, Table 3.5; DCS, 2002, Table 4.4; special tabulation for 2006-07

[1] Excludes Northern and Eastern provinces

4.6 BIRTH INTERVALS

A birth interval is defined as the length of time between two successive live births. The study of birth intervals provides insights into birth spacing patterns as well as maternal and child health. Women who have births in rapid succession may complete their childbearing years with more children than those who space births further apart. Short birth intervals are also associated with an increased risk of death for mother and child. Studies have shown that children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and dying at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Table 4.7 presents the distribution of second- and higher-order births in the five years preceding the survey by the number of months since the preceding birth, according to background characteristics. The table also presents the median number of months since the preceding birth.

As shown in Table 4.7, the median birth interval is an exceptionally long 52 months—more than 4 years. Nearly three-quarters of non-first births occur three or more years after the previous birth, while one in six births takes place 24-35 months after the previous birth. Only one in ten children is born after a very short birth interval of less than 24 months.

There is evidence that Sri Lankan women are increasingly opting for longer spacing between births. The median birth interval has increased precipitously—from 37 months for the five years preceding the 1993 DHS to 43 months for a similar period prior to the 2000 DHS, to 52 months in the 2006-07 DHS data (DCS, 2002, Table 4.8).

The median birth interval increases substantially with the age of the mother, from 45 months in the 20-29 age group to 66 months in the 40-49 age group. Sex of the preceding birth does not significantly affect the median birth interval.

Table 4.7 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	*	*	*	*	*	*	100.0	9	*
20-29	5.3	10.0	20.4	19.9	18.7	25.7	100.0	1,248	44.8
30-39	3.1	4.5	14.6	18.0	16.5	43.3	100.0	2,349	55.0
40-49	3.4	4.0	11.3	12.1	11.6	57.7	100.0	453	66.3
Birth order									
2-3	3.5	6.2	15.0	18.2	17.2	39.8	100.0	3,495	52.7
4-6	5.3	6.0	21.8	15.8	13.3	37.8	100.0	527	49.2
7+	(14.6)	(1.8)	(37.1)	(22.9)	(4.4)	(19.2)	100.0	37	(35.5)
Sex of preceding birth									
Male	3.5	6.4	16.5	17.6	17.0	39.2	100.0	2,073	51.9
Female	4.3	6.0	15.6	18.3	16.2	39.6	100.0	1,986	52.4
Survival of preceding birth									
Living	3.4	5.8	15.8	18.2	16.8	40.0	100.0	3,944	52.6
Dead	20.4	18.7	23.5	10.4	9.7	17.4	100.0	116	28.4
Residence									
Urban	5.4	7.2	17.8	20.3	16.2	33.1	100.0	512	47.5
Rural	3.5	5.2	14.3	17.6	17.1	42.4	100.0	3,292	54.5
Estate	6.1	17.0	35.0	17.3	10.8	13.7	100.0	256	32.3
District									
Colombo	4.9	4.4	14.2	21.6	14.6	40.3	100.0	458	51.6
Gampaha	5.1	5.0	16.6	20.7	15.5	37.1	100.0	443	50.0
Kalutara	3.5	7.6	13.3	18.0	19.6	38.0	100.0	237	52.2
Kandy	1.2	5.7	19.7	17.9	18.4	37.0	100.0	294	51.2
Matale	1.5	8.4	12.5	15.6	9.6	52.4	100.0	70	61.7
Nuwara Eliya	3.6	13.5	27.7	17.1	15.4	22.6	100.0	153	38.0
Galle	4.5	4.6	23.1	18.8	14.4	34.5	100.0	225	46.9
Matara	6.7	3.1	15.5	15.8	16.6	42.4	100.0	160	56.5
Hambantota	2.9	9.8	13.3	16.3	12.7	45.1	100.0	140	55.0
Batticaloa	3.6	5.4	14.6	24.5	17.3	34.6	100.0	164	49.0
Ampara	11.5	9.0	15.6	14.6	14.8	34.6	100.0	176	47.3
Trincomalee	2.4	13.1	15.1	17.2	16.7	35.5	100.0	112	49.9
Kurunegala	2.1	3.9	11.7	15.5	15.6	51.2	100.0	298	61.2
Puttalam	4.8	8.5	15.1	14.9	21.4	35.3	100.0	177	53.3
Anuradhapura	4.1	4.4	12.5	13.5	17.3	48.2	100.0	183	59.2
Polonnaruwa	0.8	2.6	5.4	13.6	25.5	52.0	100.0	89	62.6
Badulla	4.0	7.0	23.8	20.0	14.9	30.3	100.0	208	45.5
Moneragala	1.8	1.6	15.7	14.6	14.7	51.7	100.0	106	60.6
Ratnapura	1.8	8.8	15.3	15.3	20.3	38.5	100.0	215	52.4
Kegalle	1.7	3.6	14.0	19.7	18.6	42.4	100.0	153	53.4
Education									
No education	5.4	8.6	22.5	14.4	16.3	32.8	100.0	123	47.4
Primary	5.0	7.1	21.6	14.7	13.3	38.3	100.0	540	48.7
Secondary	3.4	5.3	14.3	17.0	17.1	42.8	100.0	2,133	55.1
Passed G.C.E. (O/L)	2.2	7.6	11.2	22.5	15.7	40.8	100.0	425	53.5
Higher	4.9	6.6	18.4	20.6	17.9	31.6	100.0	838	47.7
Wealth quintile									
Lowest	3.7	8.6	20.9	14.8	14.4	37.7	100.0	944	49.8
Second	3.9	6.6	15.4	17.1	17.7	39.3	100.0	896	53.0
Middle	2.6	4.7	10.9	18.2	17.0	46.5	100.0	731	57.7
Fourth	4.3	4.7	14.2	19.9	17.8	39.1	100.0	747	52.3
Highest	4.8	5.4	17.7	20.7	16.5	35.0	100.0	742	48.8
Total	3.9	6.2	16.1	17.9	16.6	39.4	100.0	4,060	52.2

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25-49 unweighted births; an asterisk represents a figure based on fewer than 25 unweighted births that has been suppressed.

The length of the birth interval is very strongly associated with the survival status of the preceding birth. The median birth interval is 24 months shorter for children whose previous sibling died (28 months) than for children whose previous sibling is alive (53 months). The percentage of births occurring less than 18 months after a previous birth is six times higher for children whose prior sibling died (20 percent) than for children whose prior sibling survived (3 percent). The shorter intervals for the former group are partly due to a shortened period of breastfeeding for the preceding child, leading to an earlier return of ovulation and hence an increased chance of pregnancy. Minimal use of contraception, presumably because of a desire to replace the dead child as soon as possible, could also be another potential factor responsible for the shorter birth interval.

Looking at place of residence, the median birth interval is shortest for women living in estate areas. The value for urban areas is also below that for the national level, with the highest value for rural births. Among districts, Polonnaruwa, Matale, Kurunegala, and Moneragala have very long median birth intervals of more than five years. Nuwara Eliya has the lowest median value of 38 months. The median birth interval increases with the level of education up to the secondary level, after which there is a decline for mothers with higher education. A similar pattern is seen for household economic status. The median birth interval increases from 50 months for births to women in the lowest wealth quintile to 58 months for the middle wealth quintile, with a decrease thereafter.

4.7 AGE AT FIRST BIRTH

The onset of childbearing has important demographic and health consequences. Early initiation into childbearing exposes women to a longer childbearing period and a subsequent increase in fertility. Available literature shows that the postponement of first births, reflecting an increase in the age at marriage, has contributed greatly to overall fertility declines in many countries. Furthermore, bearing children at an early age entails significant risks to the health of both the mother and the child.

Table 4.8 shows the percentage of women who have given birth by specific ages, according to age at the time of the survey.[2] Overall, the median age at first birth is 25 years for the 25-49 age group. When the distribution by five-year age groups is examined, a pattern of slightly higher median ages at first birth for younger women relative to older women having is apparent, although most values are clustered around 25 years.

Table 4.8 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Sri Lanka 2006-07

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	0.1	na	na	na	na	95.7	3,486	a
20-24	0.4	4.3	13.4	na	na	69.7	3,162	a
25-29	0.1	5.9	15.5	28.3	48.8	36.8	3,255	a
30-34	0.3	5.2	15.8	28.2	47.8	17.7	2,963	25.4
35-39	0.2	6.2	15.7	28.2	48.4	10.2	2,914	25.3
40-44	0.5	5.9	17.8	31.7	50.4	9.5	2,879	24.9
45-49	0.8	5.8	17.6	34.1	52.5	10.2	2,676	24.6
20-49	0.4	5.5	15.9	na	na	26.7	17,850	a
25-49	0.4	5.8	16.4	30.0	49.5	17.5	14,687	25.1

na = Not applicable
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

[2] The data are based on all women, including those who have never married (see footnote 1).

This slight increase in age at first birth is reflected in the low proportions of women in the age range 25-39 who had their first birth before age 22 (28 percent), compared with the 45-49 age group (34 percent). Comparison with data from previous surveys shows an erratic pattern; the median age at first birth for women 25-49 shows an increase from 24.0 in 1987 to 25.2 in 1993, followed by a decline to 23.2 in 2000 and an increase to 25.1 in 2006-07 (DCS, 2002, Table 4.10).

Table 4.9 summarizes the median age at first birth for different age groups by background characteristics of respondents. For women age 25-49, the median is higher in rural areas than estate areas. It is highest in Matale, Hambantota, Kurunegala, and Ratnapura districts. Women with secondary education start childbearing later than those with primary or no education. Median age at first birth is a little more than one year higher for women in the middle wealth quintile compared with those in the lowest wealth quintile.

Table 4.9 Median age at first birth

Median age at first birth among women age 25-49 years, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
Residence						
Urban	a	26.6	26.4	26.9	26.4	a
Rural	a	25.2	25.2	24.8	24.2	24.9
Estate	24.4	23.9	23.4	23.1	24.1	23.9
District						
Colombo	a	27.5	26.5	27.0	26.5	a
Gampaha	a	26.3	27.2	26.2	25.2	a
Kalutara	a	25.9	26.2	26.7	27.0	a
Kandy	24.4	26.2	26.1	25.1	24.8	a
Matale	a	23.9	24.0	25.1	23.9	24.6
Nuwara Eliya	24.3	25.0	23.5	23.4	23.2	23.9
Galle	a	25.6	26.7	25.6	24.8	a
Matara	a	26.3	27.8	26.0	26.0	a
Hambantota	a	25.4	23.1	24.9	24.0	24.9
Batticaloa	24.1	24.4	23.1	24.0	24.0	23.8
Ampara	23.9	23.3	23.1	22.7	21.4	22.9
Trincomalee	23.5	22.7	22.5	21.5	(21.7)	22.6
Kurunegala	a	25.6	24.6	24.4	23.3	24.6
Puttalam	23.3	22.9	24.2	22.7	22.3	23.0
Anuradhapura	22.2	23.4	23.0	21.5	22.3	22.4
Polonnaruwa	23.3	22.8	23.3	23.1	23.5	23.1
Badulla	23.7	23.7	24.2	25.2	24.0	24.1
Moneragala	24.6	24.4	24.8	21.6	22.9	23.6
Ratnapura	24.8	24.3	25.1	25.2	23.8	24.6
Kegalle	a	26.5	25.1	27.2	25.5	a
Education						
No education	22.3	21.8	21.7	22.2	22.4	22.2
Primary	21.2	22.0	22.2	22.0	21.7	21.9
Secondary	23.2	23.8	23.9	23.9	23.9	23.7
Passed G.C.E. (O/L)	a	25.4	26.1	25.9	26.1	a
Higher	a	29.0	29.2	28.8	29.0	a
Wealth quintile						
Lowest	23.1	22.8	23.1	23.6	23.7	23.3
Second	24.0	24.2	23.8	24.2	23.6	24.0
Middle	a	24.9	24.6	23.8	24.2	24.6
Fourth	a	26.3	26.7	25.9	24.2	a
Highest	a	27.8	27.7	27.4	26.7	a
Total	a	25.4	25.3	24.9	24.6	25.1

Note: Numbers in parentheses are based on 25-49 unweighted women.
a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group.

4.8 TEENAGE PREGNANCY AND MOTHERHOOD

Adolescent fertility is a major social and health concern. Teenage mothers are more likely to suffer from severe complications during pregnancy and childbirth, which can be detrimental to the health and survival of both mother and child. In addition, young women may not be sufficiently emotionally mature to bear the burden of caring for a child. Childbearing during the teenage years also frequently has adverse social consequences, particularly on female educational attainment, since women who become mothers in their teens are more likely to curtail education. Table 4.10 presents the percentage of women age 15-19 who are mothers or pregnant with their first child and the percentage who have begun childbearing by selected background characteristics.

Overall, only 6 percent of adolescent women age 15-19 are already mothers or are pregnant with their first child. The percentage of teenage women who have started childbearing increases with age, from less than 1 percent among women age 15 to 17 percent among women age 19.

Nearly 10 percent of estate adolescents have begun childbearing, compared with 6 percent of rural and urban adolescents. Sixteen percent of adolescents living in Ampara district and 14 percent of those in Trincomalee district have begun childbearing. The proportion who have begun childbearing also reaches or exceeds 10 percent in Hambantota, Moneragala, and Kalutara districts. The percentage is smallest for Galle district (3 percent), followed by Kandy and Gampaha districts (4 percent each). Among the education categories, young women with only primary schooling have the highest percentage who have begun childbearing (20 percent).

Table 4.10 Teenage pregnancy and motherhood

Percentage of all women age 15-19 who have had a live birth or who are pregnant with their first child and percentage who have begun childbearing, by background characteristics, Sri Lanka 2006-07

Background characteristic	Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.2	0.3	0.5	758
16	0.6	1.0	1.6	713
17	2.9	1.7	4.5	639
18	7.0	2.7	9.7	727
19	11.8	5.1	16.9	649
Residence				
Urban	4.6	1.7	6.4	503
Rural	4.1	2.1	6.2	2,842
Estate	7.0	2.6	9.6	151
District				
Colombo	3.1	1.7	4.8	447
Gampaha	2.7	1.6	4.3	371
Kalutara	8.8	1.2	10.0	147
Kandy	2.1	2.0	4.1	320
Matale	3.9	1.7	5.5	51
Nuwara Eliya	2.0	5.2	7.1	86
Galle	1.8	0.9	2.7	299
Matara	3.6	5.8	9.5	123
Hambantota	5.4	5.3	10.8	57
Batticaloa	4.4	2.4	6.8	158
Ampara	12.3	3.5	15.8	55
Trincomalee	10.5	3.9	14.3	77
Kurunegala	6.7	1.2	7.9	277
Puttalam	6.5	2.7	9.2	221
Anuradhapura	1.6	3.4	5.0	150
Polonnaruwa	7.9	0.0	7.9	63
Badulla	3.8	1.1	4.9	148
Moneragala	7.3	3.1	10.4	106
Ratnapura	3.9	1.3	5.2	341
Kegalle	*	*	*	25
Education				
No education	(12.9)	(0.0)	(12.9)	32
Primary	12.5	7.1	19.7	63
Secondary	5.7	2.2	7.9	2,240
Passed G.C.E. (O/L)	4.9	5.2	10.1	177
Higher	1.3	5.0	6.3	178
Wealth quintile				
Lowest	5.4	1.7	7.1	1,085
Second	3.9	2.5	6.4	856
Middle	3.5	1.5	5.0	847
Fourth	3.9	2.6	6.6	462
Highest	4.4	3.3	7.6	241
Total	4.3	2.1	6.4	3,486

Note: Because the survey was based on an ever-married sample, the number of women was increased using a factor based on all de facto women listed in the household who had never been married. The 'all women' factors were based on age in the household and background information available at the household level. Women who have never married are assumed to have never been pregnant. Numbers in parentheses are based on 25-49 unweighted women; an asterisk represents a figure based on fewer than 25 unweighted women that has been suppressed.

FAMILY PLANNING 5

U.V. Jayakody

One of the most significant positive changes in the history of empowering women that occurred in the latter half of the 20th century was opening up avenues for women to choose whether and when to have children. The "Reproductive Revolution," which was made possible by the availability of a wide range of modern contraceptive methods, was for the advantage of not only countries, but also individuals, and more precisely women. Various family planning programmes—backed by the commitment of their respective governments and adequate funding from many funding agencies—have made it possible to initiate family planning programmes.

These programs help individuals by providing reproductive health care that saves lives of mothers as well as children. Even more important, availability of effective contraception has offered women more choices and given them the chance to pursue higher studies and enter the world of work, which ultimately contributes to the social and economic development of their countries. With more and more people choosing to use family planning, fertility declines and hence population growth slows. Slowing population growth aids development of a country and also helps protect its environment.

The first family planning clinic in Sri Lanka was opened in 1937, but it had to be closed down due to the pressures of war and the difficulty of obtaining supplies. Even though the pioneers in the history of family planning in Sri Lanka, such as the Family Planning Association of Ceylon, continued their efforts, the government accepted family planning as a national policy by a cabinet decision only in 1965. In 1968, family planning became a responsibility of the government, and it was integrated with maternal and child health services.

Since the inception of the government's Family Health Bureau in 1968, various family planning activities have been introduced, and the programme became widespread in the country. Succeeding governments increased resources allocated to family planning, and steps were taken to provide family planning facilities equally to all citizens. The programme established various initiatives, such as the incentive scheme for voluntary sterilization, to create a favourable environment for new acceptors of contraceptives.

In the population policy statement of the Government of Sri Lanka in 1991, a quantitative target of reaching a total fertility rate (TFR) of 2.1 was set to be achieved by the new millennium. As a result of the commitment and dedication shown by the government as well as other non-governmental organizations—such as the Family Planning Association of Sri Lanka (FPASL), the Sri Lanka Association of Voluntary Surgical Contraceptives (SLVSC), and Community Development Services (CDS)—the TFR target was achieved. By the year 2000, the TFR of Sri Lanka had declined to 1.9, which is the lowest recorded for any country in the South Asia region (DCS, 2002), although results from the 2006-07 SLDHS show a recent upturn in fertility levels (see Chapter 4).

One of the goals of the Population and Reproductive Health Policy of Sri Lanka in 1998 was to "maintain [the] current declining trend in fertility so as to achieve a stable population by the middle of the 21st century." The general approach mentioned in the policy paper is to continue to provide information, behaviour change communication, and services through public- and private-sector sources. The policy also emphasizes improving the quality of services, and focusing on unmet need among certain population subgroups. These include plantation, estate, and factory workers; internally displaced persons; and "those in urban slums and underserved rural areas." The data in this survey can be used to gauge progress in availability, quality, and reach of reproductive health services as described in the policy.

The 2006-07 SLDHS investigated different aspects of family planning and related behaviour among respondents, who were ever-married women age 15-49. Questions were asked about their knowledge of family planning, ever use, and current use of contraceptive methods, their knowledge about the fertile period, source and cost of modern contraceptive methods, and informed choice. In addition, information about reasons for discontinuation was collected from those who have discontinued using contraception. Moreover, nonusers were asked about their reasons for nonuse and their preferred methods if they were to start using contraception. The survey also identified missed opportunities for family planning services and messages, which will be useful for policymakers and service providers. The effectiveness of family planning communication programmes is also assessed in SLDHS, as it is important to enhance awareness, knowledge, and attitudes among both women and men about the various family planning methods available in the country.

5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Although lack of knowledge about family planning methods and services contributes significantly to the inability of 120 million women in developing countries who would prefer to stop or delay childbearing to use any family planning method (Population Reference Bureau, 2000), Sri Lanka's population has had high levels of knowledge of family planning methods for decades. The contraceptive method preferred by women, men, or couples depends on individual circumstances. There is no 'best' method of contraception, and therefore availability of choices and balanced information on available methods would allow individuals and couples to make an informed choice that suits their own circumstances.

Data on contraceptive knowledge were collected from ever-married women age 15-49 in two ways. The SLDHS questionnaire included 10 modern contraceptive methods and two traditional contraceptive methods. First, respondents were asked to name any ways they know to delay or avoid pregnancy. All methods the respondent named spontaneously were recorded, and if any method other than the 12 provided in the questionnaire were mentioned by the respondent, provision was also made in the questionnaire to record such spontaneous replies. As the second step, for those methods not mentioned by the respondent, the interviewer probed their knowledge by reading out the name of the method and a brief description of the method. The respondent was treated as having contraceptive knowledge if she either named the method spontaneously or identified the method in the probing round.

Knowledge of contraceptive methods among ever-married and currently married women respondents age 15-49 years is shown in Table 5.1. According to the survey findings, knowledge of any method of family planning is almost universal in Sri Lanka. There are almost no differences between ever-married and currently married women. Almost all ever-married and currently married women know at least one method of family planning, and on average they know at least eight methods to delay or avoid getting pregnant.

Table 5.1 Knowledge of contraceptive methods

Percentage of ever-married and currently married women age 15-49 who know any contraceptive method, by specific method, Sri Lanka 2006-07

Method	Ever-married women	Currently married women
Any method	**99.6**	**99.7**
Any modern method	**99.5**	**99.6**
Female sterilization	94.5	94.5
Male sterilization	73.9	74.2
Pill	97.5	97.7
IUD	90.0	90.6
Injectables	97.2	97.5
Implants	47.7	48.8
Male condom	82.4	83.4
Female condom	16.6	16.9
Lactational amenorrhoea (LAM)	38.8	39.3
Emergency contraception	33.7	34.5
Any traditional method	**81.3**	**82.2**
Rhythm	66.7	67.7
Withdrawal	67.2	68.2
Other method	4.5	4.6
Mean number of methods known by respondents 15-49	8.1	8.2
Number of women	14,692	13,748

Figure 5.1 shows that knowledge about pills and injectables among respondents is very high; 98 percent of women have heard about those two methods. Eight out of ten respondents know about some traditional method of delaying or avoiding pregnancies. Contraceptive knowledge remains at very high levels—more than 97 percent—irrespective of women's age, residence, district, education, and wealth quintile (data not shown).

Figure 5.1 Knowledge of Contraception among Currently Married Women

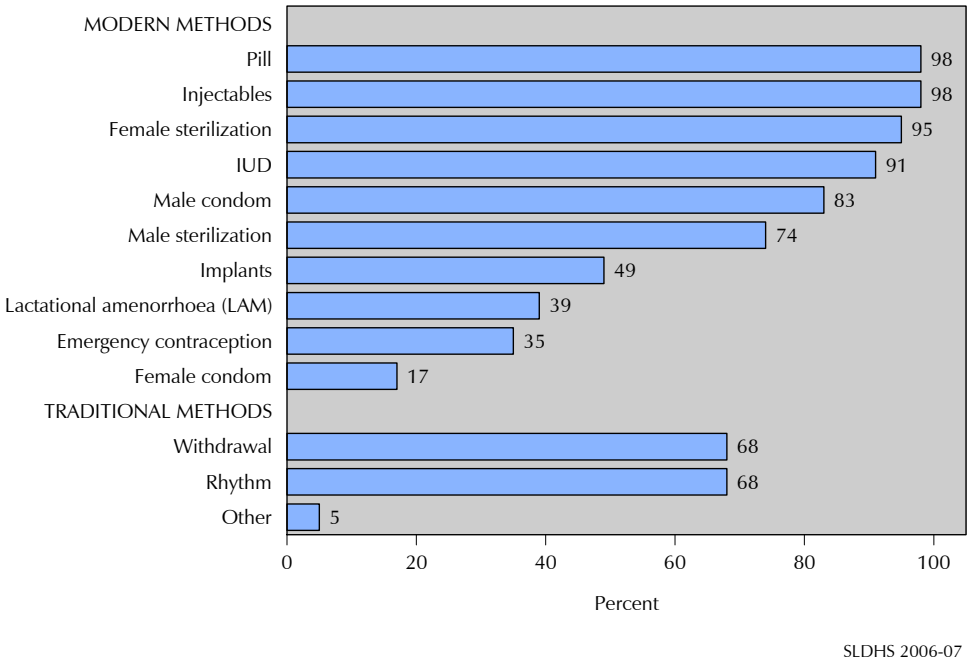


Table 5.2 shows trends in knowledge about contraceptives among currently married women since 1993.[1] Knowledge among women about all modern temporary methods has increased slightly over time.

Table 5.2 clearly shows three key changes in knowledge about contraception among currently married women. Since 1993, knowledge about male sterilization has dropped by 14 percentage points. On the other hand, knowledge of implants has increased five-fold—from about 10 percent in 1993 to over 50 percent in 2006-07. Awareness about withdrawal has also increased by 19 percentage points.

[1] Data for 2006-07 SLDHS presented in tables on trends may differ slightly from comparable numbers in the report due to the exclusion of the Eastern province, in order to enable comparisons with prior surveys.

Table 5.2 Trends in knowledge of contraceptive methods

Percentage of currently married women age 15-49 who know any contraceptive method, by specific method, Sri Lanka 1993-2006-07

Method	1993 DHS	2000 DHS	2006-07 DHS
Any method	**99.3**	**99.2**	**99.7**
Any modern method	**99.3**	**99.1**	**99.6**
Female sterilization	97.3	95.1	94.4
Male sterilization	88.6	84.4	74.9
Pill	94.5	96.9	97.8
IUD	85.7	88.1	93.4
Injectables	92.0	94.8	97.6
Implants	10.5	23.0	51.0
Male condom	78.7	77.0	85.1
Any traditional method	**72.6**	**76.4**	**84.0**
Rhythm	65.9	69.2	68.7
Withdrawal	51.3	53.6	70.9
Other method	2.1	6.4	4.9
Number of women	6,434	5,915	12,679

Note: Data for Eastern Province have been excluded from the 2006-07 DHS to be comparable with the geographic areas covered by the 1993 and 2000 DHS surveys..
Source: DCS, 2002, Table 5.1; special tabulation for 2006-07

5.2 EVER USE OF FAMILY PLANNING METHODS

Respondents who knew a specific family planning method were asked whether they had ever used that method. Ever use includes both past and current users of contraceptives. Data on ever use of family planning is useful to evaluate the effectiveness of various family planning promotional programs and can also be a benchmark in planning future family planning programmes. Table 5.3 shows the percentage of ever-married and currently married women age 15-49 who have ever used any contraceptive method.

Table 5.3 Ever use of contraception

Percentage of ever-married and currently married women age 15-49 who have ever used any contraceptive method by method, according to age, Sri Lanka 2006-07

			Modern method											Traditional method			
Age	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Emergency contraception	Any traditional method	Rhythm	Withdrawal	Folk method	Number of women
EVER-MARRIED WOMEN																	
15-19	70.4	60.4	0.0	0.0	30.1	5.7	30.8	0.3	8.5	0.3	2.6	1.7	24.9	10.6	19.8	2.0	321
20-24	79.4	70.8	0.0	0.0	32.8	10.2	46.3	0.7	13.5	0.0	1.5	2.7	32.2	16.7	23.1	4.4	1,364
25-29	86.5	79.2	2.8	0.0	36.1	14.3	55.8	0.6	18.8	0.0	2.7	2.1	35.9	22.6	24.4	4.1	2,411
30-34	89.0	81.9	8.3	0.1	38.9	16.5	55.7	0.6	21.0	0.2	4.7	2.9	44.3	30.7	29.4	5.6	2,642
35-39	88.9	78.3	19.6	0.3	37.0	15.5	47.4	0.7	17.2	0.1	4.7	2.4	45.8	32.4	29.2	3.4	2,728
40-44	86.5	75.6	29.6	1.2	31.8	13.6	35.8	0.4	15.6	0.0	4.1	1.7	47.1	34.2	29.3	1.9	2,702
45-49	81.6	65.8	32.3	3.3	21.1	9.8	21.9	0.2	9.5	0.0	2.9	1.4	46.2	32.9	29.3	1.0	2,524
Total	85.6	75.4	16.6	0.9	33.0	13.4	43.3	0.5	16.0	0.1	3.6	2.2	42.5	29.0	27.7	3.3	14,692
CURRENTLY MARRIED WOMEN																	
15-19	70.9	60.7	0.0	0.0	30.3	5.4	31.1	0.3	8.7	0.3	2.6	1.7	24.9	10.6	19.9	2.1	314
20-24	80.2	71.7	0.0	0.0	33.2	10.4	46.7	0.7	13.8	0.0	1.5	2.8	32.3	16.7	23.3	4.5	1,332
25-29	87.0	79.7	2.9	0.0	36.2	14.3	56.3	0.6	19.0	0.0	2.7	2.1	36.3	22.8	24.7	4.2	2,356
30-34	89.7	82.5	8.4	0.0	39.4	16.9	56.1	0.6	21.5	0.2	4.7	2.8	44.8	31.2	29.8	5.6	2,549
35-39	90.1	79.4	19.9	0.3	37.6	15.8	48.0	0.7	17.7	0.1	5.0	2.5	47.0	33.4	29.9	3.4	2,589
40-44	88.4	77.2	30.0	1.2	33.0	14.1	37.1	0.4	16.4	0.0	4.1	1.8	48.8	35.7	30.0	2.0	2,456
45-49	84.1	67.8	32.8	3.3	22.2	10.4	23.3	0.3	10.3	0.0	3.2	1.4	48.6	34.8	30.5	1.0	2,152
Total	86.9	76.6	16.3	0.8	33.9	13.8	44.6	0.5	16.6	0.1	3.7	2.2	43.4	29.7	28.2	3.4	13,748

LAM = Lactational amenorrhoea method

According to the 2006-07 SLDHS, 87 percent of currently married women have used some method of contraception at some point in time in their life. Over three-quarters of currently married women have ever used a modern contraceptive method, and 43 percent have used a traditional method at some time. The most common methods of family planning ever used are injectables, pill, rhythm, and withdrawal.

Table 5.4 shows the trends in ever use of different contraceptive methods for currently married women age 15-49. The percentage of ever users of traditional methods has been fluctuating around 45 percent during the 20-year period, whereas the proportion of ever users of modern contraceptives has increased dramatically by 26 percentage points.

Table 5.4 Trends in ever use by method

Percentage of currently married women age 15-49 who have ever used specific contraceptive methods, Sri Lanka 1987-2006-07

Method	1987 DHS	1993 DHS	2000 DHS	2006-07 DHS
Any method	**73.9**	**78.3**	**84.7**	**89.0**
Any modern method	**52.2**	**58.5**	**68.7**	**78.1**
Female sterilization	24.9	23.6	21.1	16.4
Male sterilization	5.7	4.0	2.4	0.9
Pill	15.8	21.2	28.4	35.5
IUD	8.9	7.9	11.1	14.7
Injectables	6.3	16.4	29.7	44.9
Implants	0.1	0.1	0.4	0.6
Male condom	9.9	10.7	14.3	17.7
Any traditional method	**45.4**	**44.9**	**48.5**	**46.0**
Rhythm	39.6	35.8	36.6	31.5
Withdrawal	17.8	23.0	26.4	30.0
Other method	0.9	1.4	5.6	3.7

Note: Data for Eastern Province have been excluded from the 2006-07 DHS to be comparable with the geographic areas covered by the 1993 and 2000 DHS surveys..
Source: DCS, 2002, Table 5.7; special tabulation for 2006-07

5.3 CURRENT USE OF CONTRACEPTIVE METHODS

The current level of contraceptive use, especially among currently married women who are presently exposed to the risk of getting pregnant, is an important indicator of the success of the family planning programme. Current users form a base for introduction of new family planning methods. The level of current use of family planning is also helpful in identifying needs for awareness programs among prospective users. In addition, this information is also useful in estimating the reduction in fertility due to the use of contraception. The contraceptive prevalence rate, which is one of the most important demographic indicators, is defined as the proportion of currently married women of reproductive age (15-49 years) who are currently using any method of contraception.

Table 5.5 shows the percent distribution of currently married women age 15-49 who are currently using specific family planning methods by age. It shows that the contraceptive prevalence rate in Sri Lanka is 68 percent. Over half of currently married women (53 percent) are using a modern method and only 16 percent use traditional methods. Among modern methods, the three most commonly used are female sterilization (16 percent), injectables (15 percent), and pills (8 percent). Among traditional methods of family planning, the most popular is rhythm with 10 percent of currently married women using it to avoid or delay getting pregnant.

Table 5.5 Current use of contraception

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to age, Sri Lanka 2006-07

			Modern method								Any traditional method	Traditional method			Not currently using	Total	Number of women
Age	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	LAM		Rhythm	Withdrawal	Other method			
15-19	53.7	44.9	0.0	0.0	12.4	5.2	23.5	0.3	3.4	0.0	8.9	4.1	4.8	0.0	46.3	100.0	314
20-24	58.6	50.2	0.0	0.0	11.2	6.5	27.1	0.7	4.5	0.1	8.4	4.0	4.3	0.1	41.4	100.0	1,332
25-29	64.2	53.4	2.9	0.0	9.5	7.7	25.9	0.4	6.9	0.2	10.7	6.1	4.5	0.1	35.8	100.0	2,356
30-34	69.8	56.6	8.4	0.0	11.4	8.4	20.1	0.5	7.7	0.1	13.3	8.1	5.1	0.0	30.2	100.0	2,549
35-39	74.4	56.0	19.9	0.2	9.3	7.7	11.7	0.3	6.6	0.2	18.4	11.8	6.5	0.1	25.6	100.0	2,589
40-44	75.5	53.3	30.0	1.0	5.2	5.9	5.9	0.1	5.2	0.0	22.2	15.4	6.7	0.0	24.5	100.0	2,456
45-49	64.3	44.1	32.8	2.9	2.1	2.1	1.7	0.0	2.4	0.0	20.2	13.3	6.9	0.0	35.7	100.0	2,152
Total	68.4	52.5	16.3	0.7	8.1	6.5	14.8	0.3	5.7	0.1	15.9	10.1	5.8	0.1	31.6	100.0	13,748

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

Injectables are a popular method of contraception among women less than 35 years of age. Use of injectables by this age group indicates that it is chosen mainly for spacing births. However, some of these women have achieved their desired family size and are using injectables to limit births until they reach the age when they are permitted to have a sterilization procedure. The data support this interpretation: there is big drop in use of injectables after age group 30-34 with a concomitant rise in use of female sterilization.

5.4 Differentials in Contraceptive Use by Background Characteristics

Table 5.6 and Figure 5.2 show current use of contraceptives by different background characteristics. Contraceptive prevalence among different subgroups shows some interesting patterns.

Contrary to what is seen in most other developing countries, contraceptive use in the rural and estate sectors (70 percent and 65 percent, respectively) in Sri Lanka is slightly higher than in the urban sector (60 percent). The estate sector has the highest prevalence of modern method use as well; 61 percent of currently married women use some kind of modern method. Over 60 percent of contraceptive use in the estate sector is accounted for by female sterilization. Female sterilization, injectables, and traditional methods are more or less equally common in urban and rural areas.

Contraceptive use patterns among currently married women age 15-49 living in the districts of Batticaloa, Trincomalee, and Ampara in the Eastern Province are noticeably different from women in other districts. Only 35 percent, 53 percent, and 56 percent, respectively, of women in these districts use any method of contraception. These are the lowest contraceptive prevalence rates among all the districts. The high use of female sterilization in the estate districts of Nuwara Eliya and Badulla reflects the effectiveness of sterilization programmes.

Another interesting finding of the 2006-07 SLDHS is the modest negative relationship between level of education and contraceptive prevalence (Figure 5.2). Usually this association is positive. The negative association is even stronger when only modern methods are considered. According to the survey findings in Table 5.6, as the respondents' level of education increases, they are less likely to use modern contraceptives— compared to their counterparts with less education— and choose traditional methods instead. More than 40 percent of women who have attained a level of education of General Certificate of Education (Ordinary Level) or higher are using traditional methods of family planning. Similarly, women from the highest wealth quintile show a greater tendency to use traditional methods of family planning than women with less affluence.[2]

[2] Education and wealth quintile are likely to be positively correlated, so these patterns are similar.

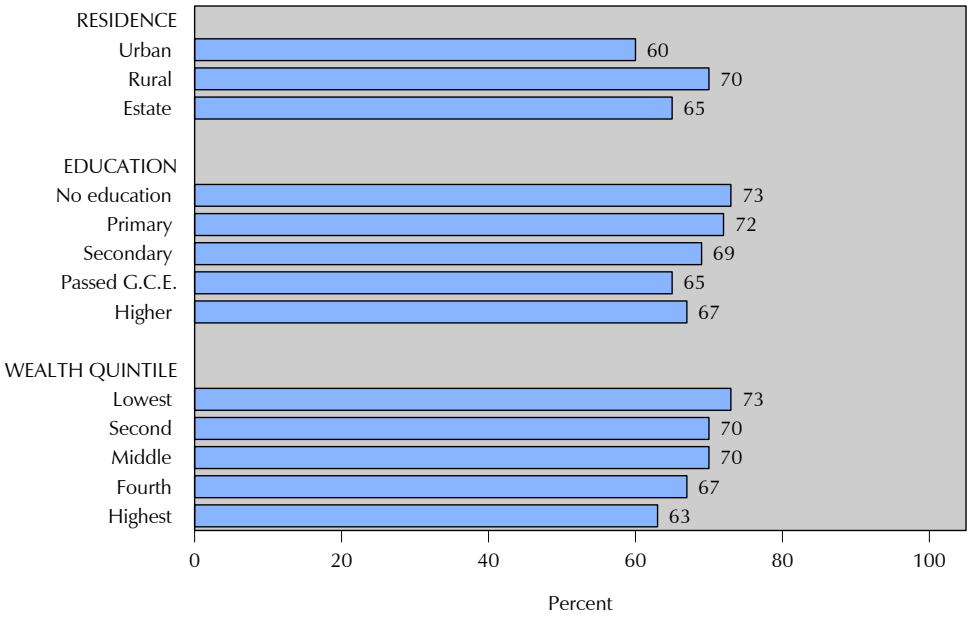
Table 5.6 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Any method	Any modern method	Modern method								Any traditional method	Traditional method			Not currently using	Total	Number of women
			Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	LAM		Rhythm	Withdrawal	Other method			
Residence																	
Urban	59.9	43.7	13.0	0.6	6.5	4.5	11.8	0.4	6.6	0.2	16.2	11.4	4.9	0.0	40.1	100.0	1,747
Rural	69.9	53.3	15.5	0.6	8.5	7.0	15.6	0.3	5.8	0.1	16.6	10.4	6.2	0.1	30.1	100.0	11,353
Estate	64.7	61.2	39.9	1.5	5.4	2.5	9.8	0.0	1.9	0.1	3.5	2.1	1.2	0.1	35.3	100.0	649
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	1,687
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	1,717
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	785
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	982
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	280
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	474
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	748
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	527
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	424
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	388
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	432
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	250
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	1,191
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	572
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	611
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	315
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	631
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	379
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	785
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	570
Education																	
No education	72.7	67.6	41.5	2.6	4.9	4.3	13.0	0.3	1.0	0.0	5.1	2.4	2.6	0.0	27.3	100.0	448
Primary	71.5	61.7	36.9	1.9	5.0	4.1	11.9	0.3	1.5	0.1	9.7	6.1	3.6	0.1	28.5	100.0	1,843
Secondary	69.0	54.9	15.2	0.5	9.3	6.8	18.2	0.4	4.3	0.1	14.2	8.2	5.9	0.0	31.0	100.0	6,754
Passed G.C.E .(O/L)	64.6	44.8	9.0	0.2	8.0	6.0	13.4	0.2	7.8	0.2	19.8	13.6	6.1	0.1	35.4	100.0	1,601
Higher	66.6	43.6	6.5	0.2	7.9	7.6	10.2	0.3	10.8	0.1	22.9	15.8	7.0	0.1	33.4	100.0	3,102
Number of living children																	
0	20.5	9.9	0.0	0.4	6.0	0.2	0.6	0.0	2.7	0.0	10.6	6.2	4.3	0.1	79.5	100.0	1,422
1-2	70.2	52.0	5.8	0.6	9.8	8.5	19.5	0.4	7.3	0.1	18.2	11.8	6.4	0.1	29.8	100.0	8,187
3-4	83.0	69.1	42.6	1.0	5.9	5.0	10.5	0.1	3.8	0.1	13.9	8.6	5.3	0.0	17.0	100.0	3,659
5+	68.8	60.7	43.8	0.7	1.7	2.1	10.4	0.9	1.0	0.1	8.1	4.7	3.4	0.0	31.2	100.0	480
Wealth quintile																	
Lowest	72.7	63.8	24.8	0.8	8.1	7.1	20.3	0.6	2.1	0.0	8.9	5.2	3.7	0.0	27.3	100.0	2,605
Second	69.6	54.9	18.1	0.9	8.7	6.1	17.6	0.2	3.1	0.2	14.6	8.9	5.6	0.1	30.4	100.0	2,724
Middle	70.0	54.5	17.6	0.5	8.0	6.7	16.0	0.2	5.4	0.2	15.5	9.5	6.0	0.0	30.0	100.0	2,746
Fourth	67.2	48.3	11.7	0.7	9.2	6.1	12.9	0.2	7.4	0.1	18.9	12.2	6.6	0.0	32.8	100.0	2,868
Highest	63.0	41.9	10.2	0.4	6.6	6.3	8.0	0.4	10.1	0.1	21.1	14.3	6.8	0.0	37.0	100.0	2,805
Total	68.4	52.5	16.3	0.7	8.1	6.5	14.8	0.3	5.7	0.1	15.9	10.1	5.8	0.1	31.6	100.0	13,748

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

Figure 5.2 Differentials in Contraceptive Use among Currently Married Women



SLDHS 2006-07

5.5 TRENDS IN CONTRACEPTIVE USE

As shown in Table 5.7, the contraceptive prevalence rate has increased from 62 to 70 percent during the 20-year period since 1987.[3] Figure 5.3 shows that use of modern methods has steadily increased, whereas users of traditional methods decreased slightly over time. Nevertheless, traditional methods remain a common choice for women. Although use of modern temporary methods has increased, Table 5.7 shows that sterilization has dropped sharply with time. Therefore the increase in the use of modern methods can be attributed to the total increase in some modern temporary methods such as pills, IUD, and injectables. Adoption of injectables continues to increase rapidly over time.

As shown in Figure 5.4, use of contraception among all age groups has increased over time. This increase is more prominent among younger than older women. Contraceptive use among the youngest age group of 15-19 has more than doubled during the 20-year period since 1987 (20 percent in 1987 and 57 percent in 2006-07).

Table 5.7 Trends in current use by method

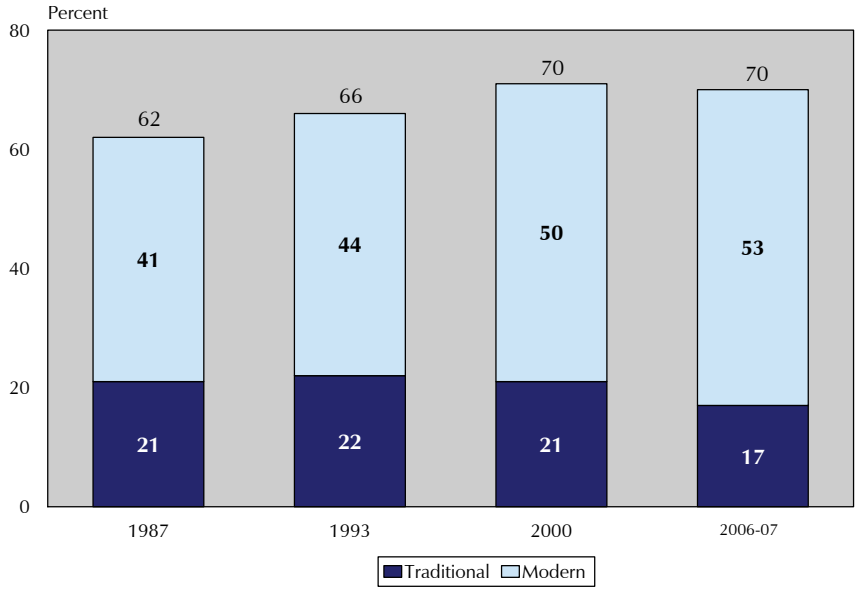
Percentage of currently married women age 15-49 who are currently using specific contraceptive methods, Sri Lanka 1987-2006-07

Method	1987 DHS	1993 DHS	2000 DHS	2006-07 DHS
Any method	**61.7**	**66.1**	**70.0**	**70.2**
Any modern method	**40.6**	**43.7**	**49.5**	**53.1**
Female sterilization	24.9	23.5	21.0	16.4
Male sterilization	4.9	3.7	2.1	0.7
Pill	4.1	5.5	6.7	8.4
IUD	2.1	3.0	5.1	6.9
Injectables	2.7	4.6	10.8	14.3
Implants	0.0	0.1	0.1	0.4
Male condom	1.9	3.3	3.7	6.0
Any traditional method	**21.1**	**22.4**	**20.5**	**17.0**
Rhythm	14.9	15.2	11.9	10.8
Withdrawal	3.4	5.0	7.1	6.1
Other method	2.8	2.2	1 .5	0.1

Note: Data for Eastern Province have been excluded from the 2006-07 DHS in order to be comparable with the geographic areas covered by the 1993 and 2000 DHS surveys.
Source: DCS, 2002, Table 5.9; special tabulation for 2006-07

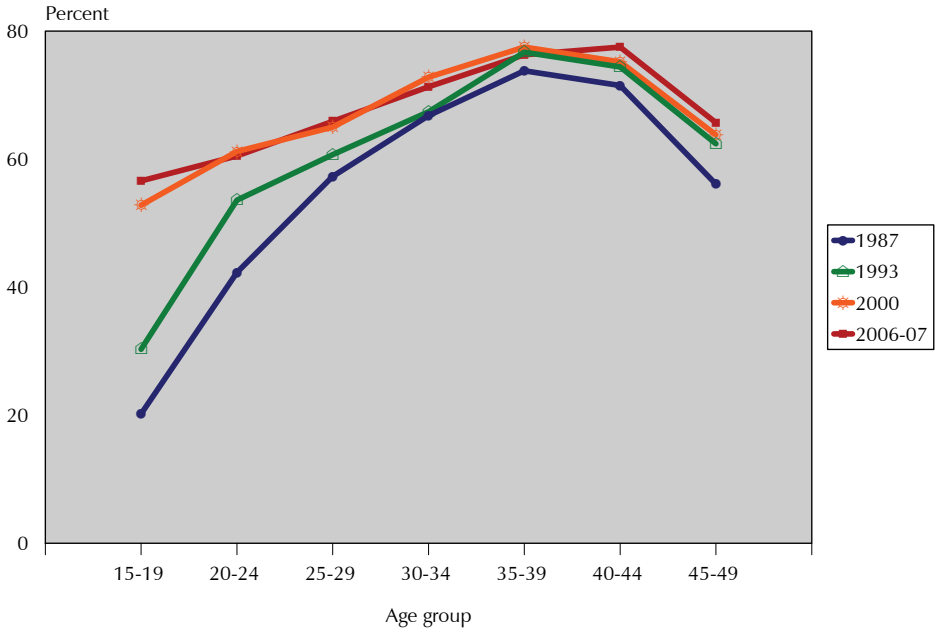
[3] When analyzing trends, data for 2006-07 exclude Eastern Province so as to be comparable with previous surveys.

Figure 5.3 Trends in Contraceptive Use among Currently Married Women, 1987 to 2006-07



Note: Excludes data from Northern and Eastern provinces

Figure 5.4 Current Use of Contraception among Currently Married Women by Age Group, 1987 to 2006-07



5.6 CONTRACEPTIVE METHOD MIX

Availability of a broad range of contraceptive methods is a key component of a successful family planning programme. Having more choices that will cater to the requirements and preferences of a wide range of individuals and couples would undoubtedly raise the overall level of contraceptive use. Heavy dependence on one or two contraceptive methods, which is usually known as a 'skewed mix of contraceptive methods,' is observed in many countries of the world. A number of reasons—such as government policies, bias towards certain methods due to familiarity, preferences of service providers, characteristics of users, and properties of the method—can cause a skewed mix of contraceptives. Therefore, understanding contraceptive method mix is useful in strengthening family planning programmes.

Table 5.8 shows how contraceptive method mix changes with the age of the user. It can be seen that traditional methods are more common among the older cohorts compared with the younger age groups. Use of modern temporary methods generally decreases with the age of the respondent, and conversely, use of permanent methods increases with age. Overall, more than 80 percent of current users up to age 25 use temporary methods.

Table 5.8 Distribution of current users by type of method

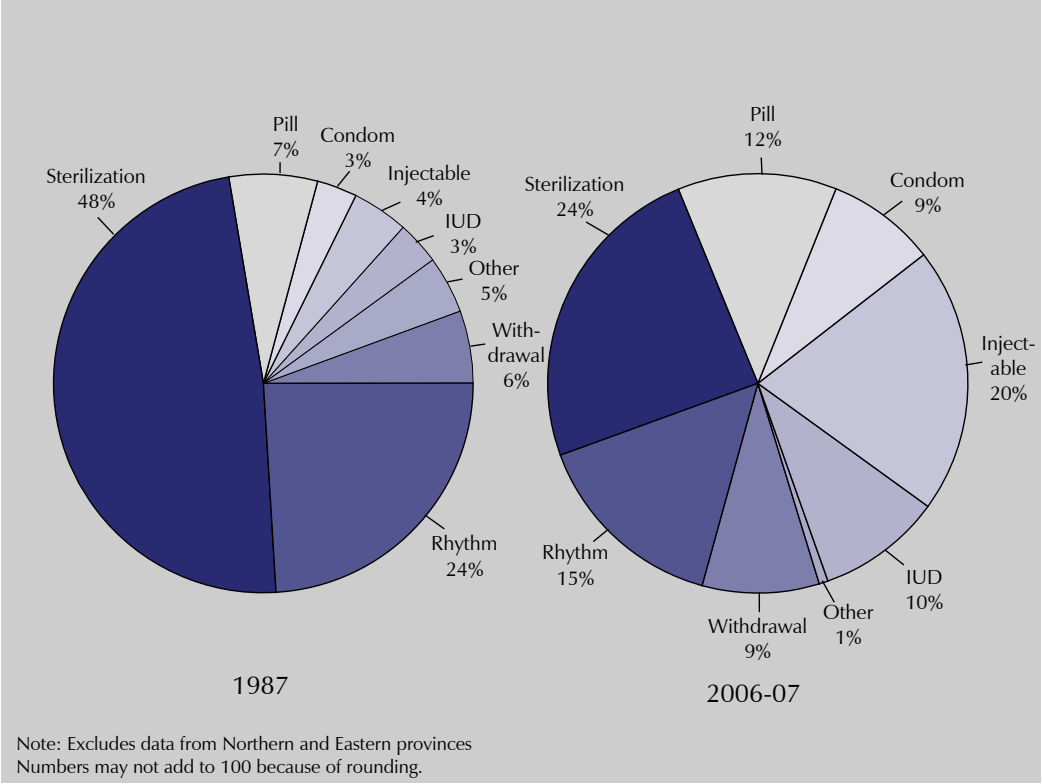
Percent distribution of currently married women age 15-49 who are currently using contraception, by broad type of method currently used, according to age, Sri Lanka 2006-07

	Type of method currently used				
	Modern				
Age	Temporary methods	Permanent methods	Traditional methods	Total	Number of users
15-19	83.6	0.0	16.5	100.0	169
20-24	85.5	0.1	14.2	100.0	781
25-29	78.8	4.5	16.6	100.0	1,513
30-34	69.1	12.0	19.0	100.0	1,779
35-39	48.2	27.1	24.6	100.0	1,926
40-44	29.5	41.2	29.4	100.0	1,854
45-49	12.9	55.6	31.5	100.0	1,384
Total	51.8	24.8	23.2	100.0	9,404

Note: Modern temporary methods include pills, IUD, injectables, condom, implants, and LAM. Permanent methods are female and male sterilization.

Figure 5.5 shows how contraceptive method mix has changed over time during the 20-year period from 1987. In 1987, Sri Lanka had a highly skewed mix of contraceptive methods; 72 percent of currently married users used either sterilization or the rhythm method. By 2006-07 a wide variety of family planning methods has become available, and the current method mix is generally more evenly distributed. The variety of methods available has indirectly contributed to the increase in the number of contraceptive users.

Figure 5.5 Trends in Contraceptive Method Mix among Currently Married Users, 1987 and 2006-07



Note: Excludes data from Northern and Eastern provinces
Numbers may not add to 100 because of rounding.

5.7 Number of Children at First Use of Contraception

Couples use family planning methods to plan the size of their family, either by spacing births or limiting the number of offspring they have. Knowing the number of living children at the time of first use of contraception by age group will give a better understanding about period and cohort changes in the reason for adoption of contraception.

Table 5.9 reveals that almost half of all ever-married women initiated use of contraception after they had their first child. About 16 percent of ever-married women started using contraception even before they had their first child. The data also show that the inclination to initiate use of contraception before having a child is much stronger among younger cohorts than it was for older women. For example, 41 percent of ever-married women age 15-19 used contraception before having any children—presumably to delay the first birth—compared with 33 percent of women now 20-24 years old. The proportion declines further with each successive cohort of women 25 years and above, ultimately falling below 10 percent for the two oldest cohorts. Between 40 and 50 percent of women 25 and above started to use family planning only after having their first child. These findings suggest a shift in women's decisions about the role of contraception in their lives.

Table 5.9 Number of children at first use of contraception

Percent distribution of ever-married women age 15-49 by number of living children at the time of first use of contraception, according to current age, Sri Lanka 2006-07

Current age	Never used	Number of living children at time of first use of contraception						Total	Number of women
		0	1	2	3	4+	Missing		
15-19	29.6	40.8	28.9	0.2	0.2	0.0	0.3	100.0	321
20-24	20.6	33.1	43.2	3.0	0.0	0.0	0.0	100.0	1,364
25-29	13.5	26.3	52.8	5.2	1.5	0.4	0.2	100.0	2,411
30-34	11.0	19.6	57.1	7.7	3.0	1.4	0.1	100.0	2,642
35-39	11.1	11.3	54.9	12.5	6.7	3.4	0.2	100.0	2,728
40-44	13.5	7.9	48.9	15.9	7.6	5.9	0.3	100.0	2,702
45-49	18.4	5.4	40.7	16.3	10.2	8.8	0.2	100.0	2,524
Total	14.4	16.3	49.8	10.6	5.2	3.5	0.2	100.0	14,692

5.8 USE OF SOCIAL MARKETING CONTRACEPTIVE BRANDS

As in most other developing countries, social marketing plays a key role in the provision of contraceptives in Sri Lanka. In addition to the pills and condoms provided by the Department of Health Services for a subsidized price, there exist a few non-governmental organizations—such as FPASL and CDS, which provide social marketing brands through a wide distribution network of retail outlets scattered around the country. They promote these brands through advertisements and promotional campaigns, training of doctors, community health workers, and chemists.

The social marketing pill brand sold in Sri Lanka is *Mithuri*, and the socially marketed condom brands are *Preethi*, *Preethi Super*, *Nite Rider*, *Sathuta*, and *Moon Beam.* Table 5.10 presents the results about use of socially marketed contraceptives.

Overall 44 percent of pill users buy the brand Mithuri. Almost 70 percent of women who use condoms reported that they use a socially marketed brand.[4] The social marketing brand of pills seems to be somewhat more popular among urban users, women with secondary or higher education, and household wealth index at the middle or higher level.

Table 5.10 Use of social marketing brand pills and condoms

Percentage of female pill and condom users age 15-49 using a social marketing brand, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage of pill users using a social marketing brand[1]	Number of women using the pill	Percentage of condom users using a social marketing brand[2]	Number of women using condoms
Residence				
Urban	53.8	99	74.9	69
Rural	42.5	829	68.1	404
Estate	(47.0)	23	76.4	7
Education				
No education	*	13	*	4
Primary	29.5	77	*	15
Secondary	43.0	527	62.6	178
Passed G.C.E (O/L)	51.0	111	76.1	73
Higher	47.6	224	71.4	210
Wealth quintile				
Lowest	39.6	158	(50.1)	28
Second	33.2	190	(66.5)	50
Middle	46.1	196	70.3	93
Fourth	47.4	239	66.5	129
Highest	51.7	168	74.2	180
Total	43.8	951	69.2	480

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports. Numbers in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Mithuri brand name.
[2] Includes Preethi, Preethi Super, Nite Rider, Sathuta, and Moon Beam.

[4] Almost 15 percent of pill users could not state the brand name they use or produce the packet to show the interviewer. A third of women using condoms did not know the brand name or show a condom package to the interviewer. These women are not included in the table.

5.9 KNOWLEDGE OF FERTILE PERIOD

Success of coitus-related family planning methods depends to a large degree on women's knowledge of reproductive physiology. Accurate knowledge of the fertile period during one's menstrual cycle is therefore of crucial importance in the successful use of not only rhythm, but also withdrawal or condoms. Therefore respondents in the 2006-07 SLDHS were asked: 'From one menstrual period to the next, are there certain days when a woman is more likely to get pregnant if she has sexual relations?' If she knew that women are more fertile during certain days, then she was asked about the exact timing of the fertile period in a woman's menstrual cycle.

Table 5.11 provides information on when women think the fertile period occurs during the menstrual cycle. Results are given for all ever-married women, as well as for users and nonusers of the rhythm method separately. The table shows that only slightly more than half of all ever-married women (55 percent) know that women are more fertile halfway between two menstrual periods. Over one-quarter of women said they didn't know of any fertile period. However, users of the rhythm method are far more knowledgeable about the fertile period than non-users. Eighty-five percent of users of the rhythm method know that women are more fertile halfway between two menstrual periods, compared to only half of non-users of rhythm. Accurate knowledge of the fertile period is also of importance for users of other coitus-related methods and for women in the reproductive age in general. Therefore, both government as well as non-government organizations should work to strengthen their education programs in order to increase awareness of reproductive physiology among all women.

Table 5.11 Knowledge of fertile period

Percent distribution of ever-married women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Sri Lanka 2006-07

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All ever-married women
Just before her menstrual period begins	0.8	1.2	1.2
During her menstrual period	0.1	0.6	0.5
Right after her menstrual period has ended	3.9	5.6	5.4
Halfway between two menstrual periods	84.6	52.1	55.2
Other	8.5	5.5	5.8
No specific time	0.0	0.2	0.2
Don't know	1.7	29.6	27.0
Missing	0.4	5.1	4.7
Total	100.0	100.0	100.0
Number of women	1,388	13,304	14,692

5.10 TIMING OF STERILIZATION

Female sterilization is the most frequently used method of family planning among women in Sri Lanka, with 16 percent of currently married women relying on sterilization to avoid childbirth. Information on age at the time of sterilization is useful for policy planners and service providers in order to make policy changes and provide a better service.

In 1988, the Sri Lankan government enforced limitations on the minimum age at which a woman can get sterilized. Before 1988, a significant proportion of women who had the sterilization operation were either under 25 years of age or had two children with the second child being very young. Since the imposition of these new criteria, a woman under age 26 can get sterilized only if she has a minimum of 3 living children and her spouse insists on a sterilization. Those who are over 26 years of age should have at least two living children, the youngest of whom should be over two years of age.

Table 5.12 shows the percent distribution of ever-married sterilized women by age at the time of sterilization and the median age at sterilization, according to the number of years since the operation. This table clearly shows that the age at sterilization is shifting towards older ages. The percent who were 25-29 at the time of the procedure has declined by half in recent years. About 40 percent of ever-married women who had the operation more than 10 years ago were 25-29 years of age, compared to only one-quarter of those who had the operation 6-9 years ago; a higher percentage of women were 30-34 when they had the operation 6-9 years ago. Of all the women who ever got sterilized, two-thirds had the operation done between ages 25-34.

Table 5.12 Timing of sterilization

Percent distribution of ever-married, sterilized women age 15-49 by age at the time of sterilization and median age at sterilization, according to the number of years since the operation, Sri Lanka 2006-07

Years since operation	Age at time of sterilization						Total	Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44	45-49			
<2	2.3	21.4	39.0	27.5	9.1	0.7	100.0	220	32.8
2-3	1.3	20.3	36.8	31.7	8.7	1.1	100.0	176	33.7
4-5	2.5	19.1	38.8	33.3	6.3	0.0	100.0	183	33.0
6-7	3.5	25.5	42.6	23.3	5.2	0.0	100.0	173	32.6
8-9	6.3	24.1	39.6	27.5	2.5	0.0	100.0	197	32.3
10+	26.7	39.7	27.5	6.1	0.0	0.0	100.0	1,294	a
Total	16.7	32.3	32.5	15.6	2.7	0.2	100.0	2,243	29.9

a = Not calculated due to censoring
[1] Median age at sterilization is calculated only for women sterilized before age 40 to avoid problems of censoring

This policy change means that women are substituting other means of contraception for sterilization to limit their family size until they reach the minimum age when the procedure is allowed. This substitution effect is likely to be the case particularly for the increase in traditional method use for women 30 and older and the constant level of injectable use up to age 35 (see Table 5.5).

5.11 SOURCE OF CONTRACEPTION

Information on where women obtain their contraceptives is useful for family planning programme managers and implementers for logistical planning. In the 2006-07 SLDHS, women who reported using a modern contraceptive method at the time of the survey were asked where they obtained the method the last time they acquired it. Since some women may not know exactly in which category the source they use falls (e.g., government hospital, private health facility, and so on), interviewers were instructed to note the full name of the source or facility. Supervisors were instructed to verify that the name and source type were consistent.

Table 5.13 shows the percent distribution of users of modern contraceptive methods by the most recent source of method. It indicates that three-quarters of women got their current method at a government facility, and one-quarter at a private facility. As would be expected, the type of source varies by method. Public sector sources predominate for surgical methods, the IUD, and—to a lesser extent—injectables. Private-sector sources are important for pill and condom users, mainly through pharmacies. Public health midwives are a frequently mentioned source for these two temporary methods, also.

Table 5.13 Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Sri Lanka 2006-07

Source	Female sterili-zation	Male sterili-zation	Pill	IUD	Injectables	Implants	Male condom	Total[1]
Public sector	**93.9**	**93.6**	**59.7**	**93.8**	**68.9**	**(92.0)**	**36.4**	**75.2**
Government hospital	85.3	76.3	1.8	43.5	12.4	(52.8)	1.9	37.2
Govt. clinic (field)	0.0	0.0	17.1	42.6	47.0	(13.7)	8.3	22.2
Family Health Bureau	7.1	16.4	0.6	4.8	1.5	(23.1)	0.4	3.7
Mobile clinic	1.2	0.2	0.2	0.2	0.7	(0.0)	0.3	0.6
Public health midwife	0.0	0.0	39.9	2.7	7.2	(2.4)	24.6	11.2
Other public	0.3	0.7	0.1	0.0	0.1	(0.0)	0.9	0.2
Private medical sector	**5.8**	**2.5**	**39.7**	**5.8**	**30.4**	**(8.0)**	**59.3**	**23.8**
Private hospital	4.1	1.7	0.5	3.8	4.5	(4.4)	0.1	3.2
Private doctor	0.4	0.0	1.7	2.0	25.2	(1.5)	0.7	7.9
Pharmacy	0.0	0.0	37.3	0.0	0.4	(0.0)	58.5	12.2
Estate hospital	1.1	0.8	0.0	0.0	0.0	(0.0)	0.0	0.3
NGO	0.1	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
Other private	0.1	0.0	0.2	0.0	0.3	(2.1)	0.0	0.2
Other source	**0.0**	**0.0**	**0.4**	**0.0**	**0.2**	**(0.0)**	**4.0**	**0.5**
Grocery	0.0	0.0	0.3	0.0	0.0	(0.0)	1.7	0.2
Friend, relative	0.0	0.0	0.0	0.0	0.1	(0.0)	0.8	0.1
Other	0.0	0.0	0.1	0.0	0.1	(0.0)	1.5	0.2
Don't know	0.2	3.4	0.0	0.0	0.0	(0.0)	0.0	0.1
Missing	0.2	0.5	0.3	0.4	0.5	(0.0)	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,243	93	1,113	887	2,041	44	782	7,203

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Total includes other modern methods but excludes lactational amenorrhoea method (LAM).

5.12 INFORMED CHOICE

Telling prospective users about the side effects and problems associated with methods and presenting them with a range of method options helps women to make an informed choice about the method they would like to use. Current users of various modern contraceptive methods who started the last episode of use within the five years preceding the survey were asked whether, at the time they were adopting the particular method, they were informed about side effects or problems that they might have with the method, what to do if they experienced side effects, and other methods that they could use.

Although almost all women who have chosen sterilization said that they had been informed that the procedure was permanent, less than half recalled being told about the other three components of informed choice, as Table 5.14 shows. It is clear that users of other clinical methods were more likely to be informed about the three points than women who chose sterilization. Approximately two-thirds of users of pills, IUD, and injectables reported that they were told about alternative methods. Temporary method users were generally informed somewhat less often about side effects, and even less frequently about actions to take if they experienced side effects.

Table 5.14 Informed choice

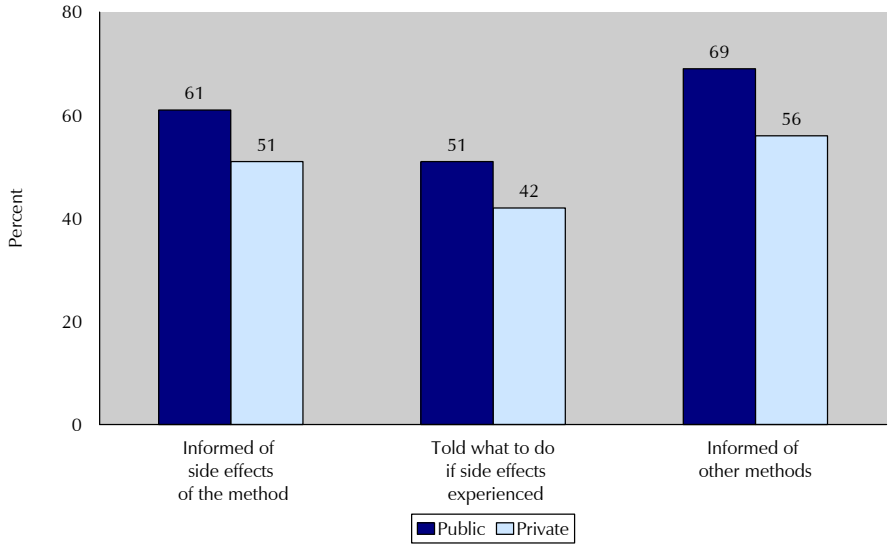
Among current users of modern methods age 15-49 who started the last episode of use within the past five years, percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and source; and among sterilized women, the percentage who were informed that the method is permanent, by initial source of method, Sri Lanka 2006-2007

	Among women who started last episode of modern contraceptive method within past five years:				Among women who were sterilized:	
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed about other methods that could be used	Number of women	Percentage who were informed that sterilization is permanent[1]	Number of women
Method						
Female sterilization	43.7	35.8	41.6	488	92.7	488
Pill	54.9	46.6	67.8	919	na	0
IUD	64.6	60.1	63.1	625	na	0
Injectables	62.5	49.3	71.7	1,831	na	0
Implants	(61.4)	(47.0)	(62.9)	36	na	0
Initial source of method[2]						
Public sector	61.3	50.9	68.8	2,955	92.4	458
Government hospital	50.2	43.1	52.9	953	91.9	428
Govt. clinic (field)	69.1	58.1	79.0	1,352	na	0
Family Health Bureau	69.3	55.8	55.6	96	(100.0)	24
Public health midwife	61.3	46.7	74.5	530	na	0
Private medical sector	51.0	42.1	55.8	931	(96.5)	30
Private hospital	51.0	43.2	46.3	125	(100.0)	24
Private doctor	57.7	44.6	61.0	470	*	4
Pharmacy	40.7	37.6	51.9	327	na	0
Total	58.7	48.7	65.5	3,913	92.7	488

Note: Table excludes users who obtained their method from friends/relatives. Methods and sources with fewer than 25 unweighted cases are not shown separately; however, those users are included in the sector rows and the total row. Figures in parentheses are based on 25-49 unweighted cases. An asterisk represents a figure based on fewer than 25 unweighted cases that has been suppressed.
na = Not applicable
[1] Among women who were sterilized in the five years preceding the survey
[2] Source at start of current episode of use

Providers in the public sector seem to give women information for an informed choice more often than private-sector medical providers. As Figure 5.6 shows, over 60 percent of women who obtained their most recent method at government facilities were informed about alternatives and side-effects, compared with slightly more than half of women who went to private-sector providers. Table 5.14 shows that government field clinics and family health bureaus do the best job of making women aware of other methods they could use.

Figure 5.6 Aspects of Informed Choice in Contraceptive Use



Note: Percentage of current users of modern methods who started last episode of use in past five years

SLDHS 2006-07

5.13 CONTRACEPTIVE DISCONTINUATION

Couples can realize their reproductive goals only when they use contraceptive methods continuously. A prominent concern for managers of family planning programmes is the discontinuation of methods. In the 2006-07 SLDHS 'calendar' section, all segments of contraceptive use between January, 2001 and the date of interview were recorded, along with reasons for any discontinuation. One-year contraceptive discontinuation rates based on the calendar data are presented in Table 5.15.

The data show that almost one-third of family planning users discontinue using the method within 12 months of adoption. Eight percent stop in order to become pregnant, and another 7 percent cease using the method due to health concerns or side effects. About 3 percent experienced a method failure. Discontinuation rates are highest for pill (43 percent), withdrawal (40 percent), and condom (35 percent), and lowest for IUD (10 percent).

Table 5.15 First-year contraceptive discontinuation rates

Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use, by reason for discontinuation and specific method, Sri Lanka 2006-07

Method	Method failure	Desire to become pregnant	Other fertility-related reasons	Side effects/ health concerns	Other method-related reasons	Other reason	Total
Pill	3.0	15.1	2.9	12.3	4.6	5.6	43.4
IUD	1.0	1.2	0.1	4.0	1.1	2.3	9.7
Injectables	0.6	3.7	2.0	13.9	2.6	4.3	27.0
Male condom	2.6	11.4	2.8	1.7	10.0	6.9	35.4
Periodic abstinence	4.5	9.4	0.6	0.2	8.0	7.9	30.5
Withdrawal	7.9	11.6	1.3	0.1	12.9	5.8	39.5
All methods	2.8	8.1	1.9	7.4	5.9	6.3	32.3

Note: Table is based on episodes of contraceptive use that began 3-59 months prior to the survey.

Table 5.16 presents the main reasons for discontinuation, regardless of duration of use, according to method. All contraceptive discontinuations occurring in the five years preceding the survey are included. The top reasons are desire to become pregnant (35 percent), and side effects and health concerns (22 percent). Women who had used pill, IUD, and injectables often gave health concerns and side effects as their main reason to stop using their method. A positive finding for programme managers is that 9 percent of discontinuations occurred in order to switch to a more effective method. This reason is frequent for women who had used condoms, lactational amenorrhoea method (LAM), periodic abstinence (rhythm), and withdrawal. Furthermore, it is a sign of the family planning programme's success that access, availability, and cost are seldom reasons to discontinue using a method.

Table 5.16 Reasons for discontinuation

Among all discontinuations of methods in the five years preceding the survey, the percent distribution by main reason for discontinuation, according to method, Sri Lanka 2006-07

Reason	Pill	IUD	Injection	Condom	LAM	Periodic abstinence	Withdrawal	Other	All methods
Became pregnant while using	7.7	4.5	2.8	7.8	3.7	15.6	18.6	13.9	8.3
Wanted to become pregnant	39.5	38.4	30.1	42.9	0.7	37.1	33.8	32.7	34.6
Husband disapproved	0.8	1.4	0.8	4.5	0.4	0.6	0.2	0.2	1.0
Side effects	7.7	5.0	11.4	0.5	1.4	0.0	0.0	0.0	5.9
Health concerns	18.7	20.6	28.7	3.8	5.4	1.1	0.6	2.6	15.8
Access/availability	0.8	0.2	1.3	1.7	0.0	0.0	0.2	0.0	0.8
Wanted a more effective method	3.3	4.4	3.8	12.6	46.7	17.5	19.9	12.0	8.9
Inconvenient to use	3.1	5.2	0.8	5.5	0.0	1.7	1.2	2.4	2.2
Infrequent sex/husband away	4.9	1.4	4.0	5.8	1.8	2.6	4.2	5.8	4.1
Cost too much	0.1	0.0	0.5	1.1	0.0	0.0	0.0	0.0	0.3
Fatalistic	0.5	0.3	0.1	0.2	0.9	0.0	0.0	0.0	0.2
Difficult to get pregnant/ menopausal	0.7	1.1	0.9	1.5	0.0	3.9	1.6	1.9	1.4
Marital dissolution/separation	0.9	1.0	1.1	1.5	0.0	0.5	1.1	0.8	1.0
Other	1.5	3.7	2.9	1.0	1.4	2.7	3.5	2.1	2.5
Don't know	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Missing	9.8	12.4	10.9	9.4	37.6	16.6	15.2	25.7	13.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	1,893	475	2,887	654	121	1,035	899	523	8,502

Note: Total includes a small number of users of male sterilization, implants, and female condom.
LAM = Lactational amenorrhoea method

5.14 FUTURE USE OF CONTRACEPTION

An important indicator of the changing demand for family planning is the extent to which nonusers of contraception intend to use family planning in the future. In the SLDHS, currently married women age 15-49 who were not using a contraceptive method were asked about their intention to use family planning in the future. The results are presented in Table 5.17.

Table 5.17 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Sri Lanka 2006-07

Intention	Number of living children[1] 0	1	2	3	4+	Total
Intends to use	40.3	57.9	50.0	42.8	28.1	48.2
Unsure	15.4	7.0	3.5	2.8	1.7	6.4
Does not intend to use	43.9	34.3	46.0	53.3	69.3	44.7
Missing	0.4	0.7	0.6	1.0	0.9	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	739	1,424	1,270	550	361	4,344

[1] Includes current pregnancy

Almost half of the current nonusers plan to use contraception sometime in the future. The proportion of women who do not intend to use family planning in the future increases for women with three or more children.

As a way to assess future demand for specific methods, currently married women who were not using contraception but intended to use in the future were asked which method they would prefer to use. The results are presented in Table 5.18. By far, the most likely method for these women is injectables (28 percent), followed by pills (16 percent), and female sterilization (15 percent). The IUD holds some interest, but less so than the methods already mentioned. Some women (13 percent) are unsure which method they would use, while others express a preference for traditional methods (11 percent).

Table 5.18 Preferred method of contraception for future use

Percent distribution of currently married women age 15-49 who are not using a contraceptive method but who intend to use in the future, by preferred method, Sri Lanka 2006-07

Method	Percent distribution
Female sterilization	14.7
Male sterilization	0.2
Pill	16.0
IUD	11.2
Injectables	27.6
Implants	0.8
Condom	5.7
Female condom	0.1
Periodic abstinence	7.6
Withdrawal	3.4
Other	0.1
Unsure	12.6
Missing	0.1
Total	100.0
Number of women	2,094

A comparison of these women to current users (see Table 5.8) suggests that the contraceptive mix of future users might be somewhat different because smaller proportions of potential future users would choose female sterilization. Instead, they might rely more on temporary modern methods (61 percent vs. 51 percent of current users). Naturally, women might actually choose a different contraceptive than the currently stated preferences. This analysis also makes sense in light of results presented earlier in Table 5.17, which shows that half of these potential users have no children or just one child. It might be expected that these women would tend to prefer temporary methods for spacing. Likewise, women with two children who intend to use family planning in the future may need to use a temporary method until they reach age 35, when they would be eligible for sterilization.

Table 5.19 Reason for not intending to use contraception in the future

Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use, Sri Lanka 2006-07

Reason	Percent distribution
Fertility-related reasons	**67.8**
Infrequent sex/no sex	21.0
Menopausal/had hysterectomy	6.6
Subfecund/infecund	30.9
Wants as many children as possible	9.3
Opposition to use	**8.1**
Respondent opposed	1.7
Husband/partner opposed	3.7
Others opposed	0.1
Religious prohibition	2.6
Lack of knowledge	**1.3**
Knows no method	1.2
Knows no source	0.1
Method-related reasons	**21.9**
Health concerns	13.1
Fear of side effects	7.4
Lack of access/too far	0.2
Inconvenient to use	0.8
Interference with body's normal process	0.4
Other	0.3
Don't know	0.5
Missing	0.1
Total	100.0
Number of women	1,941

5.15 Reasons for Not Intending to Use

As Table 5.19 shows, two-thirds of nonusers not intending to use family planning in the future have fertility-related reasons for this choice. For over 20 percent of nonusers, method-related concerns are inhibiting their adoption of contraception. These reasons are ones the programme might address through more attention to counselling, as has been suggested by the findings about informed choice (see section 5.10). Access is mentioned only rarely as a constraint to use of family planning.

5.16 Exposure to Family Planning Messages

The electronic media are widely used to inform the population about family planning issues. Information on the level of public exposure to a particular type of media allows policymakers to assess the most effective media for various target groups in the population. To gauge the effectiveness of such media on the dissemination of family planning information, respondents in the 2006-07 SLDHS were asked whether they had heard or seen a family planning message on the radio, television, or newspaper in the month preceding the interview.

Table 5.20 shows that television is the most frequently mentioned (48 percent) of the three types of media that carry messages about family planning. About 30 percent of ever-married women mentioned exposure to such information through each of the other two media—radio and newspapers/magazines. More than 40 percent of respondents did not see or hear a family planning message on any of the electronic or print media.

Table 5.20 Exposure to family planning messages

Percentage of ever-married women age 15-49 who heard or saw a family planning message on the radio or television or in a newspaper in the past few months, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Radio	Television	Newspaper/ magazine	None of the three specified media	Number of women
Age					
15-19	35.0	46.4	36.4	40.0	321
20-24	32.2	52.4	36.7	35.8	1,364
25-29	33.7	54.0	38.1	34.6	2,411
30-34	32.5	52.7	36.0	37.0	2,642
35-39	32.3	46.7	32.8	41.9	2,728
40-44	29.1	44.7	29.9	45.2	2,702
45-49	26.9	41.0	26.0	50.7	2,524
Residence					
Urban	26.0	51.7	36.2	38.9	1,893
Rural	33.1	49.3	34.0	39.7	12,095
Estate	10.6	18.3	7.9	76.1	703
District					
Colombo	22.3	54.2	41.5	34.4	1,796
Gampaha	24.3	51.6	33.7	37.7	1,839
Kalutara	44.1	52.1	42.9	44.8	837
Kandy	13.7	44.8	28.3	43.7	1,037
Matale	9.3	31.9	14.7	58.4	299
Nuwara Eliya	6.3	22.4	8.5	70.8	504
Galle	41.7	60.4	52.4	25.5	802
Matara	25.3	46.5	33.2	42.9	559
Hambantota	34.6	48.7	27.5	41.7	445
Batticaloa	36.1	30.8	16.1	51.7	434
Ampara	38.0	39.4	25.5	50.7	476
Trincomalee	63.7	60.2	37.8	20.2	266
Kurunegala	59.5	62.8	51.0	26.3	1,281
Puttalam	23.3	32.3	23.0	56.4	628
Anuradhapura	36.2	52.0	22.5	39.6	645
Polonnaruwa	46.2	58.7	30.4	31.1	335
Badulla	24.1	31.3	19.4	60.2	665
Moneragala	39.2	42.1	35.6	41.9	398
Ratnapura	33.4	50.9	35.6	38.6	840
Kegalle	20.7	42.4	18.3	51.8	605
Education					
No education	13.4	12.6	2.7	79.6	538
Primary	21.8	27.7	8.6	64.6	2,102
Secondary	30.1	48.0	29.3	41.7	7,200
Passed G.C.E. (O/L)	37.7	59.3	47.6	28.4	1,672
Higher	39.0	62.2	55.0	25.5	3,181
Wealth quintile					
Lowest	23.2	24.0	16.2	62.5	2,864
Second	27.9	40.0	25.8	46.7	2,944
Middle	33.8	54.6	32.5	37.9	2,937
Fourth	36.5	60.4	40.7	31.8	3,014
Highest	33.8	60.8	49.1	28.6	2,933
Total 15-49	31.1	48.1	33.0	41.3	14,692

Three-fourths of women in estate areas had no recent media exposure to family planning messages. Level of education and wealth index were strongly associated with exposure to family planning messages for each media form. Exposure increases dramatically with increasing education levels. Exposure to messages on TV is much greater for women in the two upper wealth quintiles (about 60 percent) than for those in the lowest quintile (24 percent).[5]

5.17 Contact of Nonusers with Family Planning Providers

Ever-married women who were not using any family planning method were asked if they had been visited by a fieldworker who talked to them about family planning in the twelve months preceding the survey. This information is especially useful for determining if nonusers of contraception are being reached by family planning programmes.

The results in Table 5.21 show that not quite a quarter of nonusers had a field worker visit and talk about family planning. A similar percentage heard about family planning when they were at a health facility. More than half of nonusers visited a health facility but reported no discussion of family planning at that time. Thus there are frequent missed opportunities for health personnel to engage nonusers in a conversation about adopting family planning. Two-thirds of women did not hear about or discuss family planning during either a home visit or a visit to a health services outlet.

The woman's age is the factor most strongly associated with having such discussions. Fieldworkers discussed family planning more often with nonusers less than 35 years of age, particularly those 20-29, than older nonusers. These women are prime candidates to adopt family planning, especially temporary methods for spacing births. Women over 30 were more likely not to have a discussion about family planning in either location than younger nonusers.

There is not much difference in family planning contacts by residence, but analysis by district reveals more variation. Districts with the lowest proportion of nonusers who were visited by a family planning fieldworker are: Puttalam (13 percent), Batticaloa (14 percent), and Colombo (16 percent). Over 30 percent of women not using family planning said a fieldworker visited and discussed family planning in Kalutara (36 percent), Anuradhapura (35 percent), and Moneragala (33 percent). Lack of discussion about family planning with either a fieldworker or a health worker in a service delivery setting occurred quite often (70 percent or more) in several districts: Colombo, Gampaha, Matale, Matara, Batticaloa, Puttalam, and Ratnapura.

No discussion of family planning with a health worker either at a facility or in a home visit occurred most often for nonusers without any formal education. The proportion decreases with each succeeding level of education. There is no association with the household wealth indicator, however.

5.18 Husband's Knowledge of Women's Contraceptive Use

Use of family planning methods is facilitated when couples discuss and agree on the issue. To assess the extent to which women use contraception without telling their partners, the survey asked married women whether their husbands knew that they were using a method of family planning.

The analysis found that hardly any women use family planning without their husband's knowledge. For all categories of the background variables, 98 percent or more of women report that their husbands are aware of their contraceptive use (data not shown).

[5] It should be mentioned that owning a TV and radio are two component indicators of the wealth index, which has an effect on this finding.

Table 5.21 Contact of nonusers with family planning providers

Among ever-married women age 15-49 who are not using contraception, the percentage who during the past 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who neither discussed family planning with a fieldworker nor at a health facility, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who neither discussed family planning with fieldworker nor at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	31.7	30.4	47.2	50.4	152
20-24	42.1	34.6	46.3	46.9	584
25-29	37.4	35.4	47.6	48.8	900
30-34	34.7	27.5	57.2	55.1	862
35-39	23.4	23.3	52.1	66.6	802
40-44	10.8	12.2	55.6	81.7	847
45-49	4.1	4.6	61.4	93.0	1,141
Residence					
Urban	18.9	17.3	54.4	73.3	847
Rural	24.9	22.6	54.7	65.7	4,157
Estate	20.5	21.5	41.7	70.8	284
District					
Colombo	16.2	13.1	62.2	76.5	696
Gampaha	22.5	17.6	69.7	70.3	683
Kalutara	35.8	15.8	56.3	62.5	289
Kandy	23.9	22.0	47.2	65.8	359
Matale	20.5	17.7	60.8	71.7	101
Nuwara Eliya	29.2	28.9	48.2	58.2	175
Galle	26.9	34.0	54.8	58.8	251
Matara	21.4	13.9	59.0	70.6	196
Hambantota	29.4	39.3	40.2	54.9	151
Batticaloa	13.9	23.1	40.9	71.7	300
Ampara	21.7	19.0	51.6	69.6	235
Trincomalee	20.2	23.5	20.8	69.1	134
Kurunegala	28.3	19.0	63.0	65.8	381
Puttalam	12.9	16.9	56.4	77.8	251
Anuradhapura	34.7	34.2	51.1	53.2	193
Polonnaruwa	30.5	30.2	43.5	55.8	89
Badulla	30.0	22.7	52.7	63.0	208
Moneragala	33.0	36.8	47.8	53.5	129
Ratnapura	20.2	23.0	44.1	70.2	264
Kegalle	30.2	30.8	35.8	61.4	201
Education					
No education	9.8	13.0	44.1	82.4	212
Primary	12.9	15.9	50.4	78.6	784
Secondary	27.1	23.7	53.6	63.5	2,538
Passed G.C.E (O/L)	24.6	20.1	58.2	67.1	637
Higher	25.9	23.7	56.7	64.6	1,116
Wealth quintile					
Lowest	21.6	21.4	49.7	69.0	972
Second	26.0	22.9	51.2	65.3	1,048
Middle	25.3	24.1	51.9	65.4	1,015
Fourth	24.2	21.2	55.8	66.9	1,087
Highest	21.6	19.1	60.0	69.1	1,166
Total	23.7	21.7	53.9	67.2	5,287

OTHER PROXIMATE DETERMINANTS OF FERTILITY 6

I.R. Bandara

This chapter addresses the principal factors—other than contraception—that influence fertility. Marriage is among the most important of these proximate determinants because it is a primary indicator of women's exposure to the risk of pregnancy. Besides marriage, this chapter explores other factors that influence fertility: sexual activity, postpartum amenorrhoea, postpartum abstinence, and the onset of menopause. Postpartum amenorrhoea and postpartum abstinence determine the length of time a woman is insusceptible to pregnancy after childbirth, which affects the length of the birth interval, and thus fertility levels. Direct measures of the beginning of exposure to pregnancy and the level of exposure are also measured in this chapter.

6.1 CURRENT MARITAL STATUS

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and therefore is important for understanding fertility dynamics. Populations in which age at first marriage is low tend to have early childbearing and relatively high fertility. In this section, age at marriage, current marital status, and dissolution of marriage are analyzed to study nuptial patterns among Sri Lankan women. It is important to mention here that marriage is very regulated by customs and laws that vary widely among ethnic groups in Sri Lanka. There are two main ethnic groups living in Sri Lanka, namely Sinhalese and Tamil, and four main religions: Buddhism, Hinduism, Islam, and Christianity. In Sri Lanka, the term marriage essentially refers to monogamous unions between one man and one woman. Even though polygamy is permitted among Muslims, it is rarely practiced in Sri Lanka. However, customs and traditions can vary with time. For example, the traditional ban against pre-marital sexual activity may be eroding, given that the age at marriage is quite high in Sri Lanka and the society has been severely disturbed by civil war for the past 25 years.

Table 6.1 presents the percent distribution of all women by current marital status, according to age. The term 'married' refers to legal or formal marriage, while 'living together' designates an informal union in which a man and woman live together, even if a formal civil or religious ceremony has not occurred. In later tables that do not list 'living together' as a separate category, these women are included in the 'currently married' group. Respondents who are currently married, widowed, divorced, or separated are referred to as 'ever married.'

Table 6.1 Current marital status

Percent distribution of all women age 15-49 by current marital status, according to age, Sri Lanka 2006-07

	Marital status								
Age	Never married	Married	Living together	Divorced	Separated	Widowed	Total	Percentage of respondents currently in union	Number of women
15-19	90.8	8.5	0.5	0.0	0.2	0.0	100.0	9.0	3,486
20-24	56.9	41.7	0.4	0.1	0.6	0.3	100.0	42.1	3,162
25-29	25.9	72.0	0.3	0.3	0.9	0.5	100.0	72.4	3,255
30-34	10.8	85.5	0.5	0.5	1.7	1.0	100.0	86.0	2,963
35-39	6.4	87.8	1.1	0.6	1.3	2.8	100.0	88.9	2,914
40-44	6.2	84.3	0.9	0.8	2.5	5.2	100.0	85.3	2,879
45-49	5.7	78.8	1.6	1.1	3.3	9.5	100.0	80.4	2,676
Total 15-49	31.1	63.7	0.7	0.5	1.4	2.5	100.0	64.4	21,336

As shown in Table 6.1, almost two-thirds (65 percent) of all women in the 15-49 age group are currently in union, while 31 percent have never married and 4 percent are either widowed, divorced, or separated. The proportion currently married reaches its maximum value (89 percent) at age group 35-39. The data also show that 91 percent of women age 15-19 have never married, a percentage that decreases with increasing age of women. Nevertheless, a relatively high 6 percent of women age 45-49 have never married.

Once marriages are entered into they remain stable. Divorce and separation are socially unacceptable in Sri Lanka, and hence are uncommon (2 percent). The proportion of women who are divorced, separated, and widowed increases steadily with age, but remains low even among older women.

Table 6.2 shows trends in the proportion of women who have ever married by age group from various sources. Some caution is advised in interpreting trends since the some of the data sources reflect the entire country, while most of the surveys omit the Northern and Eastern provinces. To be comparable to the recent surveys, the data from the 2006-07 DHS were re-tabulated to omit Eastern provinces as well, since the survey did not cover the Northern province.

Table 6.2 Proportion of ever-married women

Percentage of all women who have ever married according to age and singulate mean age at marriage (SMAM) from various sources, 1963 to 2006-07

Current age	Census 1963	Census 1971	WFS 1975	Census 1981	DHS 1987[1]	DHS 1993[1]	DHS 2000[1]	DHS 2006-07[1]
15-19	14.8	10.6	6.8	9.9	7.3	7.1	8.6	9.6
20-24	57.6	46.8	39.4	44.7	42.9	38.8	37.1	43.1
25-29	81.0	75.4	68.1	69.6	70.0	66.3	66.7	74.1
30-34	88.6	89.1	86.3	84.2	85.8	82.3	84.2	89.2
35-39	89.8	94.2	94.2	91.1	90.9	88.9	89.3	93.6
40-44	86.1	95.3	95.4	94.1	93.8	90.8	94.2	93.8
45-49	81.6	95.9	97.9	95.5	96.5	94.8	93.5	94.3
SMAM	22.1	23.5	25.1	24.4	24.8	25.5	24.6	23.5

WFS = World Fertility Survey; SMAM= singulate mean age at marriage
Sources: DCS, 1978, Table 4.1; DCS, 2002, Table 6.3; special tabulation for 2006-07
[1] Excluding Northern and Eastern Provinces

Among those under age 30, the proportions who ever married generally decreased from 1963 to 2000, albeit with numerous fluctuations. Among those over age 30, the proportions who ever married generally increased from 1963 to 1971, after which they either remain stable or fluctuate up and down, falling in 1993 and rising in 2000. There has been an increase in the proportions ever married between 2000 and 2006-07 for every age group except 40-44. The increase is particularly steep for age 25-29 (from 67 to 74 percent of women).

Table 6.2 also shows the singulate mean age at marriage, which is calculated from the proportions who have never married by age group. Over time, the mean age at marriage tends to fluctuate around 24 or 25 years, rising then falling and again rising and then falling. The estimate from the 2006-07 SLDHS is 24 years, slightly lower than the 25 years estimated from the 2000 SLDHS.

6.2 AGE AT FIRST MARRIAGE

In most Asian societies, marriage defines the onset of the socially acceptable time for childbearing. However, age at marriage varies across social classes and ethnic groups, from poorest to richest and from lowest to highest education levels. Women in some groups marry earlier than those in other groups. Women who marry early will have, on average, a longer period of exposure to pregnancy, often leading to a higher number of children ever born.

Table 6.3 shows the percentage of women who were first married by specific ages, and the median age at first marriage, according to current age. The data show that only slightly over one-quarter of women (27 percent) marry before age 20 and 14 percent marry before reaching age 18, the legal age of marriage in Sri Lanka for women.

The median age at marriage (the age by which half of women have married) is 23.3. Looking across age groups, there is little evidence of a trend over time in the age at which women marry; the median age at marriage is relatively stable around 23. Nevertheless, the proportions of women marrying by exact ages 15, 18, 20, and 22 have declined slightly over time, as shown by comparing women in the youngest (25-29) and oldest (45-49) cohorts.

Table 6.3 Age at first marriage

Percentage of all women age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Sri Lanka 2006-07

	Percentage first married by exact age:					Percentage never		Median age at first
Current age	15	18	20	22	25	married	Number	marriage
15-19	1.2	na	na	na	na	90.8	3,486	a
20-24	1.7	11.8	24.6	na	na	56.9	3,162	a
25-29	1.6	12.5	26.5	42.0	61.7	25.9	3,255	23.2
30-34	1.3	13.0	25.4	38.8	60.0	10.8	2,963	23.5
35-39	1.8	13.3	26.0	40.1	59.1	6.4	2,914	23.6
40-44	1.6	15.9	29.0	42.1	60.0	6.2	2,879	23.3
45-49	2.5	14.7	29.3	44.2	61.8	5.7	2,676	23.0
20-49	1.7	13.5	26.7	na	na	19.5	17,850	a
25-49	1.7	13.8	27.2	41.4	60.5	11.4	14,687	23.3

Note: The age at first marriage is defined as the age at which the respondent began living with her first husband
na = Not applicable due to censoring
a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

Table 6.4 further examines the median age at first marriage among women age 25-49 by five-year age groups by background characteristics. As mentioned above, the median age at first marriage among women age 25-49 is 23.3 years, a figure that is almost the same for all five-year age groups. However, urban women tend to marry almost one year later than rural women and two years later than estate women. For each age group, estate women marry earlier than women in urban and rural sectors, indicating that they are more exposed to the risk of childbearing than women in other sectors.

The variation in median age at first marriage by district ranges from a high of 24.8 years for women 25-49 in Colombo district to 20.4 years in Anuradhapura district (Figure 6.1). Median age at first marriage increases with increasing level of education and household economic status. For example, among women age 25-49, the median age at first marriage is 20.4 years for those with no education and 23.9 years for those who passed G.C.E. (O/L) standard. Likewise, the higher the wealth quintile, the higher the age at marriage of women; among women age 25-49, the median age at marriage is 21.5 years for women in the lowest wealth quintile and 24.0 years for those in the next to the highest wealth quintile.

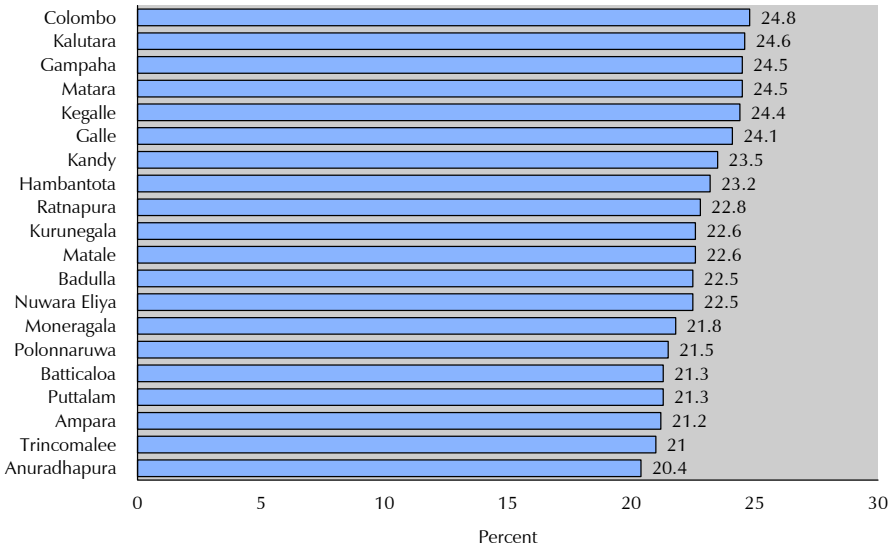
Table 6.4 Median age at first marriage

Median age at first marriage among all women by five-year age groups and age 25-49, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
Residence						
Urban	24.3	24.6	24.4	24.9	24.5	24.5
Rural	23.1	23.4	23.5	23.2	22.7	23.2
Estate	22.6	22.0	21.5	21.8	22.2	22.1
District						
Colombo	24.7	25.5	24.6	25.1	24.7	24.8
Gampaha	24.4	24.5	25.3	24.4	23.9	24.5
Kalutara	23.4	23.9	24.9	25.1	25.6	24.6
Kandy	22.5	24.2	24.3	23.6	23.1	23.5
Matale	22.7	22.4	22.2	22.7	22.9	22.6
Nuwara Eliya	23.0	23.3	21.8	22.3	22.1	22.5
Galle	23.7	24.3	24.4	24.1	23.5	24.1
Matara	23.9	24.9	26.1	24.2	24.4	24.5
Hambantota	23.8	23.1	21.5	24.2	22.4	23.2
Batticaloa	22.3	22.0	20.7	20.9	20.3	21.3
Ampara	22.2	21.9	21.4	21.5	20.0	21.2
Trincomalee	22.3	21.2	21.2	20.1	(19.7)	21.0
Kurunegala	22.8	22.9	22.8	22.3	21.8	22.6
Puttalam	21.7	21.8	21.5	21.2	20.6	21.3
Anuradhapura	20.1	21.4	20.7	19.3	20.8	20.4
Polonnaruwa	21.3	21.2	21.6	21.6	21.7	21.5
Badulla	21.9	22.2	23.1	23.3	22.6	22.5
Moneragala	22.6	22.4	22.1	19.8	21.6	21.8
Ratnapura	22.6	22.6	23.2	23.4	22.2	22.8
Kegalle	24.4	24.5	23.8	25.3	23.9	24.4
Education						
No education	20.5	20.4	19.5	20.9	20.4	20.4
Primary	19.6	20.2	20.4	20.4	20.3	20.3
Secondary	21.3	22.2	22.4	22.4	22.5	22.1
Passed G.C.E (O/L)	22.9	23.8	24.5	24.0	24.6	23.9
Higher	a	26.9	27.1	27.1	27.4	a
Wealth quintile						
Lowest	21.1	21.3	21.5	21.9	21.8	21.5
Second	22.1	22.4	22.2	22.5	22.0	22.3
Middle	23.5	23.2	23.1	22.1	22.7	22.9
Fourth	23.8	24.3	24.8	24.0	22.9	24.0
Highest	24.6	25.6	25.8	25.6	25.0	a
Total	23.2	23.5	23.6	23.3	23.0	23.3

Note: The age at first marriage is defined as the age at which the respondent began living with her first husband. Figures in parentheses are based on 25-49 unweighted cases.
a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

Figure 6.1 Median Age at First Marriage by District



SLDHS 2006-07

6.3 Age at First Sexual Intercourse

Table 6.5 shows the percentage of all women age 15-49 who had their first sexual intercourse by specific exact ages, the percentage who never had intercourse, and the median age at first intercourse according to current age. Although age at first marriage is often used as a proxy for first exposure to intercourse, the two events do not necessarily occur at the same time. Women and men sometimes engage in sexual relations before marriage or sometimes it could be at a later date than the actual recorded date of marriage.

Patterns in age at first sexual intercourse are similar to those for age at first marriage. Overall, for women age 25-49, the median age at first sex is 23.6, compared with 23.3 for age at first marriage.

Table 6.5 Age at first sexual intercourse

Percentage of all women age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had intercourse, and median age at first intercourse, according to current age, Sri Lanka 2006-07

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number	Median age at first intercourse
15-19	1.2	na	na	na	na	90.8	3,486	a
20-24	1.7	11.7	24.4	na	na	56.9	3,162	a
25-29	1.6	12.1	25.7	41.0	60.6	25.9	3,255	23.4
30-34	1.3	12.8	24.9	37.9	58.7	10.8	2,963	23.7
35-39	1.7	12.8	24.8	38.1	56.3	6.4	2,914	24.0
40-44	1.4	15.5	27.9	40.6	57.7	6.2	2,879	23.6
45-49	2.5	14.4	28.2	42.4	59.3	5.7	2,676	23.3
20-49	1.7	13.2	25.9	na	na	19.5	17,850	a
25-49	1.7	13.5	26.3	40.0	58.5	11.4	14,687	23.6
15-24	1.4	na	na	na	na	74.7	6,649	a

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group

Table 6.6 shows differentials in the median age at first sexual intercourse by background characteristics. Again, the patterns are very similar to those for age at first marriage, with sexual initiation occurring at younger ages among women in estates, those in Anuradhapura district, those with less education and in lower wealth quintiles.

Table 6.6 Median age at first intercourse

Median age at first sexual intercourse among all women by five-year age groups and age 25-49, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
Residence						
Urban	24.5	24.8	24.7	25.2	24.8	24.8
Rural	23.2	23.6	23.9	23.5	23.1	23.5
Estate	22.8	22.0	22.0	22.2	22.4	22.3
District						
Colombo	24.8	25.9	24.8	25.5	25.0	a
Gampaha	24.6	24.6	25.5	24.8	24.2	24.7
Kalutara	23.8	24.3	25.4	25.3	26.0	25.0
Kandy	22.6	24.3	24.7	23.7	23.5	23.7
Matale	22.7	22.7	22.2	24.0	23.1	22.8
Nuwara Eliya	23.1	23.5	22.7	22.7	22.2	22.8
Galle	23.9	24.3	24.7	24.2	23.5	24.2
Matara	23.9	24.9	26.2	24.7	24.5	24.6
Hambantota	23.8	23.1	21.5	24.7	22.5	23.3
Batticaloa	22.8	22.2	21.4	21.4	20.3	21.7
Ampara	22.2	22.1	21.4	21.7	20.1	21.4
Trincomalee	22.5	21.2	21.7	20.3	(19.9)	21.2
Kurunegala	23.0	23.0	23.3	22.5	22.2	22.9
Puttalam	22.2	22.0	22.7	21.2	20.9	21.7
Anuradhapura	20.3	22.0	20.9	19.3	21.0	20.7
Polonnaruwa	21.5	21.4	22.2	21.7	21.9	21.7
Badulla	22.3	22.3	23.7	23.9	23.1	23.0
Moneragala	22.8	22.6	22.4	20.0	22.0	22.0
Ratnapura	22.6	22.8	23.7	23.7	22.5	23.0
Kegalle	24.5	24.5	24.0	25.3	24.1	24.5
Education						
No education	20.6	20.3	20.6	21.2	20.6	20.7
Primary	20.0	20.4	20.5	20.5	20.4	20.4
Secondary	21.4	22.4	22.8	22.6	22.9	22.3
Passed G.C.E (O/L)	23.0	23.9	24.6	24.3	24.9	24.1
Higher	a	26.9	27.2	27.3	27.5	a
Wealth quintile						
Lowest	21.4	21.5	21.7	22.0	22.1	21.7
Second	22.2	22.6	22.6	22.9	22.2	22.5
Middle	23.6	23.4	23.5	22.4	23.1	23.2
Fourth	24.0	24.4	25.0	24.4	23.5	24.3
Highest	24.6	25.7	26.0	25.9	25.2	a
Total	23.4	23.7	24.0	23.6	23.3	23.6

Note: Figures in parentheses are based on 25-49 unweighted cases.
a = Omitted because less than 50 percent of the women had intercourse for the first time before reaching the beginning of the age group.

6.4 RECENT SEXUAL ACTIVITY

Table 6.7 shows the percent distribution of ever-married women age 15-49 by timing of their most recent sexual intercourse, according to background characteristics. It can be observed that the proportion of women who had sexual intercourse in the four weeks preceding the survey begins to taper off after age 30-34. The proportion of ever-married women whose last sexual intercourse was one or more years prior to the survey rises with age from one percent of those age 15-19 to 24 percent of those age 45-49. There is an up-and-down pattern between marital duration and timing of last sexual intercourse. The proportion of women who had sex in the previous four weeks increases slightly with duration of marriage, from 79 percent of those married less than 5 years to 85 percent among those married 10-14 years, after which it falls to a low of 62 percent among women married for 25 years or more.

Table 6.7 Recent sexual activity

Percent distribution of ever-married women age 15-49 by timing of last sexual intercourse, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Total	Number of women
Age						
15-19	79.1	19.6	0.9	0.4	100.0	321
20-24	79.1	16.6	4.1	0.1	100.0	1,364
25-29	79.4	15.8	4.6	0.2	100.0	2,411
30-34	81.1	12.8	6.0	0.0	100.0	2,642
35-39	77.8	13.7	8.4	0.1	100.0	2,728
40-44	72.0	13.7	14.0	0.3	100.0	2,702
45-49	57.3	18.2	24.3	0.2	100.0	2,524
Marital status						
Married or living together	79.3	15.6	5.0	0.1	100.0	13,748
Divorced/separated/widowed	0.1	7.1	91.6	1.2	100.0	944
Marital duration[2]						
0-4 years	79.2	18.3	2.3	0.1	100.0	2,878
5-9 years	82.3	13.6	4.1	0.0	100.0	2,921
10-14 years	85.0	11.9	3.1	0.0	100.0	2,582
15-19 years	81.7	12.9	5.4	0.1	100.0	2,107
20-24 years	75.8	17.4	6.8	0.0	100.0	1,660
25+ years	62.2	23.4	14.1	0.3	100.0	1,228
Married more than once	76.3	18.1	5.6	0.0	100.0	371
Residence						
Urban	69.2	16.4	14.0	0.4	100.0	1,893
Rural	76.1	14.1	9.7	0.1	100.0	12,095
Estate	55.4	28.2	16.1	0.3	100.0	703
District						
Colombo	74.2	15.4	10.1	0.3	100.0	1,796
Gampaha	74.8	14.0	11.1	0.0	100.0	1,839
Kalutara	78.0	12.6	9.2	0.3	100.0	837
Kandy	73.6	17.3	9.0	0.0	100.0	1,037
Matale	77.5	12.8	9.7	0.0	100.0	299
Nuwara Eliya	64.1	23.4	12.4	0.1	100.0	504
Galle	77.0	13.1	9.9	0.0	100.0	802
Matara	78.3	14.7	7.1	0.0	100.0	559
Hambantota	79.9	14.4	5.6	0.0	100.0	445
Batticaloa	49.1	18.9	31.6	0.4	100.0	434
Ampara	69.2	13.3	17.3	0.2	100.0	476
Trincomalee	64.2	25.5	10.1	0.2	100.0	266
Kurunegala	81.1	9.6	9.2	0.1	100.0	1,281
Puttalam	69.4	15.6	15.0	0.0	100.0	628
Anuradhapura	78.0	14.3	7.3	0.4	100.0	645
Polonnaruwa	77.0	14.4	8.6	0.0	100.0	335
Badulla	72.7	18.2	8.9	0.2	100.0	665
Moneragala	80.6	13.9	5.5	0.0	100.0	398
Ratnapura	75.1	15.7	8.7	0.5	100.0	840
Kegalle	71.4	17.1	11.5	0.0	100.0	605
Education						
No education	55.5	21.5	22.4	0.6	100.0	538
Primary	62.6	17.8	19.3	0.2	100.0	2,102
Secondary	75.4	14.9	9.6	0.1	100.0	7,200
Passed G.C.E (O/L)	76.2	14.6	9.1	0.1	100.0	1,672
Higher	81.4	12.9	5.6	0.1	100.0	3,181
Wealth quintile						
Lowest	69.4	16.9	13.3	0.3	100.0	2,864
Second	73.5	15.6	10.7	0.2	100.0	2,944
Middle	75.4	14.2	10.3	0.0	100.0	2,937
Fourth	77.3	13.8	8.9	0.1	100.0	3,014
Highest	75.3	14.9	9.6	0.2	100.0	2,933
Total	74.2	15.1	10.5	0.1	100.0	14,692

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not currently married

Women in estate areas are less likely to have had sexual intercourse within the four weeks prior to the survey than women in the urban and rural sectors. The proportion of women who had sexual intercourse within the four weeks prior to the survey varies from 49 percent in Batticaloa district to 81 percent in Kurunegala and Moneragala districts.

A much higher proportion of educated women (82 percent) had sexual intercourse within the four weeks prior to the survey than women without any education (56 percent). Differences by wealth quintile are small. It should be noted that at least some of the differentials in recent sexual activity by education and residence could be explained by differences in the age composition of the groups. For example, a large proportion of women with no education are in the older age groups, where women are less likely to report recent sexual activity.

6.5 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

The risk of pregnancy after a birth is largely influenced by two factors: breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding through its effect on the length of amenorrhoea (the period prior to the return of menses). Postpartum amenorrhoea is defined as the period between childbirth and the return of ovulation, generally approximated by the resumption of menstruation following childbirth. The risk of conception in this period is very low. Delaying the resumption of sexual relations after a birth also prolongs the period of postpartum protection. The duration of postpartum amenorrhoea and the period of abstinence following birth jointly determine the length of the insusceptibility period. Thus, women are considered insusceptible if they are abstaining from sex following childbirth and/or are amenorrhoeic.

Table 6.8 Postpartum amenorrhoea, abstinence and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Sri Lanka 2006-2007

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible[1]	
<2	92.0	94.2	99.0	167
2-3	59.3	61.0	78.0	242
4-5	43.1	21.6	52.3	226
6-7	27.6	15.9	34.8	213
8-9	22.0	9.4	29.1	265
10-11	17.7	6.7	22.8	259
12-13	10.6	3.2	13.3	232
14-15	13.3	2.5	14.3	244
16-17	10.5	5.0	15.2	249
18-19	6.8	2.2	9.0	254
20-21	7.3	1.7	9.0	233
22-23	6.9	3.4	10.3	236
24-25	7.9	1.2	9.2	221
26-27	9.0	2.0	11.0	251
28-29	4.9	3.5	8.4	217
30-31	5.0	2.8	7.8	248
32-33	6.1	1.9	8.0	222
34-35	4.1	2.4	6.5	247
Total	18.4	12.0	23.0	4,225
Median	3.8	3.0	5.2	na
Mean	7.4	5.1	9.0	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

The estimates shown in Table 6.8 are based on births occurring in the 36 months before the survey. The data show the proportions of births whose mothers are amenorrhoeic, abstaining from sexual relations, and insusceptible at the time of the survey by number of months since birth. Mean and median durations are also shown. In Sri Lanka, the median duration of postpartum amenorrhoea is only 4 months, meaning that half of women return to menstruation within 4 months of giving birth. The proportion of women who are amenorrhoeic decreases rapidly with increasing months since birth, with minor fluctuations in some age groups.

The majority of couples do not wait long to resume sexual relations after a birth. For example, only 22 percent of women are still abstaining 4-5 months after giving birth. The median duration of postpartum abstinence is only 3 months. Combining postpartum amenorrhoea and postpartum abstinence results in almost one-fourth of women who are considered insusceptible to conception.

Table 6.9 shows the median duration of amenorrhoea, postpartum abstinence and postpartum insusceptibility by background characteristics for women who gave birth in the three years preceding the survey. All three indicators are higher among older mothers than younger mothers. Differentials by other background characteristics are not strong and are hampered by the small numbers of cases.

Table 6.9 Median duration of postpartum amenorrhoea, abstinence and insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	3.3	2.9	4.7
30-49	4.7	3.1	5.9
Residence			
Urban	(3.2)	(3.1)	4.3
Rural	3.9	2.9	5.2
Estate	*	(4.1)	*
Education			
No education	*	*	*
Primary	*	*	*
Secondary	3.5	3.1	5.0
Passed G.C.E (O/L)	(3.8)	(2.9)	(4.8)
Higher	4.5	2.8	5.4
Wealth quintile			
Lowest	(3.6)	(3.4)	(5.3)
Second	(3.7)	(3.2)	(5.4)
Middle	4.5	3.1	(5.3)
Fourth	(3.3)	(2.8)	(4.6)
Highest	4.3	2.6	5.1
Total	3.8	3.0	5.2

Note: Medians are based on the status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted births in the interval in which the median falls; an asterisk denotes a median based on fewer than 25 unweighted births that has been suppressed.
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

6.6 MENOPAUSE

Another factor influencing the risk of pregnancy among women is menopause. In the context of the available survey data, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic, but have not had a menstrual period in the six months preceding the survey. Table 6.10 shows the percentage of ever-married women age 30-49 who have reached menopause by age group. The proportion menopausal declines slightly from 6 percent of women age 30-34 to 3 percent of those age 40-41, after which it increases steadily to 31 percent of those age 48-49. The reason for the slightly higher percentage among women 30-34 is unclear, but it may be related to the fact that use of injectable contraceptives is common among women in this age group, after which it declines (see Table 5.5).

Table 6.10 Menopause

Percentage of ever-married women age 30-49 who are menopausal, by age, Sri Lanka 2006-07

Age	Percentage menopausal[1]	Number of women
30-34	6.3	2,642
35-39	4.1	2,728
40-41	3.3	1,099
42-43	6.8	1,056
44-45	8.8	1,096
46-47	17.4	1,042
48-49	31.0	933
Total	9.0	10,596

[1] Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

FERTILITY PREFERENCES 7

L.P. de Silva

Information on fertility preferences is of considerable importance to family planning program planners, because it allows an assessment of the need for contraception, whether for spacing or limiting births, and the extent of unwanted and mistimed pregnancies. Data on fertility preferences can also be useful as an indicator of the direction future fertility may take.

The 2006-07 SLDHS included questions to ascertain fertility preferences. Women who were either not pregnant or unsure about their status were asked the question: "Would you like to have (a/another) child or would you prefer not to have any (more) children?" Women who were pregnant at the time of the survey were asked: "After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?" Women who indicated that they wanted another child were asked how long they would like to wait before the birth of the next child. Finally, women were asked in total the number of children they would like to have, if they were to start childbearing afresh.

7.1 DESIRE FOR MORE CHILDREN

Data on desire for more children provide an indication of future reproductive behaviour provided that the required family planning services are available and accessible to allow people to realize their fertility preferences. Table 7.1 presents the distribution of currently married women by the desire for more children, according to the number of living children.

Table 7.1 Fertility preferences by number of living children

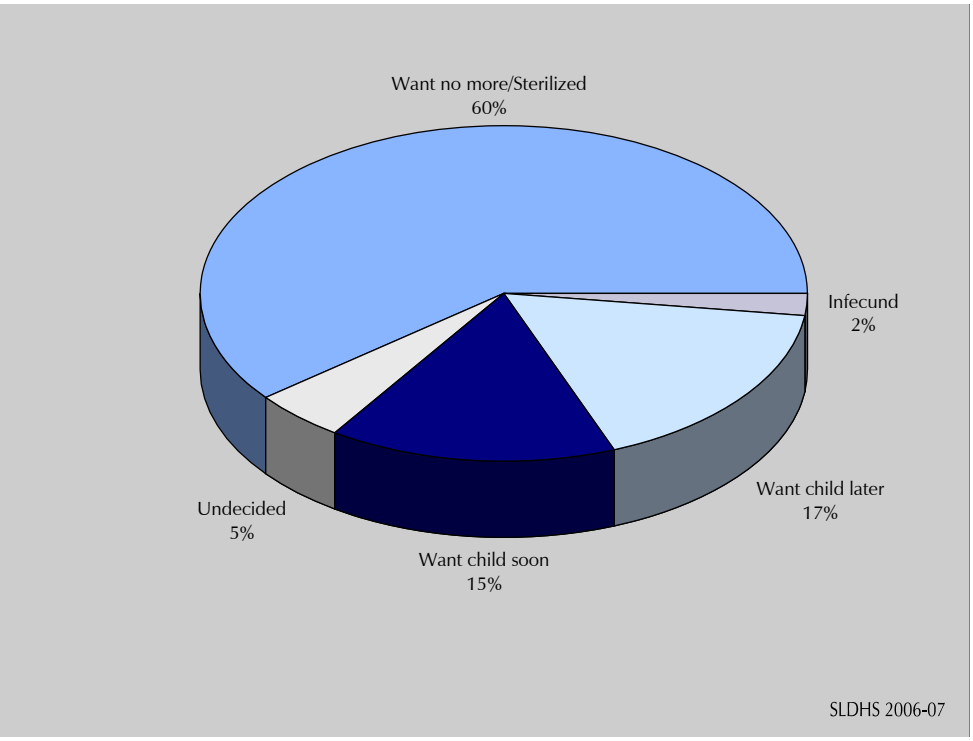
Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Sri Lanka 2006-07

	Number of living children[1]							Total
Desire for children	0	1	2	3	4	5	6+	15-49
Have another soon[2]	76.7	26.1	6.1	1.7	1.3	0.9	1.7	15.2
Have another later[3]	9.7	44.2	12.2	3.1	2.6	2.0	2.1	17.4
Have another, undecided when	1.1	2.5	1.1	0.2	0.5	0.2	0.4	1.2
Undecided	3.3	5.4	5.0	1.5	1.1	1.8	2.1	3.9
Want no more	3.6	19.2	63.6	51.4	44.2	46.5	51.7	43.2
Sterilized[4]	0.6	1.0	9.9	40.1	48.3	46.2	38.7	17.0
Declared infecund	4.7	1.4	2.0	1.7	2.0	1.9	2.8	2.0
Missing	0.3	0.2	0.1	0.2	0.0	0.6	0.5	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,031	3,556	4,883	2,828	959	318	173	13,748

[1] The number of living children includes current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilization

The table shows that there is considerable desire among Sri Lankan women to control the number of births and their timing as well. Among currently married women, 60 percent either do not want to have another child or are already sterilized (Figure 7.1). Another 17 percent want to postpone the next birth by two years. Lastly, 15 percent want a birth soon, and most of these women presently have no children.

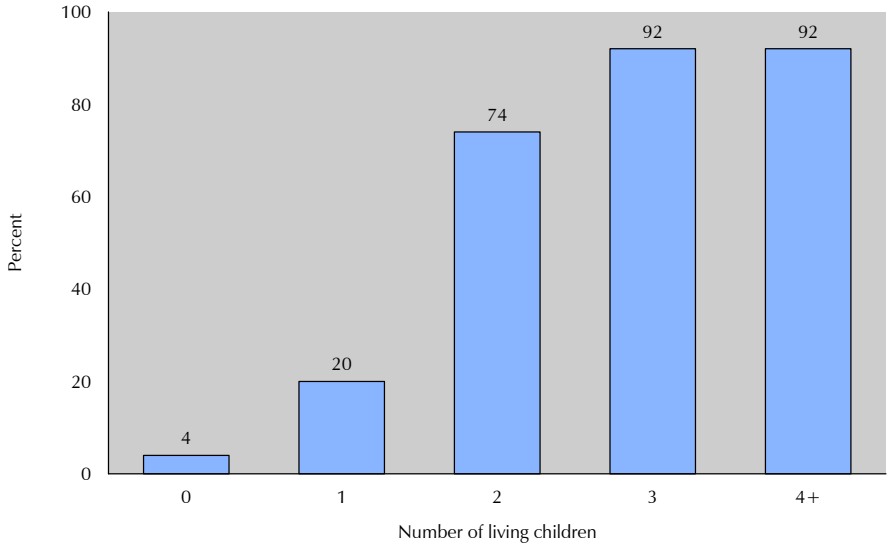
Figure 7.1 Desire for More Children among Currently Married Women



Fertility preferences are closely related to the number of living children a woman has. Among mothers with no children, 77 percent want to have a child soon, as opposed to the 10 percent who want another child, but after two years. In fact, interest in spacing the next birth starts after the first birth. Nearly 45 percent of women with one child want to delay the second birth.

The data show that the desire to limit childbearing increases as the number of living children becomes larger. Overall, 74 percent of women with two children and over 90 percent of women with three or more children either say that they want no more children or they are already sterilized (Figure 7.2).

Figure 7.2 Percentage of Currently Married Women Who Want No More Children by Number of Living Children



Note: Women who have been sterilized are considered to want no more children.

SLDHS 2006-07

Table 7.2 presents the percentage of currently married women who want no more children (including those who have already been sterilized) by the number of living children and background characteristics. In general, the differentials by background characteristics are relatively small, with a few exceptions. Women living in the estate areas are most likely not to want any more children (69 percent). Badulla and Nuwara Eliya, both major estate areas, have the highest percentages of women who want to limit their family size. All other districts except Trincomalee fall between 50 and 70 percent of women who do not want more children. The desire to limit births decreases with increasing levels of education. This pattern is found most strongly for women with just one child. However, the differentials disappear for women with two or more children.

Table 7.2 Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Number of living children[1]					Total
	0	1	2	3	4+	
Residence						
Urban	4.1	21.0	75.7	86.5	90.9	58.1
Rural	4.1	20.1	73.1	91.9	92.1	60.0
Estate	7.4	20.2	75.0	95.5	96.1	69.3
District						
Colombo	2.0	26.6	79.9	90.4	92.8	59.2
Gampaha	8.3	26.2	77.8	95.7	96.3	61.5
Kalutara	8.1	24.8	78.3	93.9	88.7	61.8
Kandy	8.2	16.0	74.8	90.4	97.9	60.2
Matale	(2.4)	19.7	71.3	92.5	(93.4)	59.7
Nuwara Eliya	(10.1)	21.9	74.2	96.6	96.9	69.0
Galle	2.4	12.9	67.3	90.3	94.3	58.0
Matara	(0.0)	10.6	63.6	84.4	94.6	53.0
Hambantota	(0.1)	3.7	53.6	85.7	96.5	56.5
Batticaloa	(0.0)	22.4	49.6	83.5	91.1	56.5
Ampara	(0.0)	13.2	55.2	78.8	83.3	54.8
Trincomalee	*	3.4	40.2	63.1	67.1	43.4
Kurunegala	0.0	24.8	82.9	97.4	96.0	63.5
Puttalam	(7.2)	21.2	67.1	88.8	89.7	60.1
Anuradhapura	(4.8)	15.6	62.3	92.5	87.1	56.3
Polonnaruwa	(3.9)	10.1	77.7	95.6	(85.8)	61.3
Badulla	2.2	21.9	80.5	93.8	98.0	70.3
Moneragala	(2.8)	10.3	65.2	89.3	95.4	56.8
Ratnapura	(0.0)	19.6	79.4	96.0	95.7	62.8
Kegalle	(7.3)	20.3	78.6	95.5	(95.3)	60.9
Education						
No education	*	54.0	76.3	91.7	91.0	80.4
Primary	14.0	34.5	77.4	91.9	92.2	80.0
Secondary	4.5	18.5	70.9	91.3	91.8	58.6
Passed G.C.E (O/L)	3.6	18.7	76.9	91.2	92.7	55.3
Higher	2.3	19.4	75.1	91.7	98.0	51.4
Wealth quintile						
Lowest	6.9	19.9	69.8	93.1	92.6	65.4
Second	3.2	18.2	73.0	91.4	90.5	61.3
Middle	4.7	16.6	73.7	93.1	93.6	58.8
Fourth	1.8	19.8	75.0	89.6	93.3	57.2
Highest	5.5	26.2	75.1	89.6	91.6	58.8
Total	4.2	20.2	73.5	91.5	92.3	60.2

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted women; an asterisk indicates a figure based on fewer than 25 unweighted women that has been suppressed.

[1] The number of living children includes the current pregnancy.

The decisions of women with two children about having any more children are pivotal to achieving Sri Lanka's goal of replacement fertility by mid-century. Almost three-quarters of these women express a desire to have no more children. The lack of differentials on the proportion of women with two children who want no more among all education, wealth, and residence categories suggests broad acceptance of the two-child norm in actual fertility behaviour. The variations by district indicate areas to focus efforts to further improve the delivery of services and create a strongly favourable environment for increased adoption of family planning.

As Figure 7.3 shows, close to 80 percent of women with two children in 8 districts do not wish to add to their family. Women with 2 children in districts of the east (Trincomalee, Batticaloa, Ampara) and southeast (Hambantota) lag behind women elsewhere in their desire to have no more children.

Figure 7.3 **Percentage of Currently Married Women with Two Children Who Want No More, by District, Sri Lanka**

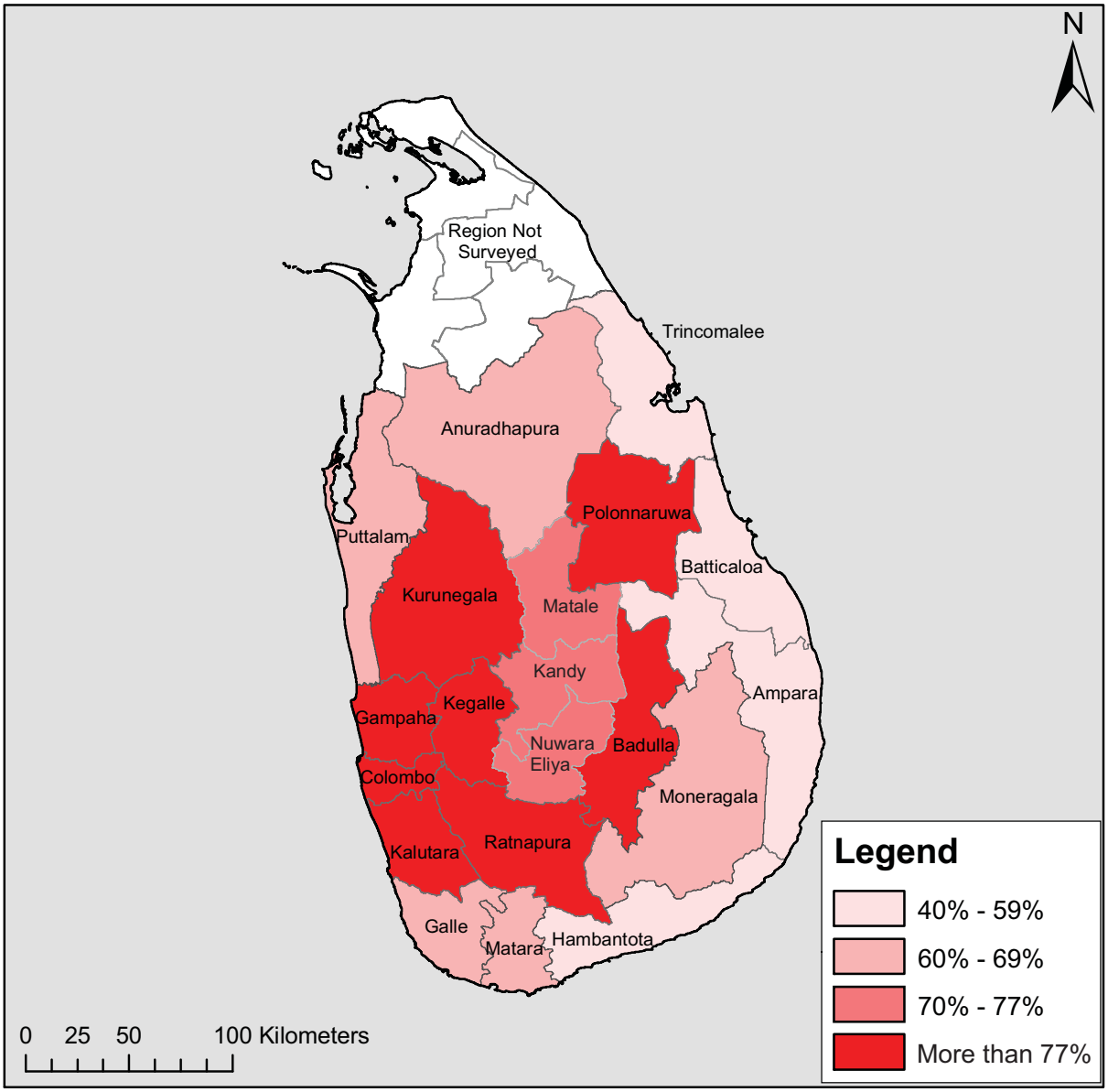
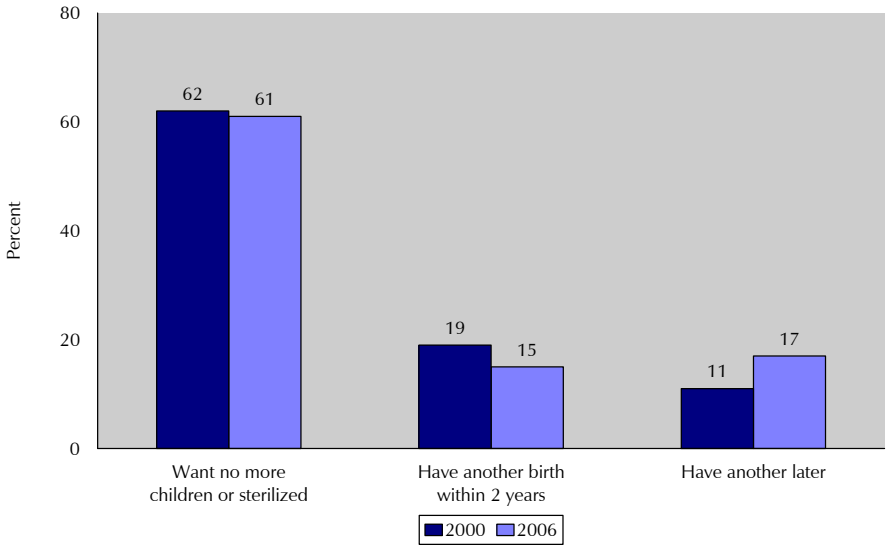


Figure 7.4 shows that although the desire to have no more children has not changed significantly since 2000, a slightly larger percentage of women would prefer to postpone the next birth.

Figure 7.4 **Trends in Fertility Preferences among Currently Married Women**



Note: Excludes Eastern Province
Source: 2000 SLDHS DCS. (2002). Table 7.3, p. 138

SLDHS 2006-07

7.2 NEED FOR FAMILY PLANNING SERVICES

The proportion of women who want to stop childbearing or space births is a crude measure of the extent of the need for family planning, given that not all of these women are exposed to the risk of pregnancy and some of them may already be using contraception. This section discusses the extent of need and the potential demand for family planning services. Women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are considered to have an unmet need for family planning. Pregnant women are considered to have an unmet need for spacing or limiting if their pregnancy was mistimed or unwanted. Similarly, amenorrhoeic women are categorized as having unmet need if their last birth was mistimed or unwanted. Women who are currently using family planning are considered to have met their need for family planning. The total demand for family planning services comprises all those who fall in the met need and unmet need categories.

Table 7.3 presents the information for currently married women on unmet need, met need, and total demand for family planning according to whether the need is for spacing or limiting births. The total demand for family planning—estimated to be 76 percent—is quite high. The table also shows that demand is high for limiting (52 percent) compared to spacing (24 percent). Finally, the table indicates that 90 percent of the total demand is satisfied.[1] The remaining ten percent is the unsatisfied demand for family planning, to which unmet need for spacing and limiting have contributed about equally.[2]

[1] Calculated as 68.4 divided by 76.0
[2] As shown by the nearly equal percentages at the bottom of the first 2 columns of data in Table 7.3.

Table 7.3 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage for the demand for contraception that is satisfied, by background characteristics, Sri Lanka 2006-07

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	12.9	1.0	13.9	48.7	5.0	53.7	62.3	6.0	68.3	79.7	314
20-24	9.7	1.7	11.4	50.2	8.4	58.6	60.6	10.1	70.6	83.9	1,332
25-29	6.8	2.4	9.2	41.6	22.6	64.2	48.8	25.0	73.8	87.5	2,356
30-34	3.3	3.4	6.7	25.9	44.0	69.8	29.3	47.5	76.8	91.3	2,549
35-39	2.1	6.1	8.2	9.7	64.7	74.4	12.0	70.8	82.8	90.1	2,589
40-44	0.5	4.7	5.3	2.5	73.0	75.5	3.0	77.7	80.8	93.5	2,456
45-49	0.1	3.7	3.9	0.6	63.7	64.3	0.7	67.4	68.1	94.3	2,152
Residence											
Urban	4.5	5.0	9.5	17.9	42.0	59.9	22.5	47.1	69.6	86.4	1,747
Rural	3.2	3.6	6.8	21.1	48.8	69.9	24.6	52.4	77.0	91.2	11,353
Estate	6.3	4.9	11.1	11.5	53.2	64.7	17.8	58.1	75.9	85.3	649
District											
Colombo	3.3	3.6	6.9	19.6	45.6	65.2	23.3	49.2	72.5	90.5	1,687
Gampaha	2.6	5.2	7.8	19.6	47.7	67.3	22.4	53.0	75.4	89.6	1,717
Kalutara	2.5	3.0	5.4	19.4	50.5	69.8	21.8	53.4	75.3	92.8	785
Kandy	2.8	3.7	6.4	20.4	48.7	69.1	23.3	52.5	75.8	91.5	982
Matale	1.9	2.9	4.8	21.7	49.0	70.7	24.1	51.9	76.0	93.7	280
Nuwara Eliya	5.2	4.0	9.2	15.9	53.5	69.5	21.4	57.6	79.0	88.3	474
Galle	2.7	3.6	6.3	24.8	48.9	73.6	27.9	52.4	80.3	92.2	748
Matara	3.7	4.0	7.7	26.0	42.8	68.8	29.6	46.9	76.5	89.9	527
Hambantota	3.5	3.8	7.4	24.1	45.4	69.5	27.9	49.5	77.4	90.5	424
Batticaloa	10.6	12.2	22.9	11.2	23.3	34.5	21.8	35.5	57.3	60.1	388
Ampara	11.7	3.7	15.4	14.9	40.8	55.7	26.8	44.6	71.4	78.4	432
Trincomalee	15.7	3.0	18.7	23.1	29.7	52.8	38.8	32.7	71.5	73.8	250
Kurunegala	1.4	2.8	4.3	20.3	55.3	75.5	21.7	58.1	79.8	94.6	1,191
Puttalam	3.0	6.0	9.0	20.9	45.1	66.1	24.2	51.1	75.3	88.0	572
Anuradhapura	2.4	1.9	4.3	24.8	49.2	74.0	27.4	51.3	78.7	94.5	611
Polonnaruwa	2.6	2.7	5.4	24.1	53.7	77.8	27.0	56.5	83.4	93.6	315
Badulla	3.5	3.2	6.7	15.0	57.5	72.4	18.6	60.8	79.4	91.5	631
Moneragala	2.4	2.0	4.4	21.9	49.1	71.1	24.8	51.4	76.1	94.2	379
Ratnapura	1.6	1.9	3.5	21.0	52.3	73.4	22.8	54.2	77.0	95.5	785
Kegalle	3.7	3.4	7.1	19.6	51.2	70.9	23.3	54.7	78.0	90.9	570
Education											
No education	2.1	5.3	7.4	7.7	65.0	72.7	10.0	70.3	80.3	90.7	448
Primary	2.6	4.4	7.1	7.5	64.0	71.5	10.2	68.4	78.6	91.0	1,843
Secondary	3.8	3.8	7.6	21.9	47.2	69.0	26.0	51.0	77.0	90.1	6,754
Passed G.C.E (O/L)	4.2	4.4	8.5	22.9	41.7	64.6	27.4	46.1	73.5	88.4	1,601
Higher	3.3	2.9	6.2	24.9	41.7	66.6	28.2	44.7	72.8	91.5	3,102
Wealth quintile											
Lowest	3.6	3.7	7.2	19.3	53.3	72.7	23.1	57.0	80.1	91.0	2,605
Second	3.9	3.7	7.6	19.8	49.8	69.6	24.0	53.6	77.6	90.2	2,724
Middle	3.5	3.5	7.0	21.5	48.5	70.0	25.1	52.1	77.3	91.0	2,746
Fourth	3.1	3.6	6.7	21.8	45.4	67.2	25.0	49.1	74.1	90.9	2,868
Highest	3.7	4.4	8.1	18.8	44.2	63.0	22.7	48.6	71.3	88.7	2,805
Total	3.5	3.8	7.3	20.3	48.1	68.4	24.0	52.0	76.0	90.4	13,748

[1] Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrhoeic women who are not using family planning and whose last birth was mistimed, or whose last birth was unwanted but now say they want more children; and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; amenorrhoeic women who are not using family planning, whose last child was unwanted and who do not want any more children; and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and who want no more children.

[2] Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here

Although the total demand satisfied is very high, there are also some important differentials by certain background variables. The total demand for family planning increases with age and is highest for the age group 35-39. There is a contrast between spacing and limiting, however. As would be expected, demand for spacing purposes is high in the lower age groups (15-29), but demand for limiting births is high in the age groups 35-44. Total demand satisfied is lowest in the three districts of the Eastern province (Ampara, Batticaloa, and Trincomalee).

There is an inverse association between level of education and total demand for family planning: the lower the level of education, the higher the demand. Looking at demand for spacing and limiting separately, the demand for spacing is high at higher educational levels, whereas for limiting, demand drops as education level increases, perhaps because those with little or no education tend to be older.

There are some marked differentials by background variables for met and unmet need. Met need (contraceptive use) is 65 percent or more in all but three districts. It is highest in Polonnaruwa (78 percent) and lowest in Batticaloa (35 percent). Districts in the North Central (Kurunegala, Puttalam), Uva (Badulla, Moneragala), and Sabaragamuwa (Kegalle, Ratnapura) provinces have a high met demand, whereas met need is considerably lower in the Eastern province. This fact is seen even more clearly with unmet need by district. Unmet need is considerably higher in the districts of the Eastern province—ranging from 15-23 percent, compared with all the other provinces (4-9 percent). Unmet need shows a decline from the lower to higher age groups. Women in the estate sector reported the highest proportion with unmet need.

Comparisons with previous surveys are not made because the definitions of unmet need have differed over time.

7.3 IDEAL NUMBER OF CHILDREN

This section focuses on the respondent's ideal number of children, implicitly taking into account the number of children that the respondent already has. Regardless of marital status, women were asked about the number of children they would choose to have if they could start afresh. Respondents who had no children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" Responses to these questions are summarized in Table 7.4.

Table 7.4 Ideal number of children

Percent distribution of ever-married women 15-49 by ideal number of children, and mean ideal number of children for all ever-married women and for currently married women, according to number of living children, Sri Lanka 2006-07

	Number of living children[1]							
Ideal number of children	0	1	2	3	4	5	6+	Total
0	1.8	0.5	0.5	0.7	0.7	1.3	1.3	0.7
1	7.7	8.3	2.5	1.5	0.2	0.8	0.0	3.9
2	62.4	63.1	56.6	28.0	19.1	13.0	10.3	48.4
3	19.6	21.0	26.9	45.1	20.8	26.2	19.4	28.0
4	4.5	4.1	9.9	14.9	40.3	18.4	25.4	11.7
5	1.8	1.1	2.2	6.3	9.5	24.3	10.7	3.9
6+	0.2	0.2	0.4	1.4	4.9	10.5	28.4	1.5
Non-numeric responses	2.1	1.6	1.0	2.1	4.5	5.5	4.4	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,104	3,796	5,145	3,024	1,077	354	192	14,692
Mean ideal number children for:[2]								
All ever-married women	2.2	2.2	2.5	3.0	3.6	3.9	4.5	2.7
Number	1,081	3,734	5,093	2,960	1,028	335	184	14,415
Currently married women	2.3	2.3	2.5	3.0	3.6	3.9	4.6	2.7
Number	1,016	3,507	4,835	2,771	918	300	165	13,511

[1] The number of living children includes current pregnancy.
[2] Means are calculated excluding respondents who gave non-numeric responses.

According to the data given in this table, the mean ideal number of children for ever-married women is 2.7. Almost half of women prefer to have two children, and nearly 30 percent prefer three children.

The positive association between the ideal family size and the actual number of living children may be due to several reasons. First, to the extent that respondents implement their preferences, those who want larger families will tend to achieve larger families. Second, respondents may adjust upward their ideal size of family as the actual number of children increases (i.e., rationalization by reporting their actual number of children as their ideal number). It is also possible that respondents with large families, being on average older than those with small families, have larger ideal sizes because of attitudes they acquired 20 to 30 years ago.

Despite these factors, the mean ideal number of children is less than the number of living children for women with four or more children. This result suggests that the ideal number of children women mention is not wholly a rationalization of their actual fertility. Although it does incorporate their actual fertility to some extent—as the increase with successive number of children demonstrates, many women with five or more children clearly prefer to have a smaller family. For instance, of the mothers with five living children, three in five state their ideal number as 4 or fewer. The mean ideal number (2.2) for women who do not yet have children points towards their anticipated family size in the future, which if achieved, would essentially be replacement level fertility.

Table 7.5 shows the mean ideal number of children for all ever-married women by age and background characteristics. As mentioned above, the overall mean ideal number of children is 2.7 children. It increases with rising age of women—from 2.3 children for women age 15-19 to 3.0 children for women age 45-49. There is an association between the mean ideal number and education level; the higher the educational level, the lower the mean ideal number of children. Within districts this number varies between 2.3 and 3.8.

Table 7.5 Mean ideal number of children

Mean ideal number of children for ever-married women age 15-49 by background characteristics, Sri Lanka 2006-07

Background characteristic	Mean[1]	Number of women
Age		
15-19	2.3	308
20-24	2.3	1,347
25-29	2.5	2,373
30-34	2.6	2,606
35-39	2.7	2,678
40-44	2.9	2,648
45-49	3.0	2,455
Residence		
Urban	2.6	1,848
Rural	2.7	11,878
Estate	2.7	689
District		
Colombo	2.4	1,763
Gampaha	2.6	1,834
Kalutara	2.3	804
Kandy	2.8	1,021
Matale	2.8	297
Nuwara Eliya	2.7	500
Galle	2.6	766
Matara	2.5	552
Hambantota	2.8	416
Batticaloa	2.7	434
Ampara	3.3	468
Trincomalee	3.8	265
Kurunegala	2.5	1,264
Puttalam	2.9	615
Anuradhapura	3.0	642
Polonnaruwa	2.7	333
Badulla	2.6	660
Moneragala	3.0	391
Ratnapura	2.6	804
Kegalle	2.6	585
Education		
No education	3.2	524
Primary	3.1	2,042
Secondary	2.6	7,068
Passed G.C.E (O/L)	2.5	1,641
Higher	2.5	3,140
Wealth quintile		
Lowest	2.8	2,813
Second	2.7	2,872
Middle	2.7	2,881
Fourth	2.6	2,965
Highest	2.6	2,884
Total	2.7	14,415

[1] Number of women who gave a numeric response

7.4 FERTILITY PLANNING STATUS

The issue of unplanned and unwanted fertility was further investigated in the 2006-07 SLDHS by asking women who had births during the five years before the survey whether the births were wanted at the time (planned), wanted but at a later time (mistimed), or not wanted at all (unwanted). For women who were pregnant at the time of the interview, this question was also asked with reference to the current pregnancy. The procedure required the respondents to recall their wishes accurately, at one or more points in the last five years. Care should be exercised in interpreting the results because an unwanted conception may have become a cherished child, leading to rationalization of responses to these questions.

According to Table 7.6, over 80 percent of births in the five years preceding the survey were wanted at the time of the pregnancy. Nine percent of births were mistimed (wanted later), and only 8 percent of births were unwanted. The proportion of wanted births is very high at lower birth orders (1 and 2) and drops strongly for subsequent birth orders.

Younger mothers (up to 25 years old) consider some of their births in the last 5 years to have been mistimed more often than women 25 and above. Ensuring that more young women are able to delay a birth could reduce mistimed births, which would help these women achieve their low desired fertility.

The percentage of unwanted births rises considerably for women 35 and older. These women have larger families and have often already achieved their desired family size.

Table 7.6 Fertility planning status

Percent distribution of births to women 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Sri Lanka 2006-07

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	91.2	6.2	2.0	0.5	100.0	3,281
2	83.6	11.3	4.7	0.5	100.0	2,727
3	69.4	10.3	19.9	0.4	100.0	1,232
4+	55.8	12.5	31.1	0.6	100.0	638
Mother's age at birth						
<20	80.0	15.2	3.9	0.9	100.0	532
20-24	83.4	11.9	4.1	0.6	100.0	1,886
25-29	85.6	8.6	5.5	0.3	100.0	2,424
30-34	82.5	7.3	9.7	0.5	100.0	1,910
35-39	75.9	5.9	17.5	0.7	100.0	913
40-44	67.2	4.8	28.0	0.0	100.0	203
45-49	*	*	*	*	100.0	10
Total	82.3	9.1	8.1	0.5	100.0	7,879

Note: An asterisk represents a figure based on fewer than 25 unweighted cases that has been suppressed.

7.5 WANTED FERTILITY RATES

Using information on whether births occurring in the five years before the survey were wanted or not, a total 'wanted' fertility rate has been calculated. The wanted fertility rate is calculated in the same manner as the conventional total fertility rate, except that unwanted births are excluded. A birth is considered wanted if the number of living children at the time of conception was less than the ideal number of children reported. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions. A comparison of the total wanted fertility rates and total fertility rates for the three years preceding the survey by background characteristics is presented in Table 7.7.

Table 7.7 Wanted fertility rates

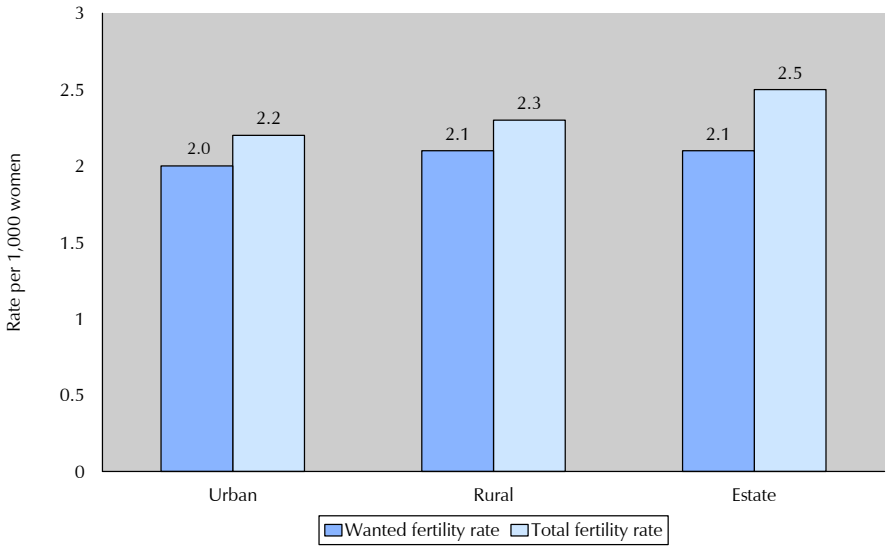
Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Total wanted fertility rates	Total fertility rate
Residence		
Urban	2.0	2.2
Rural	2.1	2.3
Estate	2.1	2.5
District		
Colombo	2.0	2.2
Gampaha	1.9	2.2
Kalutara	1.9	2.2
Kandy	2.2	2.4
Matale	*	*
Nuwara Eliya	(2.3)	(2.6)
Galle	1.8	2.1
Matara	(2.0)	(2.4)
Hambantota	(2.1)	(2.3)
Batticaloa	(2.3)	(2.8)
Ampara	(2.7)	(2.9)
Trincomalee	(2.8)	(2.9)
Kurunegala	2.3	2.5
Puttalam	1.8	2.0
Anuradhapura	(2.1)	(2.3)
Polonnaruwa	(2.3)	(2.5)
Badulla	2.0	2.4
Moneragala	(2.2)	(2.5)
Ratnapura	2.0	2.4
Kegalle	(2.3)	(2.5)
Education		
No education	1.5	1.9
Primary	2.4	2.8
Secondary	2.3	2.6
Passed G.C.E (O/L)	2.3	2.5
Higher	2.2	2.3
Wealth quintile		
Lowest	2.0	2.4
Second	2.0	2.3
Middle	2.0	2.2
Fourth	2.2	2.3
Highest	2.2	2.4
Total	2.1	2.3

Note: Rates are for the period 1-36 months prior to interview. The total fertility rates are the same as those presented in Table 4.2. Rates are based on all women, regardless of marital status (see note on Table 4.1). Rates in parentheses are based on 500-750 unweighted (all) women; an asterisk represents a TFR based on fewer than 500 unweighted women that has been suppressed.

Wanted fertility (2.1) is at replacement level. As expected, the total wanted fertility rates are lower than the actual total fertility rates; however, the gap is very small (Figure 7.5). This is true for almost all of the background variables, although in different magnitudes. Except for women living in estate areas, with little or no education, and in the lowest wealth quintile, women in Sri Lanka are mostly successful in achieving their desired family size. These results are consistent with the high satisfied demand for family planning shown earlier.

Figure 7.5 Wanted and Total Fertility Rates by Residence



SLDHS 2006-07

INFANT AND CHILD MORTALITY 8

L.P. de Silva

This chapter presents information on levels, trends, and differentials in neonatal, post-neonatal, infant, child, and under-five mortality. This information is relevant to the demographic assessment of the population and for planning and evaluation of health policies and programmes. Estimates of infant and child mortality may be an input into population projections, particularly if the level of adult mortality is known from another source or can be inferred with reasonable confidence. Information on mortality of children also serves the needs of health ministries by identifying sectors of the population that are at high risk. Infant and child mortality rates are also regarded as indices reflecting the degree of poverty and deprivation of a population. Because the government of Sri Lanka, through the Ministry of Healthcare and Nutrition, is undertaking a number of interventions aimed at reducing child mortality in the country, the analysis in this report provides an opportunity to evaluate the performance of such programs.

The data for mortality estimation were collected in the birth history section of the women's questionnaire. The birth history section begins with questions about the respondent's experience with childbearing (number of sons and daughters living with mother, the number who live elsewhere, and the number who died). These questions were followed by a retrospective birth history in which each respondent was asked to list each of her births, starting with the first birth. For each birth, data were obtained on sex, month, and year of birth, survivorship status, and current age, or if the child was dead, age at death. This information is used to directly estimate mortality. Age-specific mortality rates are categorized and defined as follows:

- Neonatal mortality (NN): the probability of dying within the first month of life
- Post-neonatal mortality (PNN): the difference between infant and neonatal mortality
- Infant mortality ($_1q_0$): the probability of dying before the first birthday
- Child mortality ($_4q_1$): the probability of dying between the first and fifth birthday
- Under-five mortality ($_5q_0$): the probability of dying between birth and the fifth birthday.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

8.1 LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY

Table 8.1 shows neonatal, post-neonatal, infant, child, and under-five mortality rates for successive five-year periods before the survey. For the five years immediately preceding the survey (approximately calendar years 2002-2006), the infant mortality rate is 15 per 1,000 births and the under-five mortality rate is 21 per 1,000 births. The data also reveal that both rates have declined over the years, though the trend is not uniform.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Sri Lanka 2006-07

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
0-4	11	5	15	5	21
5-9	18	4	22	3	25
10-14	15	4	19	2	21

[1] Computed as the difference between the infant and neonatal mortality rates

Neonatal deaths account for two-thirds of all infant deaths that occurred during the most recent five-year period. For the earlier periods, neonatal mortality contributed an even larger proportion, about four-fifths, to infant mortality. It is possible that safe motherhood interventions—including antenatal care, delivery in health facilities, and post-natal checks—over the period are having an impact on mortality immediately after birth. Child mortality at 5 deaths per 1,000 children for the most recent period is a slightly higher figure than what it had been for the two preceding five-year periods.

A comparison with data from the 2000 SLDHS shows an increase in under-five mortality, from 15 to 19 per 1,000 births (DCS, 2002), due mainly to an increase in child mortality (from 1 to 4 deaths per 1,000 children age 12 months). The infant mortality rate has hardly changed, rising from 14 to 15 per 1,000 births. Although the rise in these period rates could be in part attributable to the effects of the 2004 tsunami, the data for both surveys exclude Eastern province, which was the area most affected by the tsunami. Understanding trends in mortality requires an in-depth review of the quality of data and of factors that might affect the rates. Childhood mortality rates are also particularly sensitive to sampling errors (see Appendix B).

8.2 DATA QUALITY

The quality of mortality estimates calculated from retrospective birth histories depends upon the completeness with which births and deaths are reported and recorded. One factor that affects childhood mortality estimates is the quality of reporting age at death, which may distort the age pattern of mortality. If age at death is misreported, it will bias the estimates, especially if the net effects of the age misreporting result in transference from one age bracket to another. The reported deaths under two years have been analyzed to study any abnormal patterns such as heaping (see Table C.6 in Appendix C). The analysis shows some heaping at months 6, 12, and 18. This result implies some rounding off in reporting age at death.

Another potential data quality problem is the selective omission from the birth histories of births who did not survive, which can lead to under-estimation of mortality rates. When selective omission of childhood deaths occurs, it is usually more severe for deaths occurring early in infancy. One way such omissions can be detected is by examining the proportion of neonatal deaths to infant deaths. Generally, if there is substantial underreporting of deaths, the result is an abnormally low ratio of neonatal deaths to infant deaths. In this data set, the ratio of neonatal deaths to total deaths is plausible, implying a very negligible omission rate on the part of the respondent (see Table C.6 in Appendix C). This is also true for early neonatal deaths (see Table C.5 in Appendix C).

Displacement of birth dates can also cause a distortion of mortality trends. This can occur if an interviewer knowingly records a death as occurring in a different year. Live births occurring during the five years preceding the interview are subject to a lengthy set of additional questions. In the 2006–07 SLDHS questionnaire, the cutoff year for these questions was 2001. An interviewer might try to cut down on her overall work by changing the year of death to be outside the cutoff date for the five-year interval. A review of data on births reported by year of birth shows almost identical numbers reported for 2002 and 2001, showing no intentional "displacement" of births (see Table C.4 in Appendix C).

8.3 SOCIOECONOMIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

Mortality differentials by sector, district, educational level of mother, and household wealth are presented in Table 8.2. For a sufficient number of births to study mortality differentials across population subgroups, period-specific rates are presented for the ten-year period preceding the survey.

The data show some differentials by background variables. For example, the under-five mortality rate for the estate sector (33 deaths per 1,000 births) is almost double that for the urban sector (19 per 1,000). Under-five mortality in rural areas (23 per 1,000) is intermediate between the urban and estate sectors. In rural and estate areas, neonatal mortality constitutes more than half of the under-five deaths, whereas in the urban sector, the contribution of neonatal mortality to the under-five mortality rate is not as strong (less than one-third).

Data on childhood mortality by district are hampered by the relatively small number of births in many districts. Consequently, the data are subject to high confidence intervals (see Appendix B for a discussion of sampling errors). Under-five mortality is high in Ampara, Badulla, Puttalam, and Kurunegala districts, which are either larger districts with high rural population or with a considerable proportion of estate population. In most of these districts, the contribution of neonatal mortality to infant mortality is particularly high. Under-five mortality in Ampara district is high (54 deaths per 1,000 births), with an exceptionally high level of child mortality (27 per 1,000) relative to the national rate. It is possible that these high rates can be at least partly attributed to the effects of the tsunami.

Table 8.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Urban	6	3	10	9	19
Rural	15	4	19	3	23
Estate	18	11	29	5	33
District					
Colombo	12	3	15	1	16
Gampaha	11	3	14	1	15
Kalutara	5	1	6	3	9
Kandy	18	4	22	3	25
Matale	(23)	(3)	(26)	(6)	(31)
Nuwara Eliya	10	8	19	4	22
Galle	14	4	18	6	24
Matara	14	0	14	4	18
Hambantota	(19)	(0)	(19)	(0)	(19)
Batticaloa	1	4	5	3	8
Ampara	13	14	27	27	54
Trincomalee	(11)	(10)	(21)	(5)	(26)
Kurunegala	25	4	29	3	32
Puttalam	15	8	23	9	32
Anuradhapura	24	3	27	2	29
Polonnaruwa	(4)	(1)	(5)	(8)	(13)
Badulla	22	9	31	3	33
Moneragala	(16)	(5)	(21)	(7)	(28)
Ratnapura	13	2	16	4	20
Kegalle	(14)	(4)	(18)	(1)	(19)
Mother's education					
No education	(19)	(14)	(33)	12	(44)
Primary	14	9	23	6	29
Secondary	15	3	19	4	23
Passed G.C.E. (O/L)	12	1	13	3	16
Higher	13	4	17	2	19
Wealth quintile					
Lowest	19	6	25	8	33
Second	13	7	21	6	26
Middle	17	2	19	3	21
Fourth	11	3	14	2	16
Highest	12	1	13	1	15

Note: Rates based on 250 to 499 exposed persons (unweighted) are in parentheses.
[1] Computed as the difference between the infant and neonatal mortality rates

Although some of the elevated under-five mortality rates could be due to the tsunami in 2004, there is not a total correspondence between the tsunami-affected status of a district and higher mortality rates. Since people were displaced after the disaster, any child death events might have actually been recorded for the family living somewhere else at the time of the interview.

There is an inverse relationship between mother's education and childhood mortality, i.e., the lower the woman's education, the higher the childhood mortality. The under-five mortality rate for women who have passed G.C.E. is about one-half that for women with only primary schooling. Similarly, there is an inverse relationship between wealth quintile and under-five mortality.

8.4 DEMOGRAPHIC DIFFERENTIALS IN INFANT AND CHILD MORTALITY

Demographic characteristics of both mother and child have been found to play an important role in the survival probability of children. Table 8.3 presents early childhood mortality rates by demographic characteristics (that is, sex of child, mother's age at birth, birth order, and previous birth interval).

As in the case of more developed countries, early childhood mortality among females is lower than that of males in all mortality categories. The table also shows that there is a tendency for high neonatal mortality for births to mothers who are under age 20 at the time of the child's birth. There is a positive association between higher birth order and a greater probability of dying, irrespective of whether in infancy or early childhood. The pattern emerges with post-neonatal mortality, when conditions in the household and community influence health status of the baby. Finally, when the previous birth interval is shorter, the mortality rate of infants, especially neonates, is higher. The infant mortality rate is cut in half—from 34 to 17 per 1,000—when there is an interval of four years or more between births as opposed to less than two years.

Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Sri Lanka 2006-07

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Child's sex					
Male	16	5	21	5	26
Female	12	3	16	4	19
Mother's age at birth					
<20	22	1	23	1	24
20-29	14	5	19	4	23
30-39	13	4	17	5	22
40-49	(17)	(2)	(18)	*	*
Birth order					
1	14	3	17	2	19
2-3	14	4	18	4	22
4-6	19	9	28	10	37
7+	*	*	*	*	*
Previous birth interval[2]					
<2 years	24	10	34	7	40
2 years	14	8	21	8	29
3 years	10	4	14	5	19
4+ years	15	3	17	4	22

Note: Rates based on 250 to 499 exposed persons (unweighted) are in parentheses. An asterisk indicates that a rate is based on fewer than 250 exposed persons and has been suppressed.
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births

8.5 PERINATAL MORTALITY

Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute perinatal deaths. The distinction between a stillbirth and an early neonatal death may be a fine one, often depending on observing and then remembering sometimes-faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are closely linked, and just examining one or the other can understate the true level of mortality around delivery. For this reason, deaths around delivery are combined into the perinatal mortality rate. Thus this indicator is not affected by definitional variation or carelessness in recording practices concerning what a stillbirth is. The perinatal mortality rate is derived by dividing the number of perinatal deaths by the total number of pregnancies reaching seven months of gestation. Table 8.4 presents the number of stillbirths, early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey.

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	1	9	21	470
20-29	24	28	13	3,837
30-39	33	18	20	2,556
40-49	4	3	*	189
Previous pregnancy interval in months[4]				
First pregnancy	24	21	17	2,658
<15	2	4	(17)	345
15-26	5	9	19	713
27-38	4	5	12	709
39+	27	19	17	2,627
Residence				
Urban	8	3	12	912
Rural	50	51	18	5,731
Estate	4	3	15	409
Mother's education				
No education	2	4	*	166
Primary	11	4	23	678
Secondary	32	33	18	3,678
Passed G.C.E. (O/L)	3	5	9	804
Higher	14	11	14	1,726
Wealth quintile				
Lowest	14	18	21	1,480
Second	15	10	17	1,437
Middle	14	14	21	1,328
Fourth	13	7	14	1,448
Highest	7	9	11	1,358
Total	62	57	17	7,051

Note: Rates based on 250 to 499 unweighted pregnancies are in parentheses; an asterisk indicates a rate based on fewer than 250 unweighted pregnancies that has been suppressed.
[1] Stillbirths are foetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 mos., 24-35 mos., 36-47 mos., and 48+ mos.

The perinatal mortality rate is 17 per 1,000. There is only slight variation among the three residence categories. There is an inverse relationship between perinatal mortality and mother's education. As for the wealth quintile, perinatal mortality is comparatively low at the highest wealth quintile.

8.6 HIGH-RISK FERTILITY BEHAVIOUR

Findings from scientific studies have confirmed that there is a strong relationship between a child's chances of dying and certain fertility behaviours. Typically, the probability of dying in early childhood is much greater if children are born to mothers who are too young or too old, if they are born after a short preceding birth interval, or if they are high parity births. Very young mothers may experience difficult pregnancies and deliveries because of their physical immaturity. Older women may also experience age-related problems during pregnancies and deliveries. In this analysis, a mother is considered to be "too young" if she is less than 18 years and "too old" if she is above 34 years at the time of delivery. A "short birth interval" is a birth occurring within 24 months of a previous birth.

Table 8.5 shows the distribution of children born in the five years preceding the survey by risk category. The data show that 38 percent of births are not in any high-risk category. First births to women age 18-34 are considered to have an unavoidable risk, and they are included in the analysis as a separate risk category. The percentage of births in this category is also 38 percent. Twenty percent of births fall into a single high-risk category, while the last group is those with multiple avoidable high-risk factors, which represents 5 percent of births. Among births for all the avoidable risk categories, four out of five are in the single high-risk category, and the remainder has multiple high risks.

The second column of the table shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. Births with multiple risks are twice as likely to end in premature death as births without any risk factors. The risk ratio is only slightly elevated for births with a single avoidable risk factor (1.3).

Looking at the specific risk categories, the highest risk ratio (2.1) is for a birth interval less than 24 months. The next highest risk ratio (2.0) is for births to mothers whose age is greater than 34 and birth order greater than 3. Thankfully, very few births take place in either of these two categories (about 4 percent for each).

The final column in Table 8.5 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. Nearly 40 percent are not in any high-risk category.

Altogether slightly over half of women are in any avoidable high-risk category, with the single high-risk category (36 percent) more prominent. For these women, the most common risk is that their age exceeds 34 years. The next highest proportion is for mothers 35 and older whose pregnancy is a fourth-order birth or higher (13 percent). Next, 8 percent of currently married women are in the unavoidable risk category.

Focusing on types of risks with both relatively higher risk ratios and sizeable proportions of women could be useful in targeting special care during pregnancy. The data suggest that mothers whose age is greater than 34, who already have two or more births, and who have given birth less than 24 months ago should be given special attention during the different stages of pregnancy care.

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Sri Lanka 2006-07

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	37.7	1.00	38.8[a]
Unavoidable risk category			
First order births between ages 18 and 34 years	37.5	0.90	7.7
Single high-risk category			
Mother's age <18	2.0	1.44	0.2
Mother's age >34	9.9	0.82	25.0
Birth interval <24 months	4.2	2.11	8.3
Birth order >3	3.7	1.48	3.1
Subtotal	19.7	1.28	36.6
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.1	*	0.0
Age >34 and birth interval <24 months	0.6	(0.00)	1.2
Age >34 and birth order >3	3.5	1.99	13.4
Age >34 and birth interval <24 months and birth order >3	0.2	*	1.0
Birth interval <24 months and birth order >3	0.7	(4.74)	1.2
Subtotal	5.1	2.06	16.9
In any avoidable high-risk category	24.8	1.44	53.5
Total	100.0	na	100.0
Number of births/women	6,989	na	13,748

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases, while an asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months, or older than 34 years and 2 months; latest birth less than 15 months ago; or latest birth being of order 3 or higher.

[2] Includes the category age <18 and birth order >3

[a] Includes sterilized women

REPRODUCTIVE HEALTH 9

Dharma Dissanayake

This chapter presents the 2006-07 SLDHS findings on maternal health, antenatal, delivery, and postnatal care, and problems in accessing health care. The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and wellbeing of both mother and child. These findings are important to policymakers and programme implementers in formulating programmes and policies and improving reproductive and child health care services. The data on antenatal care (ANC) from the 2006-07 SLDHS provide details on the type of service provider, the number of ANC visits made, the stage of pregnancy at the time of the first visit, and the services and information provided during ANC, including whether tetanus toxoid was received.

9.1 ANTENATAL CARE

The major objective of antenatal care is to identify and treat problems during pregnancy such as anaemia and infections. In addition, early contact with the health care system can improve the timely and appropriate use of delivery care services. Regular antenatal care throughout pregnancy contributes to positive outcomes at delivery. In the SLDHS interviewers recorded the source(s) of antenatal care and the person(s) who provided that care for women's most recent births. Table 9.1 shows the type of antenatal care provider for women who had a live birth in the five years preceding the survey according to background characteristics.

The table shows that 99 percent of women in Sri Lanka receive antenatal care from a skilled provider. The proportion receiving ANC from a skilled provider is remarkably uniform across all categories for age, residence, district, woman's education, and household wealth quintile. Even in the estate sector, ANC usage is at the same high level.

Although doctors are the most frequently seen provider (96 percent), women also go to public health midwives often for prenatal care (44 percent). Women of all educational levels are equally likely to see a public health midwife during pregnancy, but women with more education see doctors more frequently than those with little or no education.

As shown in Table 9.2, ANC utilization has inched up from the already high level of 95 percent according to the 2000 SLDHS to almost 100 percent in the 2006-07 SLDHS.

9.1.1 Number of Antenatal Care Visits and Timing of First Visit

Antenatal care is more beneficial in preventing unfavourable pregnancy outcomes when it is sought early in the pregnancy and continued through to delivery. Health professionals recommend that the first antenatal visit should occur within the first three months of pregnancy and continue on a monthly basis through the 28th week of pregnancy and every two weeks up to the 36th week (or until birth). Under normal circumstances, WHO recommends that a woman without complications have at least four ANC visits, the first of which should take place during the first trimester.

Table 9.3 presents information on antenatal care visits for the most recent birth, including the number of visits, the timing of the first visit, and median duration of pregnancy at first visit by residential sector. It shows that 93 percent of mothers receive four or more antenatal visits. In addition, 92 percent of women have their first visit within the first three months of the pregnancy. Among those who sought care, the median duration of pregnancy at first visit is 2.4 months.

Table 9.1 Antenatal care

Among women age 15-49 who had a live birth in the five years preceding the survey, percentage who saw specific providers for antenatal care (ANC) for the most recent birth, and the percentage receiving ANC from a skilled provider for the most recent birth, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Doctor specialist/ doctor	Midwife	Other	No antenatal care	Missing	Percentage receiving antenatal care from a skilled provider[1]	Number of women
Mother's age at birth							
<20	90.1	40.6	0.0	1.0	0.2	98.8	386
20-34	90.6	44.9	0.6	0.3	0.1	99.5	4,698
35-49	91.2	43.1	0.2	0.6	0.1	99.3	930
Birth order							
1	92.6	44.5	0.4	0.2	0.2	99.5	2,335
2-3	90.1	43.7	0.7	0.5	0.0	99.4	3,175
4-5	85.7	47.9	0.0	0.4	0.6	99.0	426
6+	84.2	43.8	0.0	0.0	0.0	100.0	78
Residence							
Urban	92.3	38.0	0.4	0.2	0.2	99.5	755
Rural	90.8	46.0	0.6	0.4	0.1	99.4	4,959
Estate	84.7	32.7	0.0	0.6	0.7	98.8	300
Region							
Colombo	96.8	43.6	0.4	0.4	0.0	99.5	726
Gampaha	86.5	72.3	0.3	0.4	0.2	99.3	699
Kalutara	91.9	65.8	1.3	0.3	0.0	99.7	356
Kandy	95.6	27.4	0.5	0.5	0.0	99.5	421
Matale	92.5	49.1	0.0	0.0	0.0	100.0	117
Nuwara Eliya	84.9	32.4	0.0	0.3	0.5	99.3	205
Galle	93.6	74.2	0.4	0.0	0.0	100.0	305
Matara	79.2	80.1	0.2	0.2	0.0	99.8	253
Hambantota	98.3	38.3	0.0	0.0	0.0	100.0	201
Batticaloa	60.6	66.6	0.0	0.0	0.0	100.0	206
Ampara	90.8	10.9	0.3	0.2	1.5	98.0	215
Trincomalee	92.0	35.9	0.0	1.6	1.1	97.3	137
Kurunegala	92.8	45.8	2.5	1.3	0.0	98.4	508
Puttalam	82.4	57.6	0.2	0.5	0.0	99.5	251
Anuradhapura	89.8	18.6	0.0	0.0	0.0	100.0	263
Polonnaruwa	95.1	19.4	0.0	0.0	0.0	100.0	140
Badulla	85.3	31.6	0.0	0.4	0.4	99.2	254
Moneragala	92.5	55.6	0.5	0.9	0.4	98.7	165
Ratnapura	99.1	6.6	0.8	0.0	0.0	100.0	342
Kegalle	99.4	2.3	0.5	0.0	0.0	100.0	248
Mother's education							
No education	75.1	46.2	0.5	0.4	1.4	97.7	139
Primary	81.9	43.0	0.3	0.8	0.4	98.8	541
Secondary	90.2	44.6	0.5	0.4	0.0	99.5	3,162
Passed G.C.E. (O/L)	92.7	47.7	0.2	0.0	0.2	99.8	706
Higher	95.4	42.3	0.9	0.4	0.1	99.5	1,465
Wealth quintile							
Lowest	86.9	40.2	0.8	0.5	0.4	99.0	1,220
Second	90.5	41.0	0.4	0.5	0.0	99.5	1,212
Middle	89.1	47.8	0.5	0.3	0.3	99.3	1,177
Fourth	92.7	48.6	0.6	0.3	0.0	99.7	1,254
Highest	94.2	43.9	0.4	0.4	0.0	99.6	1,151
Total	90.7	44.3	0.5	0.4	0.1	99.4	6,014

Note: Percentages may sum to more than 100.0 because women may have seen more than one provider.
[1] Skilled provider includes doctor specialist, doctor, and midwife

Table 9.2 Trends in antenatal care coverage

Among ever-married women age 15-49 who had a live birth in the five years before the survey, percentage who received antenatal care from a skilled health provider for their most recent birth, Sri Lanka 1987-2006-07

Year	Percentage	Number of women
1987[a]	96.5	3,906
1993	96.5	3,657
2000	94.5	2,443
2006-07	99.5	5,456

Note: Data from all surveys exclude Eastern and Northern Provinces to be comparable.
Source: DCS and IRD, 1988, Table 6.5; DCS, 1995, Table 6.7; DCS, 2002, Table 8.7; special tabulations for 2006-07
[a] Data refer to all births in the five years before the survey

Table 9.3 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit; and among women with ANC, median months pregnant at first visit, according to residence, Sri Lanka 2006-07

Number and timing of ANC visits	Residence			Total
	Urban	Rural	Estate	
Number of ANC visits				
None	0.2	0.4	0.6	0.4
1	2.3	1.2	0.5	1.3
2-3	2.8	1.9	2.4	2.0
4+	84.4	93.6	94.5	92.5
Don't know/missing	10.4	2.9	2.1	3.8
Total	100.0	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit				
<4	92.3	93.3	76.7	92.4
4-5	5.5	4.3	17.8	5.1
6-7	0.7	0.9	3.1	1.0
8+	0.1	0.1	0.1	0.1
Don't know/missing	1.3	1.4	2.3	1.4
Total	100.0	100.0	100.0	100.0
Number of women	755	4,959	300	6,014
Median months pregnant at first visit (for those with ANC)	2.4	2.4	3.1	2.4
Number of women with ANC	754	4,939	298	5,991

Some women in the estate sector tend to make their first ANC visit somewhat later in pregnancy than women in urban and non-estate rural areas. Three-quarters of estate women made their initial ANC visit in the first trimester, compared with over 90 percent of urban and rural women. The median duration of pregnancy at first visit is 3.1 for estate women, compared to 2.4 for urban and rural women. It is not possible to say if there was an actual difference between women in urban areas and all other residential sectors on number of visits, since 10 percent of urban women could not recall the number of antenatal visits.

9.1.2 Components of Antenatal Care

Observing the content of antenatal care is essential for assessing the quality of these health care services. Pregnancy complications are a primary source of maternal and child morbidity and mortality. A number of health care procedures are recommended to be performed to monitor and check the development of pregnancies in mothers. Ensuring that pregnant women receive information on the signs of complications and testing them for complications should be routinely included in all antenatal care visits. To help assess ANC services, respondents in the 2006-07 SLDHS were asked whether they had been advised of complications or received certain screening tests (weight, blood pressure, urine and blood samples) during at least one of the antenatal visits. Table 9.4 presents information on the percentage of women who took iron tablets or syrup, were informed of the signs of pregnancy complications, and received selected services during antenatal care visits for their most recent birth in the last five years.

The table shows that almost all pregnant women in Sri Lanka receive core antenatal services. At their visits they have been weighed, their blood pressure checked, and blood and urine tests done (virtually 100 percent for each item). Counselling about signs of pregnancy complications was not reported as universally, however; two-thirds of the women said they had been so informed. During the last pregnancy, 93 percent took deworming medications and 98 percent took iron tablets.

As for differences by background characteristics, there is little variation because of the very high levels on the antenatal care indicators, with the exception of advice on complications. As birth order increases, women are less likely to be informed about pregnancy complications. Almost three-quarters of women having their first birth got such information, but the proportion declines steadily for second- and higher-order births.

Women living in estate areas are also less likely to report that they had received information on complications (50 percent) compared with women in other rural (70 percent) and urban (66 percent) areas. Figure 9.1 shows the variation—ranging from 54 to 84 percent—among districts in the percentage of pregnant women who are advised about potential complications during antenatal care. The likelihood that a pregnant woman is informed of pregnancy complications increases substantially with her education level, but does not vary much by wealth quintile.

Mother's education is only slightly associated with taking iron—from 94 percent for the lowest to 99 percent for the highest education level. It is more strongly associated with taking drugs against intestinal parasites.

Table 9.5 shows that the proportions of ANC clients who receive the services mentioned have remained at the highest possible levels since 2000.

Table 9.4 Components of antenatal care

Among ever-married women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Among women with a live birth in the past five years, the percentage who during the pregnancy for the most recent birth took:		Number of women with a live birth in the past five years	Among women who received antenatal care for their most recent birth in the past five years, the percentage who received selected services:					Number of women with ANC for their most recent birth
	Iron tablets or syrup	Intestinal parasite drugs		Informed of signs of pregnancy complications	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	
Mother's age at birth									
<20	97.8	90.6	386	67.0	99.4	99.7	99.7	99.6	382
20-34	98.3	93.3	4,698	69.1	99.8	99.7	99.6	99.1	4,684
35-49	97.8	90.2	930	63.2	99.4	99.7	99.4	99.3	925
Birth order									
1	98.8	91.7	2,335	74.0	99.8	99.7	99.8	99.7	2,330
2-3	98.3	94.2	3,175	66.2	99.8	99.8	99.6	99.0	3,159
4-5	94.8	88.7	426	52.6	98.8	99.6	99.4	98.1	424
6+	94.9	77.2	78	47.9	98.4	96.4	96.6	94.6	78
Residence									
Urban	98.1	88.4	755	65.6	99.3	99.7	99.8	99.2	754
Rural	98.6	93.5	4,959	69.5	99.8	99.7	99.6	99.3	4,939
Estate	92.7	89.9	300	50.1	99.3	98.8	98.8	96.9	298
District									
Colombo	98.6	89.5	726	66.4	99.8	100.0	99.8	99.3	723
Gampaha	99.5	92.3	699	59.5	100.0	99.6	99.8	99.9	696
Kalutara	98.7	97.8	356	67.9	99.9	100.0	99.3	99.5	355
Kandy	98.3	95.5	421	72.0	99.6	99.9	99.5	98.6	419
Matale	99.3	94.8	117	74.6	98.0	97.3	99.2	98.3	117
Nuwara Eliya	96.2	93.0	205	69.7	99.4	98.9	98.2	98.1	205
Galle	97.8	93.6	305	58.3	99.7	100.0	98.9	97.2	305
Matara	98.6	96.9	253	75.5	99.8	98.6	100.0	97.6	252
Hambantota	100.0	99.2	201	75.1	100.0	100.0	99.5	100.0	201
Batticaloa	93.6	62.0	206	57.9	100.0	99.6	100.0	99.0	206
Ampara	96.7	91.2	215	54.5	99.4	99.4	99.0	98.4	215
Trincomalee	97.6	76.1	137	53.7	100.0	100.0	100.0	100.0	135
Kurunegala	97.4	90.3	508	83.8	99.7	100.0	100.0	99.4	501
Puttalam	98.7	93.9	251	65.1	98.9	100.0	100.0	100.0	250
Anuradhapura	99.2	97.1	263	63.9	100.0	100.0	100.0	100.0	263
Polonnaruwa	100.0	96.9	140	73.2	100.0	100.0	100.0	100.0	140
Badulla	98.3	96.3	254	66.0	99.4	98.9	99.3	97.4	253
Moneragala	99.5	96.9	165	75.2	100.0	100.0	100.0	99.4	163
Ratnapura	96.5	96.6	342	72.2	99.6	99.6	99.2	99.6	342
Kegalle	98.4	99.2	248	77.0	100.0	100.0	100.0	99.8	248
Mother's education									
No education	93.7	82.6	139	45.3	100.0	98.9	100.0	98.1	138
Primary	94.1	87.8	541	56.9	99.6	99.3	98.8	98.3	537
Secondary	98.5	93.8	3,162	69.6	99.7	99.7	99.6	99.2	3,150
Passed G.C.E. (O/L)	99.8	94.9	706	68.4	99.9	100.0	99.8	99.4	706
Higher	98.9	92.0	1,465	70.9	99.8	99.7	99.8	99.4	1,459
Wealth quintile									
Lowest	96.4	92.6	1,220	64.1	99.5	99.5	99.0	98.4	1,214
Second	98.3	93.8	1,212	70.4	99.9	99.4	99.4	99.1	1,207
Middle	98.7	94.2	1,177	69.6	99.6	99.9	99.9	99.1	1,174
Fourth	99.0	94.1	1,254	71.2	99.8	99.8	99.9	99.7	1,250
Highest	98.7	88.4	1,151	64.9	99.8	99.9	99.8	99.4	1,146
Total	98.2	92.7	6,014	68.1	99.7	99.7	99.6	99.1	5,991

Figure 9.1 Percentage of Women Informed about Pregnancy Complications during Antenatal Care, by District

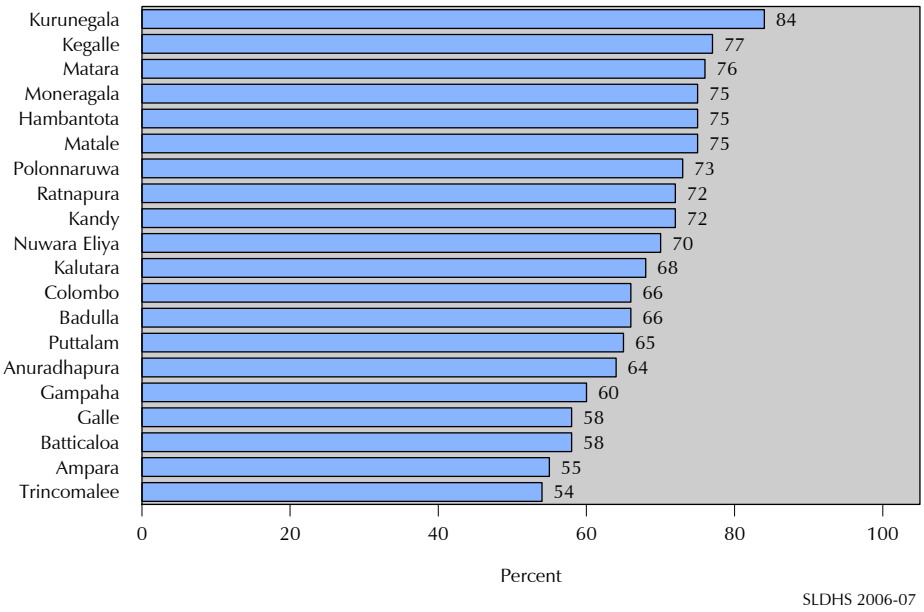


Table 9.5 Trends in antenatal care components

Among ever-married women age 15-49 receiving antenatal care for the most recent live birth in the five years before the survey, percentage who received specific antenatal services, Sri Lanka 2000 and 2006-07

Year	Weighed	Urine tested	Blood pressure measured	Number
2000	98.9	98.9	98.6	2,443
2006-07	99.7	99.6	99.7	5,435

Note: Excludes data from Eastern and Northern provinces to be comparable.
Source: DCS, 2002, Table 8.8; special tabulations for 2006-07

9.1.3 Tetanus Toxoid Injections

Neonatal tetanus is a leading cause of neonatal death in developing countries where high proportions of deliveries are conducted at home or in places where hygienic conditions may be poor. Tetanus toxoid (TT) immunization is given to pregnant women to prevent neonatal tetanus. If a woman has received no previous TT injections, a pregnant woman needs two doses of TT during pregnancy for full protection. However, if a woman was immunized before she became pregnant, she may require one or no TT injections during pregnancy, depending on the number of injections she has ever received and the timing of the last injection. For a woman to have lifetime protection, a total of five doses is required.

The 2006-07 SLDHS collected data on whether women received TT injections during pregnancy and, if so, how many, and whether or not the baby was protected against neonatal tetanus for women's most recent live birth in the five years preceding the survey.

Table 9.6 shows that 48 percent of women had two or more TT injections during their last pregnancy and 92 percent of women's recent births were protected against neonatal tetanus. A higher proportion of younger women and women pregnant with their first birth received two TT injections during their pregnancy than did older women and those having their second or higher births. The youngest women, mostly pregnant for the first time, are more likely to need vaccination because they may not have ever received TT. On the other hand, older women, particularly those at higher parities, may have had sufficient TT doses prior to this pregnancy, and thus did not require further injections.

Table 9.6 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus	Number of mothers
Mother's age at birth			
<20	84.4	92.5	386
20-34	48.3	92.7	4,698
35-49	29.8	85.8	930
Birth order			
1	92.8	94.6	2,335
2-3	18.8	91.0	3,175
4-5	21.5	83.1	426
6+	21.4	71.3	78
Residence			
Urban	54.1	90.5	755
Rural	46.9	91.8	4,959
Estate	45.7	90.6	300
District			
Colombo	53.6	90.2	726
Gampaha	47.7	91.8	699
Kalutara	54.9	95.0	356
Kandy	39.9	85.3	421
Matale	49.4	97.6	117
Nuwara Eliya	48.7	95.0	205
Galle	38.4	91.3	305
Matara	43.6	99.1	253
Hambantota	43.8	95.8	201
Batticaloa	65.2	89.4	206
Ampara	47.8	77.7	215
Trincomalee	39.6	79.9	137
Kurunegala	52.3	89.9	508
Puttalam	55.3	94.2	251
Anuradhapura	36.0	97.0	263
Polonnaruwa	45.0	93.8	140
Badulla	42.2	85.8	254
Moneragala	44.9	93.3	165
Ratnapura	48.6	96.2	342
Kegalle	44.7	97.7	248
Mother's education			
No education	43.1	83.0	139
Primary	35.3	84.3	541
Secondary	47.2	91.4	3,162
Passed G.C.E. (O/L)	51.8	93.7	706
Higher	52.1	94.6	1,465
Wealth quintile			
Lowest	43.5	88.5	1,220
Second	43.5	90.7	1,212
Middle	51.2	93.3	1,177
Fourth	51.6	94.1	1,254
Highest	49.2	91.5	1,151
Total	47.8	91.6	6,014

[1] Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth.

TT protection is uniformly high for urban, rural, and estate women. It is also over 90 percent for the majority of districts. The lowest level of protection, about 80 percent, occurs in two districts (Ampara and Trincomalee). As women's education level goes up, the percentage of births protected from neonatal tetanus also increases from 83 percent to 95 percent. It also generally increases as wealth quintile increases.

9.2 DELIVERY CARE

9.2.1 Place of Delivery

The objective of providing safe delivery services is to protect the life and health of the mother and her child. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infections leading to morbidity and mortality of either the mother or the baby. In the 2006-07 SLDHS, women were asked to provide information on the place and type of assistance during delivery for all children born in the five years preceding the survey. Table 9.7 presents the place of delivery and percentage delivered in a health facility according to women's background characteristics.

The survey reveals that 98 percent of births take place at a health facility and only 1 percent at home or some other place. Government health facilities care for 94 percent of the deliveries, while 4 percent of births take place in private-sector health facilities. There is little variation in the proportion of births occurring in a health facility by background characteristics.

The proportion of births occurring in a private-sector health facility is higher in districts of the Western Province (Colombo, Gampaha, and Kalutara), and in Kandy. These districts have large urban areas with more private providers and hospitals, as well as teaching hospitals.[1] Births in private facilities occur more often for women in the highest wealth quintile and the highest level of education (12 percent vs. less than 1 percent for women with no education).

Table 9.8 shows that there has been little change in the location of deliveries in the last seven years. Births at government-sector health facilities increased slightly, mainly due to small reductions in deliveries that take place at home.

[1] Teaching hospitals are located in the following districts covered in this survey: Colombo, Gampaha, Kandy, Galle, Kurunegala, Kegalle, and Batticaloa.

Table 9.7 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Health facility: Public sector	Health facility: Private sector	Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
Mother's age at birth								
<20	95.7	1.5	0.9	0.6	1.3	100.0	97.3	468
20-34	94.2	4.2	0.5	0.4	0.7	100.0	98.4	5,530
35-49	92.4	5.6	0.6	0.7	0.6	100.0	98.0	991
Birth order								
1	94.0	4.7	0.3	0.2	0.8	100.0	98.7	2,893
2-3	94.3	4.0	0.5	0.5	0.7	100.0	98.3	3,532
4-5	93.2	3.3	1.6	1.3	0.6	100.0	96.5	471
6+	88.3	1.9	5.7	1.4	2.6	100.0	90.3	93
Residence								
Urban	85.8	12.9	0.0	0.6	0.8	100.0	98.6	903
Rural	95.3	2.9	0.5	0.5	0.8	100.0	98.2	5,681
Estate	94.3	2.9	2.2	0.2	0.4	100.0	97.2	405
District								
Colombo	85.3	13.7	0.0	0.3	0.8	100.0	99.0	837
Gampaha	90.8	7.7	0.0	1.1	0.4	100.0	98.5	813
Kalutara	94.0	5.3	0.0	0.0	0.7	100.0	99.3	401
Kandy	92.8	6.2	0.2	0.2	0.6	100.0	98.9	492
Matale	99.8	0.0	0.2	0.0	0.0	100.0	99.8	133
Nuwara Eliya	94.8	1.8	2.4	0.4	0.6	100.0	96.6	258
Galle	97.0	2.4	0.0	0.6	0.0	100.0	99.4	371
Matara	93.7	2.9	0.2	1.8	1.4	100.0	96.6	295
Hambantota	99.0	0.0	0.0	0.0	1.0	100.0	99.0	229
Batticaloa	96.4	0.6	2.9	0.0	0.0	100.0	97.1	248
Ampara	95.2	0.9	2.8	0.4	0.8	100.0	96.0	276
Trincomalee	93.2	1.2	2.8	0.0	2.8	100.0	94.4	165
Kurunegala	95.5	2.5	0.0	0.0	2.1	100.0	97.9	561
Puttalam	95.7	1.3	0.0	2.1	0.9	100.0	97.0	285
Anuradhapura	97.9	0.2	1.4	0.0	0.4	100.0	98.1	290
Polonnaruwa	98.5	1.0	0.5	0.0	0.0	100.0	99.5	154
Badulla	95.4	1.6	0.9	0.9	1.1	100.0	97.0	315
Moneragala	97.5	0.8	1.4	0.0	0.4	100.0	98.3	188
Ratnapura	97.0	2.0	0.4	0.3	0.3	100.0	99.0	393
Kegalle	98.3	1.3	0.0	0.0	0.4	100.0	99.6	285
Mother's education								
No education	92.0	0.6	5.9	0.9	0.5	100.0	92.7	164
Primary	95.3	1.3	2.1	0.2	1.2	100.0	96.6	667
Secondary	97.4	0.9	0.4	0.4	0.8	100.0	98.3	3,645
Passed G.C.E. (O/L)	92.4	6.4	0.1	0.6	0.5	100.0	98.8	801
Higher	87.3	11.6	0.0	0.5	0.5	100.0	99.0	1,712
Antenatal care visits[1]								
None	*	*	*	*	*	100.0	*	23
1-3	93.8	4.1	1.4	0.7	0.0	100.0	97.9	198
4+	95.1	4.0	0.5	0.4	0.1	100.0	99.1	5,563
Wealth quintile								
Lowest	96.4	0.7	1.5	0.5	0.9	100.0	97.1	1,466
Second	98.1	0.1	0.7	0.4	0.7	100.0	98.2	1,423
Middle	98.1	0.5	0.3	0.3	0.8	100.0	98.6	1,314
Fourth	96.4	2.2	0.2	0.3	0.8	100.0	98.7	1,435
Highest	80.6	18.0	0.1	0.9	0.4	100.0	98.7	1,352
Total	94.0	4.2	0.6	0.5	0.7	100.0	98.2	6,989

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes some cases with antenatal care visits missing.
[1] Includes only the most recent birth in the five years preceding the survey

Table 9.8 Trends in place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, Sri Lanka 2006-07

Year	Government facility	Private facility	Home	Other	Total	Number of births
1993	87.3	6.5	6.0	0.2	100.0	3,657
2000	91.6	5.5	1.8	1.1	100.0	2,935
2006-07	93.9	4.6	0.3	0.5	100.0	6,301

Note: Excludes Eastern and Northern provinces to be comparable.
Source: DCS, 1995, Table 6.9; DCS, 2002, Table 8.10; special tabulations for 2006-07

9.2.2 Assistance During Delivery

In addition to place of birth, assistance during childbirth is an important variable that influences the birth outcome and the subsequent health of the mother and infant. The skills of the birth attendant determine whether or not he or she can manage complications and observe hygienic practices. Table 9.9 shows the percent distribution of live births in the five years preceding the survey by person providing assistance, according to background characteristics.

In the 2006-07 SLDHS, if the respondent was assisted by more than one health person at delivery, the interviewer was instructed to record all persons attending the delivery. In Table 9.9 all persons who assisted at the delivery are shown separately. Multiple responses are common, which means that many women benefit from the participation of both a doctor and a midwife in their delivery care. The table also shows the percentage delivered by a skilled provider, defined as a doctor, nurse, or midwife.

Skilled providers assisted almost all births (99 percent) in the five years preceding the survey. About three-fourths of births were assisted by a doctor[2] and 80 percent by a nurse or midwife. In the 2000 SLDHS, the proportion of births assisted by a health professional was 96 percent (DCS, 2002), demonstrating that Sri Lankan health facilities continued to improve over the seven-year period and have essentially achieved universal safe delivery.[3]

Table 9.9 also shows that in 8 districts (including those with large estate populations) only two-thirds or less of births are attended by doctors. The lowest percentages are in the heavily rural districts of Hambantota, Moneragala, Polonnaruwa, and Anuradhapura. Higher than average proportions of deliveries assisted by a doctor are reported from the districts of Colombo (84 percent), Gampaha (81 percent), and Puttalam (83 percent), for deliveries in the urban sector (80 percent), for first births (77 percent), and births to women in the highest wealth quintile (84 percent). Midwives help with over 80 percent of births, and slightly more often in rural than other residential areas. In four districts, 90 percent or more of births have a midwife's assistance.

Table 9.9 also indicates that 24 percent of births were delivered by Caesarean section (C-section), a surgical procedure. This rate is above the level of 5-15 percent identified by WHO as sufficient to take care of situations when C-section is necessary, such as first births with prolonged labour and births to older women (Dosa, 2001). The data show higher rates for these common indications for the procedure. C-sections are three times more likely among older women (35 percent) than mothers under 20 years of age. They are also more common for the first birth and decline as birth order increases.

However, differentials by background characteristics suggest non-clinical factors also influence the frequency of C-section in Sri Lanka. These factors could include the availability of surgical services in certain places, providers' convenience and economic interests, women's preferences, and greater household income for urban women.

Births to urban women are more likely to be delivered by C-section (31 percent) than births to rural women (23 percent) or women in estate areas (14 percent). C-section rates are higher in districts with numerous private hospitals (particularly the Western province—Colombo, Gampaha, and Kalutara) and several districts with teaching hospitals. Over one-third of births in Colombo district, which includes the capital, are by C-section.

[2] The category of doctor includes specialists, MBBS doctors, registered medical practitioners, and doctors not otherwise specified.

[3] The comparable percent for 2006-07 SLDHS (excluding Eastern Province) is 99 percent.

Table 9.9 Assistance during delivery

Among live births in the five years preceding the survey, percentage for which specific persons provided assistance during delivery, percentage assisted by a skilled provider, and percentage delivered by caesarean section, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Person providing assistance during delivery						Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Number of births
	Doctor	Nurse/ midwife	Traditional birth attendant	Relative/ other	No one	Don't know/ missing			
Mother's age at birth									
<20	67.1	78.0	0.1	0.5	0.0	1.3	98.1	11.4	468
20-34	74.0	81.7	0.6	0.9	0.1	0.6	98.6	22.9	5,530
35-49	77.9	79.1	0.8	1.1	0.1	0.6	98.8	34.9	991
Birth order									
1	76.9	81.7	0.6	0.6	0.0	0.7	98.9	26.9	2,893
2-3	72.9	81.2	0.7	1.0	0.1	0.6	98.6	23.0	3,532
4-5	67.6	79.8	0.1	1.3	0.1	0.6	98.3	13.7	471
6+	66.7	64.0	3.0	3.9	0.0	1.2	94.0	9.9	93
Place of delivery									
Health facility	74.9	81.9	0.5	0.6	0.0	0.1	99.7	24.1	6,866
Elsewhere	43.6	44.2	17.0	32.9	3.0	0.0	55.6	12.0	72
Residence									
Urban	80.1	75.8	0.2	0.6	0.2	0.6	99.2	30.8	903
Rural	73.5	82.1	0.7	0.8	0.1	0.7	98.7	23.4	5,681
Estate	69.0	78.9	1.1	2.7	0.0	0.5	96.5	14.2	405
District									
Colombo	84.0	80.8	0.3	0.3	0.1	0.8	99.1	36.0	837
Gampaha	81.4	86.1	1.8	0.8	0.0	0.4	99.4	29.0	813
Kalutara	76.4	79.1	0.4	0.0	0.3	0.1	99.6	25.1	401
Kandy	67.4	69.7	0.0	0.4	0.0	0.6	99.3	23.8	492
Matale	74.1	75.3	0.0	1.7	0.0	0.0	98.3	27.1	133
Nuwara Eliya	64.6	85.9	1.2	4.6	0.0	0.6	95.8	21.0	258
Galle	72.1	88.8	0.3	1.6	0.4	0.0	99.5	25.9	371
Matara	75.2	90.8	0.2	0.5	0.0	1.1	98.7	22.9	295
Hambantota	61.8	97.2	0.0	0.0	0.0	1.0	99.0	19.8	229
Batticaloa	78.2	41.0	0.3	1.8	0.0	0.0	98.4	7.6	248
Ampara	65.8	74.7	1.8	2.2	0.0	0.8	96.8	20.4	276
Trincomalee	71.9	43.7	1.1	0.5	0.0	2.4	96.5	18.4	165
Kurunegala	76.3	89.6	1.2	0.3	0.0	2.1	97.7	18.3	561
Puttalam	83.3	68.8	0.5	0.0	0.3	0.4	99.3	18.7	285
Anuradhapura	62.9	89.4	0.7	1.1	0.0	0.4	98.1	17.9	290
Polonnaruwa	60.4	81.6	0.0	0.5	0.0	0.0	99.5	18.9	154
Badulla	67.5	83.4	0.5	2.3	0.0	1.6	96.0	20.1	315
Moneragala	56.3	73.6	0.0	1.3	0.4	0.0	99.2	20.0	188
Ratnapura	79.5	92.6	0.0	0.7	0.0	0.3	99.3	22.4	393
Kegalle	75.0	90.7	0.2	0.0	0.0	0.4	99.4	27.8	285
Mother's education									
No education	71.3	67.6	0.9	4.6	0.0	0.5	94.4	10.7	164
Primary	72.2	75.5	1.0	1.9	0.1	0.9	96.9	17.2	667
Secondary	71.4	81.5	0.6	0.7	0.1	0.7	98.7	19.0	3,645
Passed G.C.E. (O/L)	75.8	82.1	0.2	0.7	0.0	0.6	99.3	25.7	801
Higher	80.2	83.2	0.7	0.5	0.0	0.6	99.3	37.1	1,712
Wealth quintile									
Lowest	69.5	80.0	0.8	1.6	0.1	0.9	97.4	16.3	1,466
Second	69.3	81.2	0.5	1.0	0.1	0.7	98.4	17.8	1,423
Middle	73.8	81.7	1.0	1.0	0.1	0.7	98.9	19.5	1,314
Fourth	74.2	81.1	0.7	0.2	0.1	0.4	99.2	26.2	1,435
Highest	84.4	81.6	0.1	0.6	0.0	0.6	99.4	40.0	1,352
Total	74.1	81.1	0.6	0.9	0.1	0.7	98.6	23.8	6,989

Note: Percentages may sum to more than 100.0 because women may have seen more than one provider. Total includes some women with information missing on place of delivery.
[1] Skilled provider includes doctor, nurse, and midwife.

As the table indicates, the rates are more than three times higher for women in the top education level (37 percent) compared with the lowest (11 percent). Similarly, C-section births occur more frequently for women in the highest wealth quintile than the lowest. Further analysis would help to understand the relative importance of these correlated background characteristics (residence, education, and wealth quintile), as well as women's age and birth order, to the observed level of C-section. It appears that discretionary use of C-section is on the rise in Sri Lanka.

9.3 POSTNATAL CARE

A large proportion of maternal and neonatal deaths occurs during the first 48 hours after delivery. Thus, postnatal care is important for both the mother and the child to treat complications, as well as to provide the mother with important information on how to care for herself and her child. It is recommended that all women receive a check on their health within two days of delivery. To assess the extent of postnatal care utilization, respondents were asked whether they had received a health check after delivery of the last birth in the five years preceding the survey, the timing of the first check-up, and the type of health provider performing the postnatal check-up. This information is presented according to background characteristics in Tables 9.10 and 9.11.

Some explanation of the construction of these tables is necessary. These two tables exclude births delivered by C-section because, unfortunately, mothers who had C-sections were not asked about a check-up before discharge, according to the questionnaire skip pattern. For all other deliveries in facilities, mothers were specifically asked about a check-up before discharge (which is usually the first postnatal check-up), who did the check, and when it was done after delivery. Although it may be reasonable to think that such a check-up is done for C-section cases, there are no data to confirm this assumption or provide the other two items. Thus, these two tables include only all vaginal deliveries—both in health facilities and non-facility locations. If a woman did not have a check-up before leaving the facility or delivered elsewhere, the time of a public health midwife's first home visit after delivery is used in Table 9.10, and the public health midwife is counted as the provider in Table 9.11.

Delivery in a health facility clearly increases the likelihood of a timely postnatal check-up. In Table 9.10, over 90 percent of non-surgical deliveries had a postnatal check within 48 hours, and the vast majority occurred within 4 hours of delivery. Only 4 percent of women had no check-up after delivery.

Notable differentials are present only for residence, district, and woman's education level. Looking at the percentage of last live births (normal deliveries) with a check within 2 days, women living in estate areas are slightly less likely to be examined (82 percent, combining the first three columns in Table 9.10) than women in urban and rural areas (over 90 percent for both). Check-ups within 2 days occur in most districts, but there are four districts (Nuwara Eliya, Batticaloa, Ampara, and Anuradhapura) where less than 80 percent of women have a check-up in the recommended period. Of special concern are the relatively high percents with no postnatal check in Batticaloa and Ampara (22 and 16 percent, respectively), despite the fact that over 90 percent of births in these districts (see Table 9.5) take place in health facilities. The percent receiving a timely postnatal check goes up with each succeeding education level.

Since most births take place in health facilities, women's first postnatal check is performed by a skilled provider over 90 percent of the time, as Table 9.11 shows. Another 5 percent of women have their first postnatal check-up at home when the public health midwife visits.

The public health midwife visit is relatively more important as the provider of this initial check after delivery in the estate areas (11 percent) and in four districts—Nuwara Eliya, Anuradhapura, Polonnaruwa, and Moneragala—where between 10 and 20 percent of these checks are done by the public health midwife.

No strong differentials are evident for other background characteristics, except education. Postnatal checks by a skilled provider increase as the level of education goes up. Women with primary or no education lack a check-up after the birth slightly more often than women with at least some secondary education.

Table 9.10 Timing of first postnatal checkup

Among women age 15-49 with a birth in the five years preceding the survey[1] the percent distribution of mothers' first postnatal checkup for the last live birth by time since delivery, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Mother's first postnatal checkup (time since delivery)					No postnatal checkup[1]	Total	Number of women
	Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/ missing			
Mother's age at birth								
<20	70.3	12.8	10.1	1.5	0.9	4.3	100.0	343
20-34	68.1	15.6	6.8	4.2	1.8	3.4	100.0	3,626
35-49	74.7	9.5	7.2	2.8	0.8	5.1	100.0	603
Birth order								
1	67.9	16.1	8.0	3.5	1.6	3.0	100.0	1,711
2-3	69.9	14.2	6.6	4.0	1.8	3.5	100.0	2,426
4-5	70.2	12.0	6.9	3.9	0.4	6.7	100.0	366
6+	69.2	5.6	6.4	7.1	0.0	11.7	100.0	69
Residence								
Urban	71.4	13.4	7.2	1.6	1.7	4.7	100.0	520
Rural	69.1	15.2	7.0	3.8	1.6	3.3	100.0	3,797
Estate	65.3	7.7	9.4	9.3	0.4	7.9	100.0	254
District								
Colombo	67.0	20.6	7.0	2.4	2.5	0.4	100.0	460
Gampaha	73.6	15.5	7.1	1.6	1.5	0.7	100.0	502
Kalutara	79.8	11.6	5.9	1.4	1.3	0.0	100.0	271
Kandy	74.3	10.7	4.1	1.5	2.3	7.1	100.0	318
Matale	69.0	12.6	3.9	5.7	3.3	5.4	100.0	86
Nuwara Eliya	61.9	10.6	5.4	14.8	0.6	6.7	100.0	161
Galle	60.6	20.9	11.4	3.7	2.1	1.2	100.0	224
Matara	88.3	5.6	2.5	2.8	0.5	0.4	100.0	193
Hambantota	68.6	13.7	10.0	3.4	1.2	3.1	100.0	157
Batticaloa	60.8	5.5	6.6	3.5	1.5	22.1	100.0	189
Ampara	55.8	15.0	9.1	2.1	2.0	16.1	100.0	170
Trincomalee	84.3	4.8	3.1	1.7	0.0	6.2	100.0	111
Kurunegala	63.4	24.9	6.8	2.8	0.6	1.5	100.0	416
Puttalam	79.7	8.7	6.0	0.5	0.6	4.4	100.0	204
Anuradhapura	39.1	24.3	12.7	17.4	3.3	3.1	100.0	217
Polonnaruwa	43.0	27.8	14.8	7.4	4.6	2.4	100.0	115
Badulla	63.9	15.0	8.2	5.2	2.1	5.6	100.0	202
Moneragala	60.4	16.7	13.1	6.3	1.7	1.7	100.0	134
Ratnapura	81.9	7.3	6.6	2.8	0.7	0.9	100.0	262
Kegalle	94.0	1.4	1.9	1.9	0.0	0.7	100.0	181
Education								
No education	66.3	2.2	9.6	5.9	7.4	8.4	100.0	121
Primary	69.3	8.9	7.3	4.6	1.9	8.1	100.0	446
Secondary	69.9	13.6	7.4	4.3	1.5	3.3	100.0	2,551
Passed G.C.E. (O/L)	67.8	17.4	8.2	2.9	1.2	2.6	100.0	524
Higher	68.1	19.9	5.6	2.6	1.1	2.7	100.0	930
Wealth quintile								
Lowest	67.1	11.3	8.1	5.1	2.4	5.9	100.0	1,018
Second	70.2	14.2	7.2	3.1	1.4	4.0	100.0	990
Middle	69.6	15.3	6.7	4.1	1.2	3.1	100.0	949
Fourth	68.7	17.4	6.8	3.7	1.1	2.3	100.0	921
Highest	70.6	15.1	6.6	3.0	1.7	2.9	100.0	694
Total	69.1	14.6	7.1	3.8	1.6	3.7	100.0	4,572

Note: Excludes women whose most recent birth was delivered by C-section because they were not asked about a checkup before discharge

[1] Includes women who received a checkup after 41 days

Table 9.11 Type of provider of first postnatal checkup

Among women age 15-49 with a birth in the five years preceding the survey, percent distribution of providers of mothers' first postnatal checkup for the last live birth, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Provider of mother's first postnatal checkup						
	Doctor/ nurse/ midwife	Public health midwife at home	Other	Don't know/ missing	No postnatal checkup[1]	Total	Number of women
Mother's age at birth							
<20	90.4	4.2	0.9	0.1	4.3	100.0	343
20-34	90.8	4.9	0.3	0.6	3.4	100.0	3,626
35-49	91.0	2.9	0.5	0.5	5.1	100.0	603
Birth order							
1	91.2	4.7	0.6	0.4	3.0	100.0	1,711
2-3	91.3	4.3	0.2	0.6	3.5	100.0	2,426
4-5	87.6	4.8	0.6	0.4	6.7	100.0	366
6+	77.3	9.0	0.0	1.9	11.7	100.0	69
Residence							
Urban	92.1	1.8	0.7	0.7	4.7	100.0	520
Rural	91.3	4.5	0.4	0.5	3.3	100.0	3,797
Estate	80.3	11.4	0.2	0.2	7.9	100.0	254
District							
Colombo	95.8	1.9	0.6	1.3	0.4	100.0	460
Gampaha	97.8	1.4	0.0	0.1	0.7	100.0	502
Kalutara	96.8	1.4	1.4	0.4	0.0	100.0	271
Kandy	88.6	2.7	0.9	0.8	7.1	100.0	318
Matale	87.0	6.6	0.0	1.0	5.4	100.0	86
Nuwara Eliya	77.8	15.2	0.0	0.3	6.7	100.0	161
Galle	94.5	3.7	0.0	0.6	1.2	100.0	224
Matara	95.7	3.6	0.0	0.2	0.4	100.0	193
Hambantota	91.8	4.7	0.0	0.4	3.1	100.0	157
Batticaloa	73.5	4.4	0.0	0.0	22.1	100.0	189
Ampara	81.2	2.0	0.7	0.0	16.1	100.0	170
Trincomalee	88.3	4.9	0.6	0.0	6.2	100.0	111
Kurunegala	93.7	3.2	0.7	0.9	1.5	100.0	416
Puttalam	93.7	1.3	0.0	0.7	4.4	100.0	204
Anuradhapura	75.6	20.7	0.0	0.6	3.1	100.0	217
Polonnaruwa	84.6	10.8	0.6	1.6	2.4	100.0	115
Badulla	85.7	5.8	1.6	1.3	5.6	100.0	202
Moneragala	88.1	10.1	0.0	0.0	1.7	100.0	134
Ratnapura	95.9	3.3	0.0	0.0	0.9	100.0	262
Kegalle	97.4	1.9	0.0	0.0	0.7	100.0	181
Education							
No education	81.8	7.8	1.3	0.7	8.4	100.0	121
Primary	84.9	6.2	0.0	0.9	8.1	100.0	446
Secondary	90.7	4.9	0.5	0.6	3.3	100.0	2,551
Passed G.C.E. (O/L)	93.5	3.2	0.3	0.4	2.6	100.0	524
Higher	93.5	3.2	0.3	0.4	2.7	100.0	930
Wealth quintile							
Lowest	86.9	6.3	0.4	0.4	5.9	100.0	1,018
Second	91.1	4.0	0.3	0.6	4.0	100.0	990
Middle	91.4	4.5	0.4	0.5	3.1	100.0	949
Fourth	92.5	4.1	0.5	0.6	2.3	100.0	921
Highest	92.9	3.5	0.2	0.5	2.9	100.0	694
Total	90.8	4.6	0.4	0.5	3.7	100.0	4,572

Note: Excludes women whose most recent birth was delivered by C-section because they were not asked about a checkup before discharge

[1] Includes women who received a checkup after 41 days

9.4 PROBLEMS IN ACCESSING HEALTH CARE

Many factors can prevent women from getting medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery. In the 2006-07 SLDHS, women were asked whether each of the following factors would be a big problem in seeking medical care: getting permission to go for treatment, getting money for treatment, distance to a health facility, having to take transportation, not wanting to go alone, concern that there may not be a female health provider, concern that there may not be any health provider, and concern that there may be no drugs available.

Almost half of women overall, as Table 9.12 indicates, reported that they encounter at least one big problem (as given above) in accessing health care. Looking at the specific items, women mention getting money for treatment and not wanting to go alone most often (22 percent each). Distance to health facility (20 percent) and getting transport (19 percent) are the next most frequently cited problems faced.

There are wide differences in experiencing at least one barrier to care for women with some background characteristics. There is a broad range on this indicator by district, from a low of 27 percent in Kegalle to a high of 92 percent of women in Batticaloa. Problems of access due to distance and transportation seem to be quite serious in several districts (Figure 9.2). Women in Nuwara Eliya, Batticaloa, Trincomalee, and Moneragala districts are twice as likely to mention distance and transportation. Women living on estates report much more difficulty to get care (77 percent) than all other respondents (slightly less than half). They are more likely to say that each item is a problem.

Almost 60 percent of teenage respondents report difficulty in getting health care, principally because they consider going alone as a big problem more often than older women do. Higher parity women mention obstacles to accessing care more often than those with 0-2 children. For them the concerns are getting money, distance, and transport. Women who are no longer married (58 percent) have problems to access care more often than currently married women (47 percent) do. The main reason was getting money for treatment.

Problems in accessing care diminish as women's education level and economic standing rise. As has been seen elsewhere in this report, the differential is larger for education than the wealth quintile. Never-educated women and women in the lowest wealth quintile are more likely to report problems with getting money, distance to the facility, and transportation to a facility than other women.

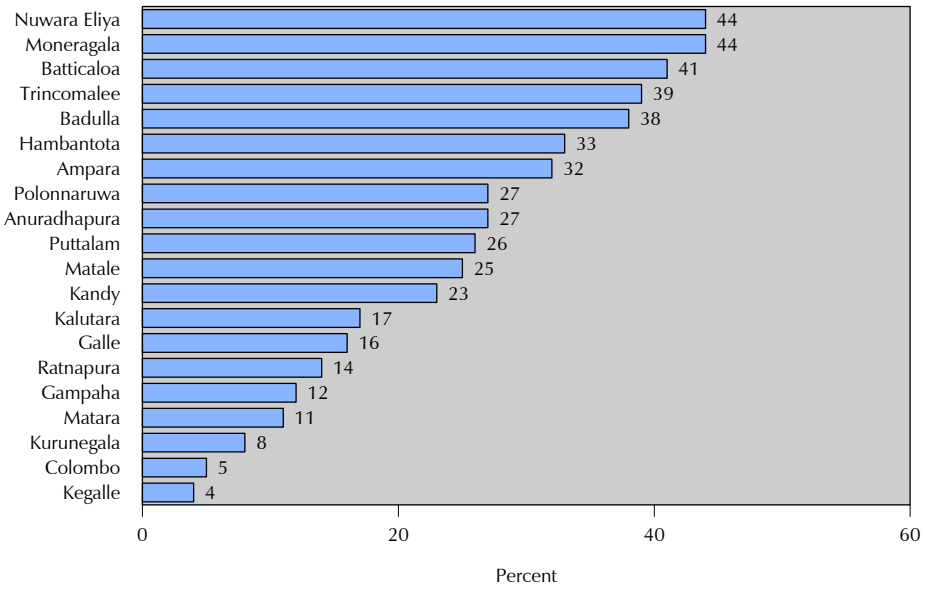
Table 9.12 Problems in accessing health care

Percentage of ever-married women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Problems in accessing health care								At least one problem accessing health care	Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern no female provider available	Concern no provider available	Concern no drugs available		
Age										
15-19	5.8	20.9	23.5	22.7	36.7	14.0	10.4	10.6	57.5	321
20-34	3.1	18.8	18.5	18.9	23.7	8.1	8.6	9.6	46.8	6,417
35-49	2.9	25.1	20.1	19.5	19.3	6.8	7.8	9.2	47.3	7,954
Number of living children										
0	2.8	13.0	15.1	13.9	29.6	9.8	9.0	9.3	47.3	1,499
1-2	2.4	19.2	16.5	16.7	20.5	6.3	6.9	8.0	43.3	8,684
3-4	4.2	29.5	25.3	24.7	20.4	8.8	10.1	11.8	53.2	3,974
5+	6.7	44.3	37.6	37.5	25.8	11.8	13.1	15.3	68.2	534
Marital status										
Married or living together	3.0	20.9	19.0	18.9	21.5	7.5	8.1	9.2	46.5	13,748
Divorced/separated/widowed	3.6	41.7	27.2	26.0	23.4	8.1	10.6	12.6	57.9	944
Employed past 12 months										
Not employed	3.3	21.2	18.3	18.2	23.1	7.7	8.4	9.4	47.1	8,492
Employed for cash	3.0	24.7	19.5	19.0	19.7	8.0	8.7	10.1	47.3	5,008
Employed, not for cash	1.5	19.8	27.9	28.7	18.4	4.7	4.8	6.9	48.6	1,189
Residence										
Urban	3.8	19.2	9.9	10.1	24.9	9.9	9.4	10.4	44.5	1,893
Rural	2.3	21.2	19.2	19.1	20.5	6.4	6.8	8.1	45.9	12,095
Estate	14.4	49.2	50.6	47.4	30.8	20.2	29.0	28.5	77.4	703
District										
Colombo	1.5	12.8	5.4	5.5	14.3	6.0	4.7	5.6	29.2	1,796
Gampaha	1.4	18.2	11.5	10.4	26.5	6.0	5.6	5.9	45.6	1,839
Kalutara	1.5	50.0	17.4	15.2	6.0	1.4	1.9	2.0	57.2	837
Kandy	3.4	20.8	22.6	25.6	29.7	12.0	7.7	8.0	60.9	1,037
Matale	2.7	20.4	24.7	28.5	32.5	12.7	17.4	20.7	63.7	299
Nuwara Eliya	15.2	47.1	44.3	41.3	27.9	17.0	22.9	24.6	75.3	504
Galle	1.3	20.3	16.0	16.7	27.3	10.8	5.0	4.7	49.8	802
Matara	0.1	15.1	11.1	14.5	16.4	4.0	0.5	0.4	32.9	559
Hambantota	1.4	25.0	33.4	35.3	21.5	5.9	6.1	7.4	59.5	445
Batticaloa	13.4	56.7	41.0	43.2	51.6	22.1	27.4	28.3	91.6	434
Ampara	7.0	30.9	31.7	29.7	32.9	14.9	18.9	19.3	62.5	476
Trincomalee	20.6	26.9	38.8	35.9	22.5	9.1	11.2	9.2	47.9	266
Kurunegala	0.6	9.5	8.3	8.3	8.7	5.0	9.5	16.7	30.9	1,281
Puttalam	2.4	21.8	26.4	23.5	25.3	7.6	8.4	6.8	46.7	628
Anuradhapura	1.7	19.1	27.0	26.4	18.5	5.8	7.2	10.1	44.5	645
Polonnaruwa	1.0	20.2	27.1	26.0	18.1	4.5	4.9	6.8	44.2	335
Badulla	4.1	32.3	37.7	37.2	20.4	11.8	19.3	22.6	59.2	665
Moneragala	3.9	28.7	43.6	41.9	31.8	7.4	6.6	4.8	66.4	398
Ratnapura	1.6	13.9	14.4	14.0	18.0	3.1	5.2	5.9	34.2	840
Kegalle	1.1	9.5	4.2	3.9	19.8	1.1	2.0	2.0	26.7	605
Education										
No education	9.8	51.3	44.5	44.3	26.2	15.9	17.1	19.5	74.7	538
Primary	6.8	41.7	36.4	34.5	25.4	11.9	13.8	15.5	64.6	2,102
Secondary	2.7	23.2	19.6	19.8	20.9	7.3	7.4	9.1	47.6	7,200
Passed G.C.E. (O/L)	1.4	12.6	12.6	13.3	21.7	5.8	7.6	7.7	40.6	1,672
Higher	1.0	7.5	7.5	7.2	19.8	4.8	5.2	5.2	33.9	3,181
Wealth quintile										
Lowest	6.8	43.4	38.4	37.7	24.5	10.7	13.2	15.9	66.1	2,864
Second	3.4	28.4	24.0	25.7	22.2	8.6	9.6	11.0	54.6	2,944
Middle	2.2	21.1	18.4	17.8	19.4	6.1	6.8	7.9	44.9	2,937
Fourth	1.5	13.3	11.2	10.9	20.7	6.6	5.4	6.0	39.1	3,014
Highest	1.5	5.9	6.1	5.2	21.3	5.8	6.2	6.4	32.2	2,933
Total	3.0	22.3	19.5	19.3	21.6	7.5	8.2	9.4	47.3	14,692

Note: Total includes 3 women with information on employment status missing

Figure 9.2 Percentage of Women Who Cite Distance to Health Facility as a Barrier to Care, by District



SLDHS 2006-07

CHILD HEALTH 10

S.T.C. Gaveshika

Many of the deaths in early childhood can be prevented by immunising children against preventable diseases and by ensuring that children receive prompt and appropriate treatment when they become ill. Universal immunisation of children against the six vaccine-preventable diseases (namely, tuberculosis, diphtheria, whooping cough [pertussis], tetanus, polio, and measles) is crucial to reducing infant and child mortality.

This chapter presents findings on aspects of child health that contribute to their survival and development. These include birth weights, childhood vaccination coverage, prevalence of common childhood illnesses, and information on actions taken by mothers and health facility providers to control childhood illnesses. Information given here is useful to fill gaps in the present health network and achieve further reductions in neonatal, infant, and child morbidity and mortality.

Birth weight is an important indicator of the likelihood of survival and guides child health programs to decrease neonatal and infant mortality. Information on treatment practices and contact with health services by children with the three most important childhood illnesses (acute respiratory infection, fever, and diarrhoea) helps in the assessment of national programs aimed at reducing the mortality impact of these illnesses. Survey information is provided about prevalence and treatment of acute respiratory infection (ARI) and the prevalence of fever and its treatment with antimalarial drugs and antibiotics. The treatment of diarrhoeal disease with oral rehydration therapy (including increased fluids) can reduce the severity and duration of the episode. The data in this survey aid in the assessment of programs that recommend such treatment. Finally, information on sanitary practices and the manner of disposing of children's stools is presented because appropriate disposal helps to prevent and reduce the severity of diarrhoeal disease.

The growth and development of a child depends on the quality of health care received in the first year of life. In Sri Lanka, public health officers attached to the Ministry of Healthcare and Nutrition conduct community-level child health and development programs. Promotion of good health and prevention of communicable diseases are major roles of the Medical Officer of Health (MOH). The functions of the MOH are distributed among Public Health Inspectors, Public Health Nurses, and Public Health Midwives under the close supervision of the MOH. The public health midwife serves at the grassroots level. She interacts frequently with mothers and transmits health information to them. Over the years, Public Health Midwives have contributed to the prevention of common childhood illnesses (Ministry of Healthcare and Nutrition, n.d.). Although Sri Lanka has achieved high levels on several health indicators faster than other South Asian countries, even today child deaths are reported from diseases that could be prevented easily. Therefore, information on prevalence of common diseases and the quality of health care provided to children below five years is important to bring down infant mortality and achieve the MDG for IMR of 12.8 per 1,000 births (MDG Sri Lanka, n.d. [a]).

Each child born in a government hospital in Sri Lanka is issued a Child Health Development Report (CHDR) by the hospital authority at the time of birth. For children born elsewhere, the card is issued when the child is registered at the public health midwife's counter at community health centres. At post-maternity clinics, Sri Lankan mothers are asked to keep this card until the child reaches five years of age. Mothers have a good incentive to retain the card, as it is required to enrol the child in school.

Birth weights of children are recorded on this card, issued by the Ministry of Healthcare and Nutrition. It is also used to record vaccines given, mark growth and development of a child, and report

other important health issues related to a child. This child health card was used to obtain such information for young children whose mothers were interviewed in the survey.

10.1 CHILD'S WEIGHT AT BIRTH

Birth weight is an important determinant of a newborn child's survival and an indicator of a child's vulnerability to the risk of childhood illnesses. Children whose birth weight is less than 2.5 kilograms (kg) are considered to have a higher than average risk of early childhood death.

SLDHS interviewers were instructed to extract information on birth weight from the CHDR for all surviving children who were born in the five years before the interview. Interviewers were able to use CHDRs for almost all of those children (93 percent). However, Table 10.1 shows that mothers in the estate sector (72 percent), especially in Nuwara Eliya District (79 percent), are behind in keeping the CHDR compared with mothers in urban and rural areas of the country (94 and 95 percent, respectively). In addition, the percentage of children with birth weight from the CHDR card increased as mothers' education increased.

Table 10.1 describes reported birth weights of children under five according to background characteristics. It shows that 17 percent of children under five weighed less than 2.5 kg at birth. Younger mothers are more likely to have low birth weight babies than older mothers; over one-quarter of babies born to mothers less than 20 years old weighed less than 2.5 kg, compared to only 16 percent of those born to women age 35-49. Low birth weight is much more common in estate areas (31 percent) than in urban (13 percent) or rural areas (16 percent).

A baby with low birth weight needs extra attention and care during infancy. Therefore, a mother's knowledge, resources, and experience are very important to save a child. The SLDHS found that the proportion of children with low birth weight whose mothers have higher education (13 percent) is half that of children whose mothers had no education (30 percent). In addition, the household's wealth quintile is also related to birth weight; low birth weight is twice as common for surviving births in the lowest quintile (23 percent) as for the highest quintile (11 percent). Support by social institutions could help poorer mothers to avoid low birth weights.

Compared with the 2000 SLDHS, in which 17 percent of the surviving births were low birth weight (DCS, 2002, Table. 9.8), the current proportion of surviving children with low birth weight does not show any change.[1] However, the incidence of low birth weight in the estate sector has increased rapidly—from 21 percent up to 31 percent.

[1] The 2006-07 SLDHS found 17 percent with low birth weight, excluding Eastern Province to make the data comparable.

Table 10.1 Child's weight

Percent distribution of children under five by birth weight as recorded on vaccination card and percentage of children with a reported birth weight, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Percent distribution of children with a reported birth weight[1]			Number of children	Percentage of children with a reported birth weight[1]	Number of children
	Less than 2.5 kg	2.5 kg or more	Total			
Mother's age at birth						
<20	25.8	74.2	100.0	429	94.2	456
20-34	16.0	84.0	100.0	5,072	93.3	5,435
35-49	15.9	84.1	100.0	907	93.2	973
Birth order						
1	20.4	79.6	100.0	2,655	93.2	2,849
2-3	13.5	86.5	100.0	3,267	94.2	3,469
4-5	17.7	82.3	100.0	410	90.0	455
6+	11.2	88.8	100.0	76	84.7	90
Residence						
Urban	12.8	87.2	100.0	838	94.0	892
Rural	16.4	83.6	100.0	5,283	94.7	5,577
Estate	31.0	69.0	100.0	287	72.4	396
District						
Colombo	10.5	89.5	100.0	784	94.9	827
Gampaha	12.6	87.4	100.0	771	96.2	801
Kalutara	13.7	86.3	100.0	376	94.3	398
Kandy	18.5	81.5	100.0	442	91.9	481
Matale	22.1	77.9	100.0	122	95.0	128
Nuwara Eliya	33.8	66.2	100.0	199	78.6	253
Galle	21.2	78.8	100.0	347	96.0	361
Matara	20.2	79.8	100.0	277	95.3	290
Hambantota	17.6	82.4	100.0	207	91.5	226
Batticaloa	16.4	83.6	100.0	216	87.7	247
Ampara	12.1	87.9	100.0	236	88.3	267
Trincomalee	19.9	80.1	100.0	149	92.9	160
Kurunegala	16.0	84.0	100.0	542	98.6	550
Puttalam	10.7	89.3	100.0	271	98.2	276
Anuradhapura	17.5	82.5	100.0	274	95.4	287
Polonnaruwa	14.7	85.3	100.0	149	98.7	151
Badulla	21.9	78.1	100.0	262	84.7	309
Moneragala	18.2	81.8	100.0	165	89.6	185
Ratnapura	19.3	80.7	100.0	360	93.1	387
Kegalle	21.7	78.3	100.0	259	93.2	278
Mother's education						
No education	30.3	69.7	100.0	131	84.3	155
Primary	20.6	79.4	100.0	584	89.7	651
Secondary	17.5	82.5	100.0	3,351	93.6	3,580
Passed G.C.E (O/L)	14.7	85.3	100.0	752	94.9	792
Higher	13.2	86.8	100.0	1,590	94.3	1,686
Wealth quintile						
Lowest	22.6	77.4	100.0	1,281	89.9	1,425
Second	19.0	81.0	100.0	1,308	93.5	1,398
Middle	14.2	85.8	100.0	1,225	95.0	1,289
Fourth	16.0	84.0	100.0	1,338	94.5	1,416
Highest	11.0	89.0	100.0	1,256	94.0	1,335
Total	16.6	83.4	100.0	6,408	93.4	6,864

[1] Based on child health cards for living children only; mothers were not asked about birth weight or size of child at birth if card was not available.

10.2 VACCINATION COVERAGE

The National Immunisation Program of Sri Lanka commenced in 1961 and expanded significantly after 1978 (DCS, 1995). According to the program, when a child completes nine months of life, he or she should be fully immunised against six preventable childhood diseases. According to the CHDR, a BCG vaccine against tuberculosis should be given at birth or at first clinical contact. Polio and DPT against diphtheria, pertussis, and tetanus require three vaccinations at approximately 2, 4, and 6 months of age. Measles should be given at or soon after reaching 9 months of age. The government provides all childhood vaccines free of charge, and the public health midwife is responsible for spreading vaccination information to the mothers of eligible children.

The 2006-07 SLDHS collected information on vaccination coverage for all living children born in the five years preceding the survey. Interviewers copied the information from the CHDR or obtained the mother's verbal report.

Vaccination coverage information focuses on the age group 12-23 months. This group of children is the youngest cohort that has reached the age by which they should be fully vaccinated, while also allowing for some delays to receive some doses. Overall coverage levels at the time of the survey and by 12 months of age are shown in Table 10.2 for this age group. Also shown is the percentage of children age 12-23 months who received the various vaccinations by the source of vaccination information (whether based on a written vaccination card or on the mother's recall). As mentioned above, card availability was very high (93 percent).

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Sri Lanka 2006-07

Source of information	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[1]	No vaccinations	Number of children
Vaccinated at any time before survey											
Vaccination card	93.1	93.3	93.2	93.0	93.3	93.2	93.0	91.1	90.9	0.0	1,341
Mother's report	6.4	6.5	6.5	6.5	6.4	6.4	6.4	6.1	6.1	0.3	97
Either source	99.6	99.7	99.7	99.5	99.7	99.6	99.4	97.2	97.0	0.3	1,438
Vaccinated by 12 months of age[2]	99.2	99.6	99.5	98.7	99.6	99.4	98.8	94.9	94.1	0.4	1,438

[1] BCG, measles, and three doses each of DPT and polio vaccine
[2] For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination

Using both sources of information, 97 percent of children 12-23 months were fully immunised. Furthermore, Table 10.2 shows that 94 percent of children 12-23 months had received all basic vaccinations by their first birthday, and less than 1 percent had not received any vaccinations at all. According to Table 10.2, coverage is close to 100 percent for each of the basic vaccines considered in the survey. The coverage of BCG vaccination achieved this status (99 percent) 20 years ago (DCS and IRD, 1988) and the three doses of DPT, polio, and measles have also now reached this point.

Information about differences in vaccination coverage among subgroups of the population is useful for program planning and targeting resources to areas most in need. Table 10.3 presents vaccination information for children 12-23 months by antigen and background characteristics of mothers and children. There is no sex preference for childhood vaccination. There are no noticeable differences in vaccination coverage observed sector-wise or even district-wise. However, in seven districts the size of this age group is too small to make a firm conclusion. As a whole, the high percentages of children who have received basic vaccines demonstrate the strength of the network of public health services.

Table 10.3 Vaccinations by background characteristics

Percentage 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, by background characteristics, Sri Lanka 2006-07

Background characteristic	BCG	DPT			Polio			Measles	All basic vaccinations[2]	No vaccinations	Percentage with a vaccination card seen	Number of children
		1	2	3	1	2	3					
Sex												
Male	99.5	99.7	99.6	99.3	99.7	99.6	99.3	96.8	96.5	0.3	92.2	718
Female	99.7	99.7	99.7	99.7	99.7	99.7	99.5	97.6	97.4	0.3	94.3	720
Birth order												
1	99.7	99.9	99.9	99.8	99.8	99.8	99.7	97.9	97.8	0.1	91.6	565
2-3	99.5	99.7	99.7	99.5	99.7	99.7	99.5	97.5	97.3	0.3	95.1	763
4-5	99.2	99.2	98.4	96.9	99.2	98.4	96.9	92.8	92.8	0.8	88.9	91
6+	*	*	*	*	*	*	*	*	*	*	*	19
Residence												
Urban	99.3	99.6	99.6	99.4	99.4	99.4	99.1	96.6	96.3	0.4	92.0	188
Rural	99.8	99.9	99.8	99.7	99.9	99.8	99.7	97.5	97.4	0.1	94.5	1,164
Estate	97.4	98.0	98.0	96.8	98.0	98.0	96.2	94.1	92.4	2.0	78.4	85
District												
Colombo	99.6	99.6	99.6	99.6	99.6	99.6	99.6	95.0	95.0	0.4	94.9	177
Gampaha	100.0	100.0	100.0	99.7	99.7	99.7	99.4	98.5	98.5	0.0	93.1	169
Kalutara	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.2	98.2	0.0	91.3	84
Kandy	99.6	100.0	100.0	100.0	100.0	100.0	100.0	98.8	98.3	0.0	94.1	108
Matale	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(95.7)	(95.7)	(0.0)	(96.8)	28
Nuwara Eliya	97.9	97.9	97.9	96.1	97.9	97.9	95.2	97.0	95.2	2.1	81.7	56
Galle	100.0	100.0	100.0	100.0	100.0	100.0	100.0	93.8	93.8	0.0	99.8	66
Matara	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	91.9	61
Hambantota	(97.7)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(97.7)	(0.0)	(87.7)	45
Batticaloa	(98.2)	(98.2)	(98.2)	(98.2)	(98.2)	(98.2)	(98.2)	(94.1)	(94.1)	(1.8)	(91.8)	43
Ampara	100.0	100.0	98.9	98.9	100.0	98.9	98.9	96.0	96.0	0.0	93.8	66
Trincomalee	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(97.7)	(97.7)	(0.0)	(91.2)	30
Kurunegala	99.5	100.0	100.0	100.0	100.0	100.0	100.0	98.6	98.2	0.0	96.7	123
Puttalam	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(94.0)	(94.0)	(0.0)	(98.0)	46
Anuradhapura	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	94.7	60
Polonnaruwa	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(0.0)	(97.8)	30
Badulla	97.5	97.5	97.5	97.5	97.5	97.5	97.5	96.0	96.0	2.5	89.3	58
Moneragala	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.1	96.1	0.0	93.7	41
Ratnapura	100.0	100.0	100.0	98.5	100.0	100.0	98.5	95.1	95.1	0.0	90.4	91
Kegalle	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(99.1)	(99.1)	(0.0)	(92.4)	55
Mother's education												
No education	(97.1)	(97.1)	(97.1)	(89.4)	(97.1)	(97.1)	(89.4)	(80.6)	(80.6)	(2.9)	(88.9)	24
Primary	99.4	99.4	98.8	98.4	99.4	98.8	98.4	95.6	95.2	0.6	93.6	122
Secondary	99.8	99.8	99.8	99.8	99.8	99.8	99.7	97.5	97.4	0.2	93.7	753
Passed G.C.E (O/L)	99.6	99.6	99.6	99.3	99.6	99.6	99.3	98.5	98.5	0.4	93.1	154
Higher	99.4	99.8	99.8	99.8	99.7	99.7	99.7	97.6	97.2	0.2	92.7	384
Wealth quintile												
Lowest	99.3	99.4	99.2	98.4	99.4	99.2	98.2	94.2	93.7	0.6	92.8	302
Second	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.0	99.0	0.6	93.3	295
Middle	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.7	98.7	0.0	94.1	241
Fourth	99.7	100.0	100.0	99.8	100.0	100.0	99.8	97.1	96.8	0.0	94.4	317
Highest	99.6	99.8	99.8	99.8	99.6	99.6	99.6	97.3	97.1	0.2	91.7	284
Total	99.6	99.7	99.7	99.5	99.7	99.6	99.4	97.2	97.0	0.3	93.3	1,438

Note: Figures in parentheses are based on 25-49 unweighted children; an asterisk indicates a figure based on fewer than 25 unweighted children that has been suppressed.
[1] BCG, measles, and three doses each of DPT and polio vaccine.

10.3 TRENDS IN VACCINATION COVERAGE

It appears that the percentage of children fully vaccinated has actually decreased slightly over the last five years. Table 10.4 shows the percentages of children who have received vaccinations during the first year of life from past surveys in Sri Lanka. Data in this table for the 2006-07 SLDHS differ from the previous tables because the districts in the Eastern Province are excluded, as well as vaccinations by mother's report, in order to make the data comparable with the earlier surveys.

Table 10.4 shows that the proportion of children who are fully immunised has increased, especially from 1987 to 1993, after which it has plateaued or even declined slightly to 91 percent, excluding Eastern Province.

Table 10.4 Trends in vaccination coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey according to a vaccination card only, Sri Lanka 2006-07

Year	BCG	DPT3	Polio3	Measles	Fully immunized
1987	99.1	93.4	93.1	68.5	67.3
1993	100.0	99.3	99.3	95.5	95.0
2000	99.8	98.0	98.2	94.2	93.5
2006-07	93.2	93.1	93.1	91.2	91.0

Note: Data from all surveys exclude Eastern and Northern Provinces so as to be comparable.
Source: DCS and IRD, 1988, Table 6.9; DCS, 2002, Table 8.13; special tabulations for 2006-07

10.4 ACUTE RESPIRATORY INFECTION AND TREATMENT

Respiratory infections are common among children under age five years and sometimes they lead to pneumonia or asthma. Fever and coughing are common initial symptoms of ARI, and early diagnosis and treatment with antibiotics can prevent a large proportion of ARI and pneumonia deaths. In the 2006-07 SLDHS, several questions were asked to separate children with symptoms associated with ARI from children who suffered from a cough or a cold during the reference period. In the survey, the interviewer asked whether the child's coughing was accompanied by short, rapid breathing that the mother considered to be chest-related. Such a child is considered to possibly have ARI.

Table 10.5 shows a low prevalence (4 percent) of ARI. This could be an underestimate, however, since interviewers did not have a medical background. Furthermore, this measure is affected by the reliability of mothers' recall as to when the ARI episode occurred and their own perceptions about the illness.

Table 10.5 shows the prevalence of ARI and whether treatment was sought, according to the background characteristics of the family. Since prevalence is so low, the differences by background characteristics are minor. More than half of the children (58 percent) were taken to a health provider for treatment of their respiratory illness.[2]

[2] If a child had ARI symptoms but no fever, mothers were not asked if the child had taken antibiotics. Mothers were asked about antibiotics only if the child had ARI symptoms and fever; therefore data on antibiotic treatment are not shown in the table.

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age five, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Children under five		Children under five with symptoms of ARI	
	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[2]	Number of children
Age in months				
<6	2.2	634	*	14
6-11	4.9	739	(67.6)	37
12-23	5.0	1,438	65.7	71
24-35	4.5	1,395	67.4	63
36-47	4.0	1,357	50.5	55
48-59	4.4	1,300	48.6	57
Sex				
Male	4.7	3,521	60.1	165
Female	3.9	3,343	55.7	132
Cooking fuel				
Electricity or gas	3.1	1,244	(35.2)	38
Kerosene	3.4	182	*	6
Wood/straw[3]	4.6	5,417	62.0	251
Residence				
Urban	3.4	892	(54.8)	30
Rural	4.3	5,577	57.9	237
Estate	7.3	396	63.9	29
District				
Colombo	4.7	827	(27.0)	39
Gampaha	2.6	801	*	21
Kalutara	3.3	398	*	13
Kandy	1.8	481	*	9
Matale	6.7	128	*	9
Nuwara Eliya	6.5	253	*	16
Galle	4.8	361	*	17
Matara	2.4	290	*	7
Hambantota	10.7	226	*	24
Batticaloa	2.1	247	*	5
Ampara	4.2	267	*	11
Trincomalee	0.8	160	*	1
Kurunegala	3.8	550	*	21
Puttalam	1.1	276	*	3
Anuradhapura	6.5	287	*	19
Polonnaruwa	3.5	151	*	5
Badulla	8.3	309	*	26
Moneragala	4.1	185	(44.4)	8
Ratnapura	5.3	387	*	21
Kegalle	8.1	278	*	23
Mother's education				
No education	6.0	155	*	9
Primary	7.2	651	67.4	47
Secondary	4.6	3,580	60.4	166
Passed G.C.E (O/L)	2.9	792	*	23
Higher	3.1	1,686	(44.1)	52
Wealth quintile				
Lowest	6.0	1,425	70.2	85
Second	5.4	1,398	56.5	75
Middle	3.9	1,289	60.1	50
Fourth	3.2	1,416	56.2	45
Highest	3.0	1,335	(35.6)	41
Total	4.3	6,864	58.2	296

Note: Total includes 21 children with household fuel of "other" or "no food cooked in household."
[1] Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related) is considered a proxy for pneumonia.
[2] Excludes pharmacy, shop, and traditional practitioner
[3] Includes grass, shrubs, crop residues

10.5 FEVER

Fever is a common health problem among Sri Lankan children. It is a symptom of many acute infections—including malaria, ARI, and diarrhoea. Malaria and other illnesses that cause fever contribute to malnutrition and mortality. Table 10.6 shows the percentage of children under five years of age who had fever in the two weeks preceding the survey.

Table 10.6 Prevalence and treatment of fever

Among children under age five, the percentage who had a fever in the two weeks preceding the survey; and among children with fever, the percentage of children for whom treatment was sought from a health facility or provider, the percentage who took antimalarial drugs and the percentage who took antibiotic drugs, by background characteristics, Sri Lanka 2006-07

	Among children under age five		Children under age five with fever			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
Age in months						
<6	9.5	634	62.5	0.0	31.9	60
6-11	22.8	739	87.5	0.7	50.2	169
12-23	21.5	1,438	85.8	0.4	49.0	310
24-35	17.6	1,395	89.5	0.0	54.4	245
36-47	16.0	1,357	84.4	0.4	47.2	217
48-59	14.6	1,300	84.7	0.0	49.1	190
Sex						
Male	17.7	3,521	86.3	0.4	47.9	623
Female	17.0	3,343	83.9	0.2	50.4	569
Residence						
Urban	21.7	892	81.4	0.0	49.1	193
Rural	16.7	5,577	86.3	0.4	48.7	931
Estate	16.9	396	81.0	0.0	54.3	67
District						
Colombo	18.6	827	82.8	0.0	48.2	154
Gampaha	16.2	801	80.3	0.0	53.8	129
Kalutara	8.7	398	(95.6)	(0.0)	(53.9)	35
Kandy	19.2	481	86.1	0.0	43.1	93
Matale	28.0	128	69.5	0.0	50.9	36
Nuwara Eliya	14.8	253	84.8	0.0	71.7	38
Galle	17.3	361	86.4	2.0	63.6	63
Matara	14.0	290	90.4	0.0	66.2	41
Hambantota	25.5	226	(88.7)	(0.0)	(68.6)	58
Batticaloa	13.5	247	(67.4)	(0.0)	(42.3)	33
Ampara	24.1	267	79.5	0.0	34.2	65
Trincomalee	11.0	160	(81.7)	(0.0)	(71.1)	18
Kurunegala	19.2	550	93.1	1.2	39.1	106
Puttalam	15.7	276	90.2	0.0	71.0	43
Anuradhapura	18.4	287	83.0	0.0	21.7	53
Polonnaruwa	23.1	151	(81.8)	(0.0)	(33.6)	35
Badulla	19.9	309	81.9	0.0	42.6	62
Moneragala	18.7	185	(98.0)	(2.7)	(39.1)	35
Ratnapura	15.8	387	(90.4)	(0.0)	(48.2)	61
Kegalle	13.2	278	(92.8)	(0.0)	(48.4)	37
Mother's education						
No education	23.2	155	(89.2)	(0.0)	(40.5)	36
Primary	24.2	651	83.0	0.0	55.3	158
Secondary	17.6	3,580	85.0	0.3	47.9	631
Passed G.C.E (O/L)	14.6	792	89.1	0.0	43.4	116
Higher	14.9	1,686	84.6	0.5	52.1	251
Wealth quintile						
Lowest	20.6	1,425	86.6	0.3	50.4	294
Second	18.2	1,398	85.7	0.0	52.7	255
Middle	16.9	1,289	82.7	0.0	44.6	218
Fourth	15.2	1,416	90.8	1.2	52.4	215
Highest	15.8	1,335	79.4	0.0	44.1	210
Total	17.4	6,864	85.2	0.3	49.1	1,191

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop, and traditional practitioner

Nearly one in five children (17 percent) had experienced fever recently. The data reveal that most of the time mothers do not overlook a child's fever; 85 percent of children who had a fever were taken to a health provider for advice and treatment. Nearly half of the children with fever were given antibiotics. Less than 1 percent of those who had a fever were reported to have received antimalarial drugs.

Table 10.6 also presents information on the prevalence of fever and care seeking among children below five years by background characteristics. It reveals that fever is more prevalent among children 6 to 11 months (23 percent) and 12 to 23 months (22 percent) than older children. According to the data, fever is reported slightly more often in urban areas (22 percent) than in rural areas and the estate sector (both 17 percent). It appears that care is sought slightly more often in the rural sector (86 percent) than elsewhere.

10.6 DIARRHOEAL DISEASE

Diarrhoea is another common disease among children under five years, and childhood food habits, use of contaminated water, and disposal of excreta increase the incidence of infection. Dehydration caused by diarrhoea can raise infant mortality, but it can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhoea-causing agents is frequently related to the use of contaminated water and unhygienic practices in food preparation and disposal of excreta. Therefore, education on prevention is very important to decrease the number of diarrhoeal cases.

Table 10.7 shows that only 3 percent of children under five had diarrhoea in the two weeks before the survey. The figure is slightly lower than the 2000 SLDHS figure (7 percent) (DCS, 2002).[3] The data indicate that prevalence of diarrhoea has declined slightly even in the estate sector—from 7 percent down to 5 percent.[4]

Table 10.7 Prevalence of diarrhoea

Percentage of children under age five who had diarrhoea in the two weeks preceding the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Diarrhoea in the two weeks preceding the survey: All diarrhoea	Diarrhoea with blood	Number of children
Age in months			
<6	1.5	0.3	634
6-11	9.1	0.8	739
12-23	4.7	0.2	1,438
24-35	3.1	0.4	1,395
36-47	2.0	0.3	1,357
48-59	0.8	0.0	1,300
Sex			
Male	3.3	0.4	3,521
Female	3.3	0.2	3,343
Source of drinking water[1]			
Improved	3.4	0.3	6,066
Not improved	2.2	0.1	795
Toilet facility[2]			
Improved, not shared	2.9	0.2	5,646
Non-improved or shared	4.9	0.7	1,204
Residence			
Urban	3.2	0.0	892
Rural	3.2	0.3	5,577
Estate	5.3	0.5	396
District			
Colombo	2.4	0.0	827
Gampaha	2.0	0.5	801
Kalutara	2.9	0.1	398
Kandy	2.6	0.0	481
Matale	1.9	0.0	128
Nuwara Eliya	5.1	0.9	253
Galle	1.6	0.0	361
Matara	1.4	0.3	290
Hambantota	3.2	0.0	226
Batticaloa	6.5	1.4	247
Ampara	8.4	0.6	267
Trincomalee	4.8	1.3	160
Kurunegala	1.7	0.5	550
Puttalam	3.7	0.5	276
Anuradhapura	5.0	0.0	287
Polonnaruwa	8.2	1.0	151
Badulla	3.3	0.3	309
Moneragala	4.9	0.0	185
Ratnapura	2.1	0.0	387
Kegalle	4.7	0.0	278
Mother's education			
No education	5.1	0.0	155
Primary	6.2	1.2	651
Secondary	3.0	0.2	3,580
Passed G.C.E (O/L)	2.7	0.0	792
Higher	2.8	0.3	1,686
Wealth quintile			
Lowest	3.6	0.5	1,425
Second	4.0	0.3	1,398
Middle	3.1	0.4	1,289
Fourth	3.0	0.2	1,416
Highest	2.6	0.2	1,335
Total	3.3	0.3	6,864

Note: Total includes 3 cases missing information about water source and 13 cases missing information about type of toilet
[1] See Table 2.7 for definition of categories.
[2] See Table 2.8 for definition of categories.

[3] The percentage for the 2006-07 SLDHS without Eastern Province is 2.9 percent.
[4] For residence the percentages in the 2006-07 SLDHS without Eastern Province are: urban, 3.2; rural, 2.7; and estate, 5.3.

The occurrence of diarrhoea varies by age of the child (Table 10.7). Children age 6-11 months are most prone to diarrhoea (9 percent). This is the time of weaning, development of greater mobility, and hand-to-mouth exploration, so children are more exposed to pathogens than in early infancy and childhood. With regard to district, diarrhoea prevalence of 5 percent or more is found in the following five districts: Nuwara Eliya, Batticaloa, Ampara, Anuradhapura, and Polonnaruwa. Mother's level of education is an important factor in the control of diarrhoea; however, only a small differential is seen between children of mothers with no education (5 percent) or some primary education (6 percent) and those whose mothers have passed G.C.E. or higher (3 percent).

In the 2006-07 Sri Lanka DHS, mothers of children who had diarrhoea were asked about what was done to treat the illness. Table 10.8 shows the percentage of children who received specific treatments according to sex of the child. Of the 225 children with diarrhoea, 82 percent were treated by a health facility or provider, with girls only slightly more likely than boys to be taken for treatment.

Taking into account all forms of rehydration, slightly more than two-thirds of children with diarrhoea received some form of ORT. Half of the children were given oral rehydration solution (ORS), and 35 percent were given recommended home fluids. The most common other type of treatment was capsules, pills, or syrup (40 percent). Hardly any children received intravenous saline. These results indicate that, in general, children with diarrhoea receive appropriate treatment.

Table 10.8 Diarrhoea treatment

Among children under age five who had diarrhoea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who were given other treatments, by sex, Sri Lanka 2006-07

		Oral rehydration therapy (ORT)					Other treatments					
Sex	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider	ORS packets or pre-packaged liquid	Recom-mended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Capsules, pills, or syrup	Injec-tion	Medi-cine with saline	Home remedy/ other	No treat-ment	Number of children
Male	80.3	53.2	38.6	64.2	29.2	70.1	47.7	2.3	2.5	16.2	16.1	115
Female	83.4	49.0	32.1	61.9	28.1	66.3	30.6	0.0	1.1	11.4	20.3	110
Total	81.8	51.1	35.4	63.1	28.7	68.2	39.4	1.2	1.8	13.8	18.2	225

Note: ORT includes solution prepared from oral rehydration salt (ORS), pre-packaged ORS packet, and recommended home fluids (RHF)
[1] Excludes pharmacy, shop, and traditional practitioner

10.7 FEEDING PRACTICES DURING DIARRHOEA

Diarrhoea affects the growth and development of a child. Therefore, mothers are encouraged to feed their children with enough foods and increased fluids in any form during the period of infection. These practices help to reduce dehydration and minimize the adverse consequences of diarrhoea on the child's nutritional status. Mothers were asked whether they gave the child less, the same amount, or more fluids and food than usual when their child had diarrhoea.

Table 10.9 gives the percent distribution of children under five who had diarrhoea in the two weeks before the survey by the amount of liquids and foods offered compared to the normal practice. Mothers of two-thirds of the children with a recent diarrhoea episode reported following the appropriate practice of continuing feeding and giving ORT and/or increased fluids. More detailed analysis reveals that less than 30 percent of children with diarrhoea are given more liquids than usual, which is the recommended practice. On the other hand, mothers seem to follow the other recommended practice of continuing feeding. About 85 percent of children continue to be fed when they are sick, although the amount of food consumed was frequently less than usual. Feeding practices for boys and girls were generally similar.

Table 10.9 Feeding practices during diarrhoea

Percent distribution of children under age five who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhoea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhoea, by sex, Sri Lanka 2006-07

	Amount of liquids offered						Amount of food offered										
Sex	More	Same as usual	Some-what less	Much less	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know/ missing	Total	Percentage given increased fluids and continued feeding	Percentage given increased fluids and continued breast-feeding	Percentage who continued feeding and were given ORT and/or increased fluids	Number of children with diarrhoea
Male	29.2	41.8	16.5	11.7	0.8	100.0	0.6	35.2	28.4	20.9	9.7	5.2	0.0	100.0	18.8	24.4	69.1	115
Female	28.1	30.4	25.3	14.2	2.0	100.0	2.8	27.3	22.4	32.1	9.1	5.7	0.7	100.0	8.8	17.7	64.4	110
Total	28.7	36.3	20.8	12.9	1.4	100.0	1.7	31.3	25.5	26.3	9.4	5.4	0.3	100.0	13.9	21.2	66.8	225

[1] Equivalent to the UNICEF/WHO indicator "Home management of diarrhoea." MICS Indicator 34
[2] Continued feeding includes children who were given more, same as usual, or somewhat less food during the diarrhoea episode
[3] Equivalent to UNICEF MICS Indicator 35.

10.8 KNOWLEDGE OF ORS PACKETS

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy, which may include the use of a solution prepared from packets of oral rehydration salts (ORS). To ascertain how widespread knowledge of ORS is in Sri Lanka, respondents were asked whether they know about ORS packets.

The SLDHS found that 97 percent of mothers have heard about ORS (Table 10.10). However, the table shows that knowledge of ORS is still lowest among estate-sector mothers (89 percent), mothers with no education (84 percent), and mothers 15-19 years old (89 percent). Nevertheless, these levels of knowledge are quite high relative to other countries.

Table 10.10 Knowledge of ORS packets or pre-packaged liquids

Percentage of mothers age 15-49 who gave birth in the five years preceding the survey who know about ORS packets or ORS prepackaged liquids for treatment of diarrhoea by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage of women who know about ORS packets or ORS prepackaged liquids	Number of women
Age		
15-19	88.5	151
20-24	96.0	904
25-34	97.6	3,438
35-49	97.0	1,521
Residence		
Urban	96.3	755
Rural	97.6	4,959
Estate	88.8	300
District		
Colombo	96.8	726
Gampaha	98.8	699
Kalutara	98.6	356
Kandy	95.4	421
Matale	96.6	117
Nuwara Eliya	95.3	205
Galle	98.2	305
Matara	96.3	253
Hambantota	96.6	201
Batticaloa	95.6	206
Ampara	95.3	215
Trincomalee	96.8	137
Kurunegala	98.3	508
Puttalam	96.8	251
Anuradhapura	98.6	263
Polonnaruwa	99.0	140
Badulla	92.6	254
Moneragala	95.4	165
Ratnapura	95.8	342
Kegalle	97.9	248
Education		
No education	84.0	139
Primary	91.9	541
Secondary	97.1	3,162
Passed G.C.E (O/L)	98.1	706
Higher	99.1	1,465
Wealth quintile		
Lowest	94.1	1,220
Second	96.5	1,212
Middle	98.1	1,177
Fourth	98.3	1,254
Highest	97.9	1,151
Total	97.0	6,014

ORS = Oral rehydration salts

10.9 STOOL DISPOSAL

The proper disposal of children's faeces is important in reducing the frequency of diarrhoea episodes. If faeces are left uncontained, diseases may be spread by direct contact or through animal or insect contact. Table 10.11 presents information about the disposal of the stools of children under five, by background characteristics.

Table 10.11 Disposal of children's stools

Percent distribution of youngest children under age five living with the mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Manner of disposal of children's stools								Total	Percentage of children whose stools are disposed of safely	Number of mothers
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Rinsed away	Other	Missing			
Age in months											
<6	1.7	44.4	9.6	34.3	6.9	0.6	1.9	0.6	100.0	55.7	627
6-11	1.6	65.0	15.0	12.0	4.6	0.5	1.0	0.2	100.0	81.6	727
12-23	4.8	70.7	17.6	2.2	3.1	0.8	0.5	0.3	100.0	93.1	1,392
24-35	20.0	56.7	18.7	1.2	2.3	0.5	0.3	0.3	100.0	95.4	1,251
36-47	49.0	35.6	11.9	1.1	0.8	0.9	0.2	0.4	100.0	96.6	1,048
48-59	74.5	16.8	6.6	0.3	0.5	0.7	0.2	0.4	100.0	97.8	891
Toilet facility											
Improved, not shared[1]	27.1	52.7	11.1	5.8	2.2	0.3	0.5	0.3	100.0	90.9	4,888
Non-improved, shared, or none	18.5	37.2	27.7	7.7	5.4	2.3	0.9	0.4	100.0	83.3	1,035
Residence											
Urban	26.0	58.4	5.7	5.1	2.4	0.3	1.5	0.5	100.0	90.2	750
Rural	25.3	49.1	16.0	5.9	2.5	0.6	0.4	0.3	100.0	90.4	4,890
Estate	28.9	43.0	2.7	12.6	7.4	3.6	1.0	0.8	100.0	74.5	295
Region											
Colombo	27.9	60.6	1.9	4.8	2.3	0.4	1.4	0.7	100.0	90.5	724
Gampaha	27.7	58.9	5.9	4.0	2.5	0.2	0.8	0.0	100.0	92.5	685
Kalutara	33.5	55.5	4.1	3.2	1.5	1.3	0.6	0.1	100.0	93.2	355
Kandy	27.9	52.2	8.0	8.6	3.0	0.0	0.0	0.3	100.0	88.0	414
Matale	14.4	58.5	14.0	10.0	1.9	0.0	0.6	0.8	100.0	86.8	113
Nuwara Eliya	28.8	47.4	2.8	12.8	4.3	2.6	1.3	0.0	100.0	79.0	204
Galle	28.6	51.2	8.0	6.8	3.9	0.0	1.0	0.5	100.0	87.8	300
Matara	10.4	78.4	3.8	3.0	3.7	0.0	0.3	0.4	100.0	92.6	251
Hambantota	30.0	43.4	16.6	9.3	0.7	0.0	0.0	0.0	100.0	90.0	199
Batticaloa	18.6	33.2	44.2	0.0	0.9	3.0	0.0	0.0	100.0	96.1	205
Ampara	20.2	44.1	27.4	4.2	2.8	1.2	0.0	0.1	100.0	91.7	214
Trincomalee	8.2	26.7	59.2	0.5	5.0	0.3	0.0	0.0	100.0	94.2	134
Kurunegala	25.6	43.8	21.8	5.4	1.7	0.8	0.1	0.8	100.0	91.2	503
Puttalam	21.9	30.9	33.5	5.1	6.0	1.6	0.6	0.4	100.0	86.3	243
Anuradhapura	23.2	29.6	35.9	9.1	0.8	1.2	0.0	0.4	100.0	88.6	262
Polonnaruwa	18.3	38.6	31.4	10.5	1.2	0.0	0.0	0.0	100.0	88.3	138
Badulla	31.4	49.0	6.3	6.0	5.4	1.0	0.4	0.6	100.0	86.7	251
Moneragala	20.3	44.5	17.1	13.7	2.4	1.0	0.0	1.0	100.0	81.9	161
Ratnapura	27.1	54.1	5.8	8.5	2.3	0.2	1.7	0.2	100.0	87.0	337
Kegalle	32.8	46.1	9.1	6.7	4.4	0.5	0.5	0.0	100.0	88.0	244
Education											
No education	29.1	35.1	21.2	5.7	6.0	3.0	0.0	0.0	100.0	85.3	136
Primary	24.5	34.4	21.6	8.0	6.3	3.0	1.4	0.8	100.0	80.4	532
Secondary	25.1	46.2	17.1	6.9	2.9	0.6	0.7	0.4	100.0	88.4	3,115
Passed G.C.E (O/L)	25.9	57.6	9.3	5.7	1.0	0.1	0.4	0.0	100.0	92.8	701
Higher	26.4	61.6	6.1	3.9	1.5	0.0	0.2	0.3	100.0	94.2	1,453
Wealth quintile											
Lowest	21.4	38.0	23.7	9.8	4.4	1.8	0.6	0.4	100.0	83.1	1,196
Second	25.0	43.9	18.6	7.4	3.6	0.6	0.5	0.4	100.0	87.6	1,196
Middle	25.5	49.1	14.7	5.6	2.8	0.7	1.2	0.3	100.0	89.3	1,161
Fourth	28.7	55.7	9.0	3.9	1.9	0.3	0.3	0.2	100.0	93.4	1,245
Highest	27.0	63.7	3.8	3.8	1.0	0.1	0.3	0.4	100.0	94.5	1,137
Total	25.5	50.0	14.0	6.1	2.7	0.7	0.6	0.3	100.0	89.6	5,935

Note: Total includes 12 children missing information as to toilet facility.

[1] Non-shared facilities that are of the types: flush or pour flush into a piped sewer system/septic tank/pit latrine; ventilated, improved pit (VIP) latrine; pit latrine with a slab; and a composting toilet.

Nearly 90 percent of mothers stated that they used safe methods (child used toilet, rinsed into toilet, or buried) to dispose of their child's faeces. This figure is lowest (56 percent) among children under 6 months of age. Safe practices for stool disposal are less common in the estate sector (75 percent) than other areas (90 percent). The percentage of safe stool disposal increases modestly as the mother's level of education and wealth quintile go up. For mothers with no education, 85 percent practised safe disposal, compared to 94 percent of women with post-secondary education. Safe stool disposal increases from 83 percent for children in the lowest wealth quintile to 95 percent of those in the highest quintile.

NUTRITION OF CHILDREN AND WOMEN 11

H.R. Gunasekera and Chandrani Piyasena

Nutrition intake from birth to two years of age is a key determinant of the future growth, health, and development of the child. However, this period is often marked by growth faltering, micronutrient deficiencies, and common childhood illnesses. Proper breastfeeding practices, including exclusive breastfeeding during the first six months of life, are crucial to the health and well-being of a child. Continued breastfeeding for a longer period not only improves the nutritional status of the child but also prevents the mother's exposure to another pregnancy too soon. Complementary foods introduced initially around six months of age contribute to the nutritional needs of the child.

A woman's nutritional status has important implications for her health as well as the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, slow recovery from illness, and heightened risk of adverse pregnancy outcomes. For example, a woman who has poor nutritional status, short stature, anaemia, or other micronutrient deficiencies has a greater risk of obstructed labour, producing lower quality breast milk, dying due to postpartum haemorrhage, and morbidity from various conditions. If the mother's nutritional status is unsatisfactory, her baby may have a low weight at birth and become ill.

This chapter presents information about nutritional concerns for children and women. Anthropometric assessment of nutritional status, diversity of foods consumed, and micronutrient intake are presented for children and women. In addition, infant and young child feeding practices, including breastfeeding and feeding with solid and semisolid foods, are presented for children. A summary indicator that describes the quality of infant and young child (age 6-23 months) feeding practices (IYCF) is included.

11.1 NUTRITIONAL STATUS OF CHILDREN

Anthropometric data on height and weight collected in the 2006-07 SLDHS permit the measurement and evaluation of the nutritional status of young children in Sri Lanka. This evaluation allows identification of subgroups of children who are at increased risk of faltered growth, disease, impaired mental development, and death.

11.1.1 Measurement of Nutritional Status among Young Children

The 2006-07 SLDHS collected data on the nutritional status of children by measuring the height and weight of all children under six years of age. Data were collected with the aim of calculating three indices—namely, weight-for-age, height-for-age, and weight-for-height. Weight measurements were obtained using lightweight, bathroom-type scales with a digital screen designed and manufactured under the guidance of UNICEF. Height measurements were carried out using a measuring board produced by Shorr Productions. Children younger than 24 months were measured lying down (recumbent length) on the board, while standing height was measured for older children.

For the 2006-07 SLDHS, the nutritional status of children is calculated using new growth standards published by WHO in 2006. These new growth standards were generated using data collected in the WHO Multicentre Growth Reference Study (WHO, 2006). The study, whose sample included 8,440 children in six countries, was designed to provide a description of how children should grow under optimal conditions. The WHO Child Growth Standards can therefore be used to assess children all over the world, regardless of ethnicity, social and economic influences, and feeding

practices.[1] Each of the three nutritional status indicators described below is expressed in standard deviation units from the median of the Multicentre Growth Reference Study sample.

Each of these indices—height-for-age, weight-for-height, and weight-for-age—provides different information about growth and body composition, which is used to assess nutritional status. The height-for-age index is an indicator of linear growth retardation and cumulative growth deficits. Stunting reflects failure to receive adequate nutrition over a long period of time and is also 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. Children whose height-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted) and are chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted.

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. 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 whose weight for height is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted) and are acutely malnourished. Children whose weight-for-height is below minus three standard deviations (-3 SD) are considered severely wasted.

Weight-for-age is a composite index that takes into account both acute and chronic malnutrition. Children whose weight-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age is below minus three standard deviations (-3 SD) are considered severely underweight.

The analysis presented in this chapter uses measurements of height and weight obtained for all children under age 5 living in the households selected for the SLDHS sample. The results include children who were not biological offspring of the women interviewed in the survey.

Both height and weight measurements were obtained for 94 percent of the 6,857 children under age five in the sampled households. The following analysis focuses on the 6,567 children for whom complete and plausible anthropometric and age data were collected.

11.1.2 Stunting

Table 11.1 shows the nutritional status of children under five classified by background characteristics. At the national level, the height-for age indicator reveals that 17 percent of children under five are stunted, and only 4 percent are severely stunted.

Stunting generally increases with age and peaks among children age 18-23 months (22 percent). From age 24 months onward, the percent stunted gradually drops (Figure 11.1). First births and births occurring 48 or more months after a prior birth are less likely to be stunted than children born after a shorter birth interval. Male children are slightly more likely to be stunted than female children.

Table 11.1 also reveals that children under five whose mothers who do not live in the household have a higher percentage of stunting (23 percent) than children living with their mother (17 percent). This result provides support to the argument that children who do not live with their natural mother may not receive the same quality of care and nurturing that they would if they lived with her.

[1] Appendix Table C.7 provides the same indices using the older internationally accepted reference population (NCHS/WHO) to allow comparison with previous data sources.

Table 11.1 Nutritional status of children

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 2006-07

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	
Age in months												
<6	2.5	10.0	(0.3)	6.2	15.1	1.8	(0.8)	2.8	11.9	0.8	(0.8)	543
6-8	2.0	9.6	(0.5)	2.5	10.3	1.8	(0.7)	1.7	12.2	0.7	(0.9)	309
9-11	4.6	15.5	(0.8)	1.9	11.5	0.4	(0.7)	4.8	15.3	0.4	(1.0)	393
12-17	4.7	17.3	(1.0)	1.8	12.9	1.8	(0.8)	2.0	17.8	0.6	(1.0)	687
18-23	5.1	22.0	(1.2)	2.8	15.7	2.0	(0.8)	4.5	22.8	0.8	(1.2)	672
24-35	4.6	21.0	(1.1)	2.9	14.1	1.2	(1.0)	3.9	22.7	0.3	(1.3)	1,325
36-47	3.3	18.7	(1.1)	2.5	15.2	1.9	(1.0)	3.9	24.2	1.2	(1.3)	1,337
48-59	3.4	15.1	(1.0)	2.7	17.3	1.5	(1.1)	4.2	24.9	0.3	(1.3)	1,302
Sex												
Male	4.7	18.1	(1.0)	3.1	16.1	1.6	(0.9)	3.8	21.8	0.8	(1.2)	3,391
Female	3.0	16.5	(0.9)	2.5	13.2	1.5	(0.9)	3.5	20.4	0.5	(1.2)	3,177
Birth interval in months[2]												
First birth[3]	3.4	14.8	(0.9)	2.7	15.3	1.8	(0.9)	3.5	19.3	0.9	(1.1)	2,622
<24	6.1	24.6	(1.1)	3.4	12.4	0.7	(0.9)	6.3	20.7	0.0	(1.3)	361
24-47	5.3	20.5	(1.1)	2.8	14.0	1.7	(0.9)	4.3	23.3	0.7	(1.3)	1,244
48+	3.2	16.7	(1.0)	2.7	14.7	1.4	(0.9)	2.9	21.9	0.5	(1.2)	2,075
Mother's interview status												
Interviewed	3.8	17.1	(1.0)	2.7	14.7	1.6	(0.9)	3.6	21.0	0.7	(1.2)	6,302
Not interviewed but in household	3.1	14.7	(0.5)	11.2	25.4	0.0	(1.1)	4.3	12.9	0.0	(1.1)	55
Not interviewed, and not in the household[4]	4.3	22.8	(1.2)	4.1	14.0	1.4	(0.8)	4.4	26.3	0.0	(1.2)	208
Mother's nutritional status[5]												
Thin (BMI<18.5)	5.9	23.2	(1.2)	5.1	22.9	0.8	(1.2)	7.5	30.4	0.4	(1.5)	1,045
Normal (BMI 18.5-24.9)	3.8	17.3	(1.0)	2.7	14.9	1.4	(1.0)	3.2	21.8	0.4	(1.2)	3,307
Overweight/obese (BMI ≥25)	3.0	14.5	(0.8)	1.8	9.9	2.6	(0.7)	2.5	14.5	1.2	(0.9)	1,607
Residence												
Urban	2.8	13.8	(0.7)	3.2	14.7	1.8	(0.8)	3.0	16.5	0.8	(1.0)	831
Rural	3.3	16.2	(0.9)	2.7	14.8	1.5	(0.9)	3.4	21.2	0.6	(1.2)	5,357
Estate	14.2	40.2	(1.7)	3.8	13.5	1.8	(0.8)	8.9	30.1	0.5	(1.5)	379
District												
Colombo	1.4	8.4	(0.6)	2.1	13.2	1.9	(0.8)	1.5	14.1	1.3	(0.9)	785
Gampaha	1.2	10.0	(0.6)	2.4	10.9	2.1	(0.8)	2.3	11.6	1.3	(0.9)	809
Kalutara	3.1	15.9	(0.9)	1.8	12.1	1.3	(0.8)	4.3	16.9	0.8	(1.1)	354
Kandy	2.4	18.1	(1.1)	2.1	15.7	1.4	(1.0)	4.4	25.3	0.6	(1.3)	460
Matale	6.7	19.2	(1.0)	2.5	11.8	0.0	(0.9)	4.8	23.2	0.0	(1.2)	134
Nuwara Eliya	13.5	40.8	(1.7)	2.0	10.5	2.5	(0.5)	5.4	25.3	0.2	(1.3)	239
Galle	2.5	16.0	(1.0)	1.1	14.3	0.8	(1.0)	2.0	23.2	0.1	(1.3)	371
Matara	2.7	14.8	(0.9)	2.9	17.4	1.9	(0.9)	2.0	23.3	0.6	(1.2)	287
Hambantota	5.8	18.8	(1.1)	3.7	20.9	1.0	(1.2)	4.2	23.8	0.0	(1.4)	213
Batticaloa	7.7	24.4	(0.9)	6.7	19.4	3.6	(1.0)	5.5	27.5	0.6	(1.2)	242
Ampara	2.7	14.1	(0.9)	4.7	19.3	0.9	(1.0)	2.1	22.0	0.0	(1.2)	260
Trincomalee	11.3	30.5	(1.0)	10.2	28.1	1.9	(1.2)	6.4	27.8	0.0	(1.5)	146
Kurunegala	4.2	18.6	(1.1)	2.8	13.3	2.0	(0.9)	3.9	20.6	0.6	(1.2)	526
Puttalam	1.4	14.0	(1.0)	1.2	11.7	0.7	(0.9)	1.9	19.2	0.7	(1.2)	242
Anuradhapura	2.5	15.3	(1.0)	3.4	14.6	0.4	(1.0)	2.9	25.0	0.0	(1.3)	279
Polonnaruwa	0.6	16.0	(1.0)	3.2	17.9	0.6	(1.1)	5.3	25.6	0.0	(1.3)	136
Badulla	8.7	33.1	(1.4)	3.7	17.5	0.9	(1.0)	7.0	32.8	0.0	(1.5)	278
Monaragala	7.4	21.7	(1.1)	3.9	19.8	0.9	(1.1)	7.8	26.6	0.5	(1.4)	185
Ratnapura	5.5	19.3	(1.2)	2.9	12.3	2.7	(0.8)	5.5	23.9	1.1	(1.2)	365
Kegalle	2.8	17.5	(1.1)	1.2	15.6	0.5	(1.0)	4.0	23.3	1.0	(1.3)	257
Mother's education[6]												
No education	10.4	41.0	(1.7)	2.5	17.0	1.9	(1.0)	7.6	36.3	0.0	(1.7)	146
Primary	8.9	28.7	(1.4)	4.0	18.5	1.3	(1.1)	6.7	32.8	0.3	(1.5)	601
Secondary	3.7	18.3	(1.0)	3.3	15.6	1.1	(1.0)	4.2	22.3	0.5	(1.2)	3,312
Passed G.C.E. (O/L)	2.8	13.8	(0.8)	1.5	13.3	3.2	(0.8)	2.1	18.1	1.3	(1.0)	724
Higher	2.1	9.6	(0.6)	1.9	12.0	1.8	(0.8)	1.7	13.4	0.9	(0.9)	1,573
Wealth quintile												
Lowest	8.2	28.3	(1.4)	4.1	16.9	1.0	(1.0)	6.3	29.3	0.2	(1.5)	1,377
Second	3.6	20.1	(1.1)	2.6	14.7	1.2	(1.0)	4.7	24.8	0.3	(1.3)	1,365
Middle	3.4	16.2	(1.0)	2.5	16.3	1.4	(1.0)	3.8	21.7	0.7	(1.2)	1,220
Fourth	2.6	12.8	(0.8)	2.8	15.1	1.7	(0.9)	2.3	17.7	0.5	(1.1)	1,335
Highest	1.2	8.1	(0.5)	2.1	10.5	2.6	(0.7)	1.0	11.2	1.6	(0.7)	1,271
Total	3.9	17.3	(1.0)	2.8	14.7	1.6	(0.9)	3.7	21.1	0.7	(1.2)	6,567

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. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes 399 cases missing mother's nutritional status, 1 case missing mother's interview status, and 1 case missing mother's education.

[1] Includes children who are below -3 standard deviations (SD) from the international reference population median

[2] Excludes children whose mothers were not interviewed

[3] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[4] Includes children whose mothers are dead

[5] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10.

[6] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Figure 11.1 Percentage of Children Under Five Who Are Stunted, by Demographic Characteristics

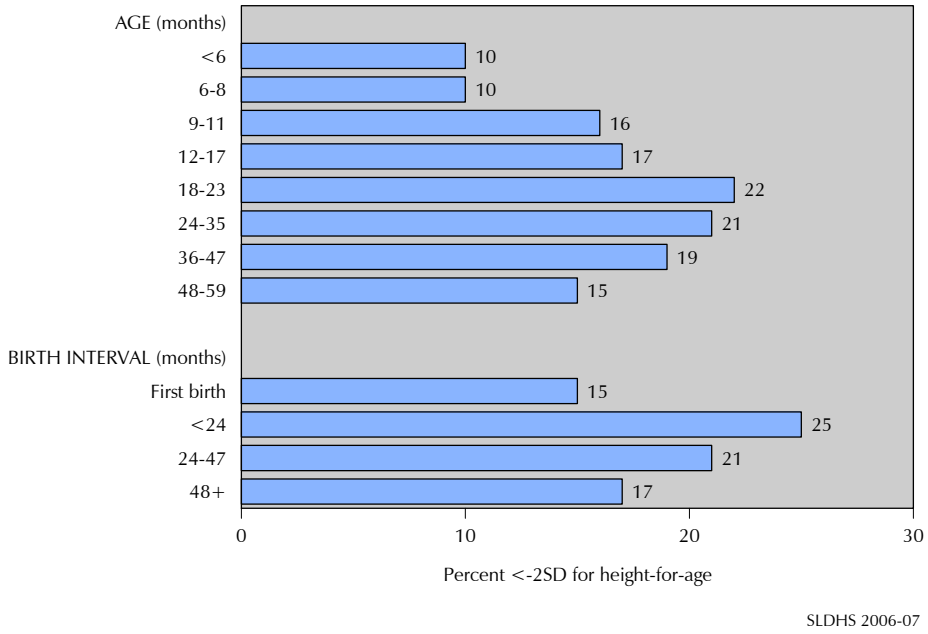
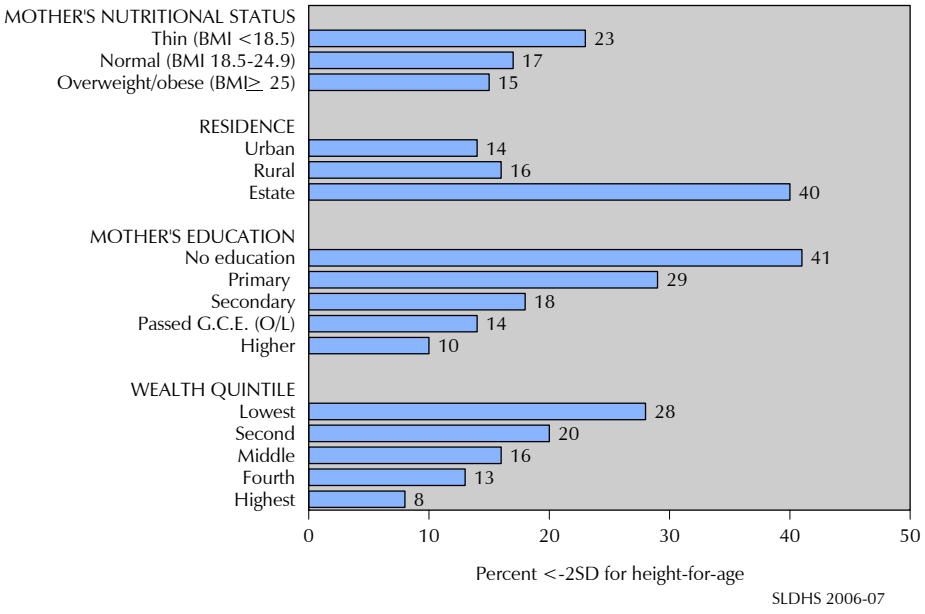


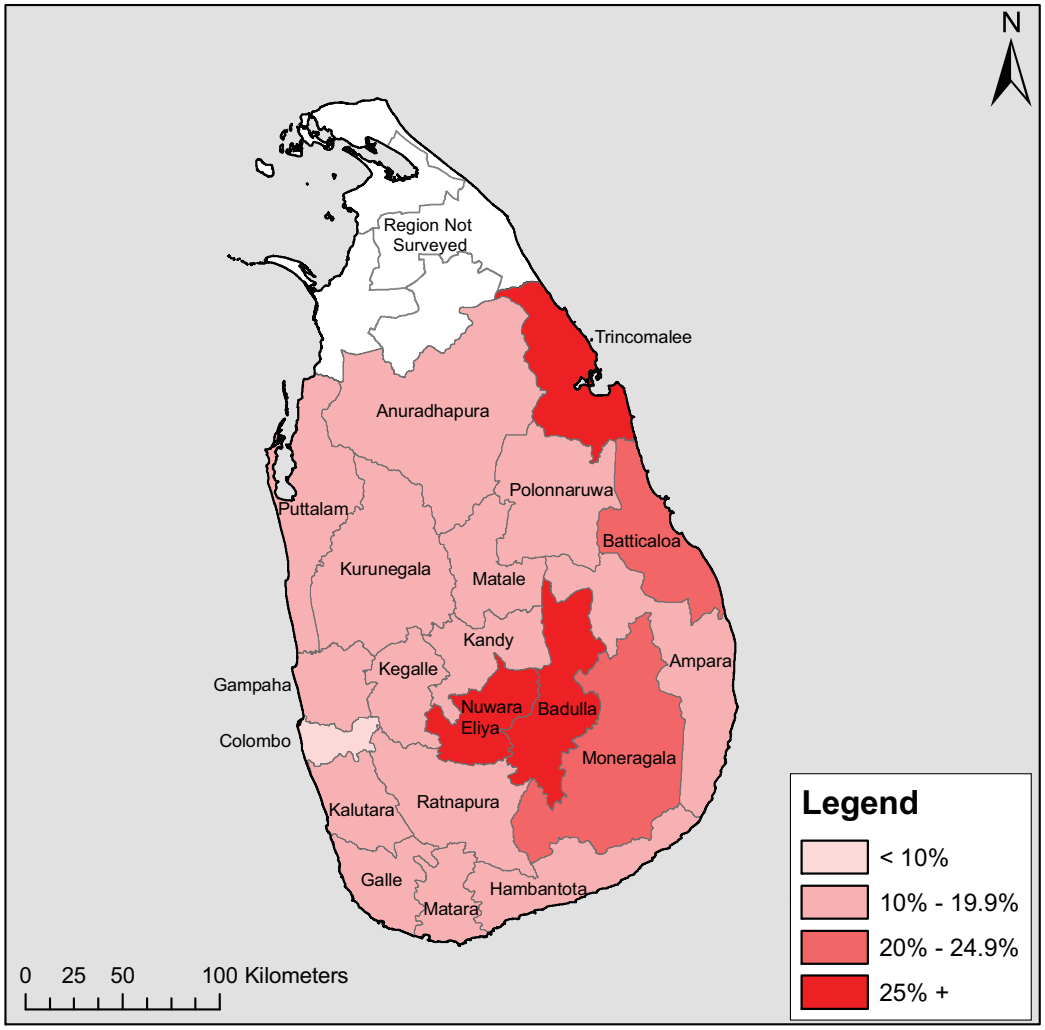
Figure 11.2 clearly shows that stunting decreases with better nutritional status of the mother, and increasing levels of mother's education and household wealth. For example, children whose mothers have no education are four times as likely to be stunted (41 percent) as children of mothers with higher education (10 percent).

Figure 11.2 Percentage of Children Under Five Who Are Stunted, by Other Selected Characteristics



There is little difference between children living in urban and rural areas, but the level of stunting in estate children is nearly three times higher than the urban areas. Table 11.1 and Figure 11.3 show variation in stunting across administrative districts. Colombo and Gampaha have the lowest levels of stunting (8 percent and 10 percent, respectively). Nuwara Eliya (41 percent) and Badulla (33 percent) have the highest prevalence of stunting. These two districts are predominantly estate areas with large tea plantations. Trincomalee and Batticaloa districts in Eastern Province also have relatively high levels of stunting (30 percent and 24 percent, respectively).

Figure 11.3 **Percentage of Children Under Five Who Are Stunted**



11.1.3 Wasting

Table 11.1 also shows children under five years who are wasted, as measured by weight-for-height. The overall prevalence of wasting is 15 percent, and 3 percent are severely wasted.

Wasting is highest at age 48-59 months (17 percent) and lowest in children in 6-8 months of age (10 percent). Birth interval has less effect on wasting than on stunting. Differentials in wasting by sex and mother's nutritional status are similar to the differentials in stunting; however, the patterns with mother's education and household wealth, though present, are not as strong as for stunting.

There appear to be no differences by residence, but prevalence of wasting varies among the districts. Children in Trincomalee have the highest level of wasting (28 percent). Wasting is also relatively high among children in Hambantota (21 percent), Moneragala (20 percent), and Batticaloa and Ampara (19 percent each). Interestingly, children living in Nuwara Eliya district are least likely to be wasted, although they have the highest level of stunting. This is most likely because children who are short for their age are less likely to be too thin for their height. The phenomenon is sometimes referred to as "nutritional dwarfs."

11.1.4 Underweight

As shown in Table 11.1, 21 percent of children under five are underweight, and 4 percent are severely underweight. The percentage generally increases with age. Children whose mother's BMI is below normal are more likely to be underweight than children whose mother's BMI is in the normal range (30 percent versus 22 percent). Differentials by other background characteristics show similar patterns as for stunting, except for birth interval.

The ranking of districts is similar to stunting to some extent. One-third of children in Badulla are underweight, followed by Trincomalee and Batticaloa (28 percent each), and Moneragala (27 percent).

11.2 Initiation of Breastfeeding

Early initiation of breastfeeding is encouraged for a number of reasons. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also fosters bonding between mother and child.

Table 11.2 shows the percentage of children born in the five years preceding the survey by breastfeeding status and the timing of initial breastfeeding, by background characteristics. The table indicates that 99 percent of children are breastfed at some point, just above the level found in the 2000 DHS (DCS, 2002).[2] There are hardly any differences among categories of the background variables. Overall, 80 percent of children are breastfed within one hour of birth and 97 percent are breastfed within one day after delivery. There are only slight differences in breastfeeding within one hour of birth between urban and rural sectors; children in estate areas are more likely to be breastfed within the first hour after birth. The percentage is highest in Trincomalee district (90 percent) and lowest in Matale district (71 percent).

[2] In 2000 it was 98.0 percent. The comparable figure for the 2006-07 SLDHS, excluding Eastern Province, is 99.3 percent (N=6,301).

Table 11.2 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and for the last children born in the five years preceding the survey ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth, by background characteristics, Sri Lanka 2006-07

Background characteristic	Breastfeeding among children born in past five years		Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children ever breastfed
	Percentage ever breastfed	Number of children born in past five years			
Sex					
Male	99.3	3,594	78.9	96.4	3,070
Female	99.2	3,396	80.9	97.3	2,907
Residence					
Urban	99.6	903	78.1	96.8	752
Rural	99.2	5,681	79.8	96.8	4,927
Estate	99.2	405	85.0	97.7	298
District					
Colombo	99.5	837	79.4	96.0	723
Gampaha	99.4	813	76.0	97.5	696
Kalutara	99.2	401	80.4	98.7	355
Kandy	98.4	492	81.7	97.0	414
Matale	98.6	133	71.4	96.0	116
Nuwara Eliya	100.0	258	78.1	96.1	205
Galle	98.9	371	74.0	96.4	303
Matara	99.5	295	78.1	95.8	252
Hambantota	99.7	229	87.9	97.3	200
Batticaloa	98.3	248	85.9	98.5	203
Ampara	98.8	276	79.6	98.1	212
Trincomalee	99.1	165	90.4	96.5	136
Kurunegala	100.0	561	86.0	96.6	508
Puttalam	99.0	285	78.6	98.7	249
Anuradhapura	99.2	290	79.4	97.1	262
Polonnaruwa	99.3	154	72.9	94.8	139
Badulla	99.3	315	81.9	96.6	253
Moneragala	100.0	188	76.2	97.7	165
Ratnapura	99.6	393	74.5	94.9	341
Kegalle	98.7	285	86.4	97.0	244
Mother's education					
No education	98.0	164	78.2	96.6	137
Primary	99.1	667	77.3	97.4	538
Secondary	99.2	3,645	80.9	97.0	3,139
Passed G.C.E. (O/L)	99.6	801	83.6	97.6	704
Higher	99.5	1,712	76.8	96.1	1,459
Wealth quintile					
Lowest	98.7	1,466	79.7	97.3	1,209
Second	99.6	1,423	80.4	97.1	1,208
Middle	99.1	1,314	81.1	97.2	1,166
Fourth	99.7	1,435	80.6	96.7	1,250
Highest	99.3	1,352	77.3	96.0	1,144
Total	99.3	6,989	79.9	96.9	5,977

Note: Table is based on births in the past five years whether the children are living or dead at the time of interview

[1] Includes children who started breastfeeding within one hour of birth

Feeding the first milk, colostrum, to the newborn is beneficial to the baby's health. Giving colostrum has been promoted to mothers and health care providers. Most newborns (92 percent) are given colostrum. As Table 11.3 shows, only 8 percent do not receive the first milk. Women in estate areas are three and four times more likely to discard the colostrum as urban and rural women, respectively.

Among those mothers who did not give colostrum to their baby, 61 percent took this action on the advice of health providers. Thus, although there has been strong improvement in giving colostrum from 77 percent in 2000 to 92 percent in 2006-07,[3] health planners might focus on the information health providers give to mothers after delivery.

[3] The percentage giving colostrum in the 2006-07 survey, excluding Eastern Province, is 92.2.

Table 11.3 Colostrum feeding

Among children born in the five years before the survey who were ever breastfed, percentage of the most recent births who were not given colostrum and among those, the percentage whose mothers were advised by a health provider not to give colostrum, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage not given colostrum	Number of last-born children born in past five years who were ever breastfed	Percentage advised by a health provider not to use colostrum	Number of children who were not given colostrum
Sex				
Male	8.1	3,070	61.4	247
Female	8.5	2,907	60.9	246
Residence				
Urban	10.4	752	60.1	78
Rural	6.6	4,927	56.9	326
Estate	29.8	298	77.7	89
Mother's education				
No education	23.2	137	(54.2)	32
Primary	20.3	538	59.3	109
Secondary	9.0	3,139	61.7	282
Passed G.C.E. (O/L)	5.0	(704	(65.1)	35
Higher	2.4	1,459	(65.1)	35
Wealth quintile				
Lowest	13.7	1,209	62.3	166
Second	9.7	1,208	61.5	117
Middle	7.5	1,166	56.9	87
Fourth	5.6	1,250	60.8	70
Highest	4.6	1,144	64.1	53
Total	8.3	5,977	61.1	493

Note: Figures in parentheses are based on 25-49 unweighted cases.

11.3 BREASTFEEDING STATUS BY AGE

Policy guidelines for breastfeeding in Sri Lanka are in accordance with UNICEF and WHO recommendations that children be exclusively breastfed during the first six months of life and that children be given solid or semisolid complementary food in addition to continued breastfeeding from 6 months until age 24 months or more, when the child is fully weaned. Exclusive breastfeeding is recommended because breast milk is uncontaminated and contains all the nutrients necessary for children in the first few months of life. In addition, the mother's antibodies in breast milk provide immunity to disease. Early supplementation is discouraged for several reasons. First, it exposes infants to pathogens and increases their risk of infection, especially disease. Second, it decreases infants' intake of breast milk and therefore suckling, which reduces breast milk production. Third, in low-resource settings, supplementary food is often nutritionally inferior.

Information on complementary feeding was obtained by asking mothers about the current breastfeeding status of all children under five years of age and, for the youngest child born in the three-year period before the survey and living with the mother, foods and liquids given to the child the day and night before the survey.

Table 11.4 shows the percent distribution of youngest children under three years living with the mother by breastfeeding status according to age in months. Breastfeeding is widely accepted in Sri Lanka. For example, 97 percent of children age 9-11 months and 91 percent of those age 12-17 months are still being breastfed. Exclusive breastfeeding is reported for 76 percent of children under 6 months. From levels over 85 percent for the first three months, exclusive breastfeeding declines to 54 percent in the fourth and fifth months. Although any liquid or solid food is not recommended before the sixth month of life, small percentages of children are given other liquids during this period. A few mothers introduce complementary foods as early as 2-3 months (3 percent), and this practice increases to 33 percent in months 4-5. Most of the children age 6-8 months (84 percent) receive complementary foods. The percentage rises sharply with the next age group, and 95 percent of children are fed solid or semisolid food by one year of age.

Table 11.4 Breastfeeding status by age

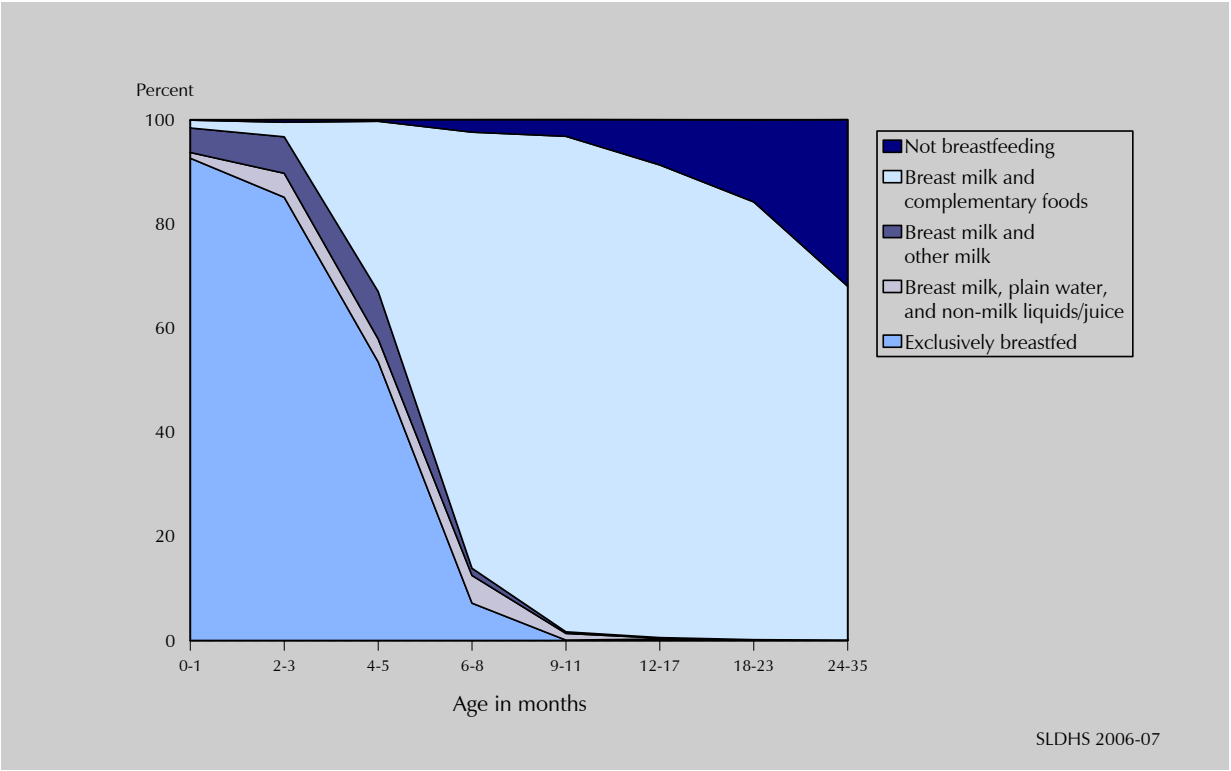
Percent distribution of youngest children under three years who are living with their mother by breastfeeding status and the percentage currently breastfeeding, according to age in months, Sri Lanka 2006-07

		Breastfeeding and consuming:							
Age in months	Not breast-feeding	Exclusively breastfed	Plain water only	Non-milk liquids/ juice	Other milk	Comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under three years
0-1	0.0	92.6	1.1	0.0	4.7	1.5	100.0	100.0	164
2-3	0.5	85.1	3.7	0.9	7.0	2.8	100.0	99.5	239
4-5	0.3	53.5	2.4	2.0	9.1	32.7	100.0	99.7	224
6-8	2.4	7.2	3.9	1.4	1.4	83.7	100.0	97.6	325
9-11	3.2	0.1	0.9	0.4	0.3	95.1	100.0	96.8	401
12-17	8.7	0.3	0.2	0.0	0.1	90.7	100.0	91.3	705
18-23	15.7	0.1	0.0	0.0	0.1	84.0	100.0	84.3	687
24-35	32.0	0.1	0.0	0.0	0.0	67.9	100.0	68.0	1,251
Selected age groups									
0-3	0.3	88.1	2.6	0.5	6.1	2.3	100.0	99.7	403
0-5	0.3	75.8	2.5	1.1	7.2	13.2	100.0	99.7	627
6-9	2.6	5.0	3.2	1.3	1.3	86.6	100.0	97.4	471
12-15	7.8	0.4	0.2	0.0	0.0	91.5	100.0	92.2	463
12-23	12.2	0.2	0.1	0.0	0.1	87.4	100.0	87.8	1,392
20-23	16.1	0.2	0.0	0.0	0.2	83.5	100.0	83.9	438

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk 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 non-milk liquids and who do not receive complementary foods are classified in the non-milk 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.

Although it is recommended that breastfeeding be continued throughout the second year of life, 12 percent of children 12-23 months old are not receiving any breast milk. Figure 11.4 illustrates the patterns of infant feeding by the age of the child.

Figure 11.4 **Infant Feeding Practices of Children Under 3 Years by Age**



11.4 DURATION AND FREQUENCY OF BREASTFEEDING

Table 11.5 presents the duration of breastfeeding by background characteristics. The estimates of median and mean duration of breastfeeding are based on current status data, that is, the proportion of children in the three years preceding the survey who were being breastfed at the time of the survey.

Breastfeeding is widely accepted in Sri Lanka, and the duration of breastfeeding is fairly long. The median duration of any breastfeeding is 33 months, and the mean is 29 months. For exclusive breastfeeding and predominant breastfeeding, the median is less than 5 months. The means are 5 and 6 months, respectively.

Table 11.5 also shows duration of breastfeeding by selected background characteristics. By residential sector, breastfeeding duration is longest in rural areas (34 months) and is shortest in the estate sector (25 months). There are no differences in duration of any breastfeeding by mother's education level, except that women with no education have shorter breastfeeding intervals. However, the median for exclusive breastfeeding does tend to rise as the mother's education level goes up. Socioeconomic status as measured by wealth quintile has no relationship with the duration of breastfeeding.

Figures 11.5 and 11.6 show that the duration of breastfeeding has increased since 1993. The mean for any breastfeeding has increased from 23 months in 1993 to 28 months in 2000 and to 30 months in 2006-07. The mean for exclusive breastfeeding has risen from 1 month in 1993 to 4 months in 2000 and to 5 months in 2006-07.[4] These results suggest that communication about breastfeeding by providers and through other channels is bringing about a positive change in mothers' behaviour.

[4] Figures for 2006-07 exclude Eastern Province in order to be comparable to the 1993 and 2000 SLDHS.

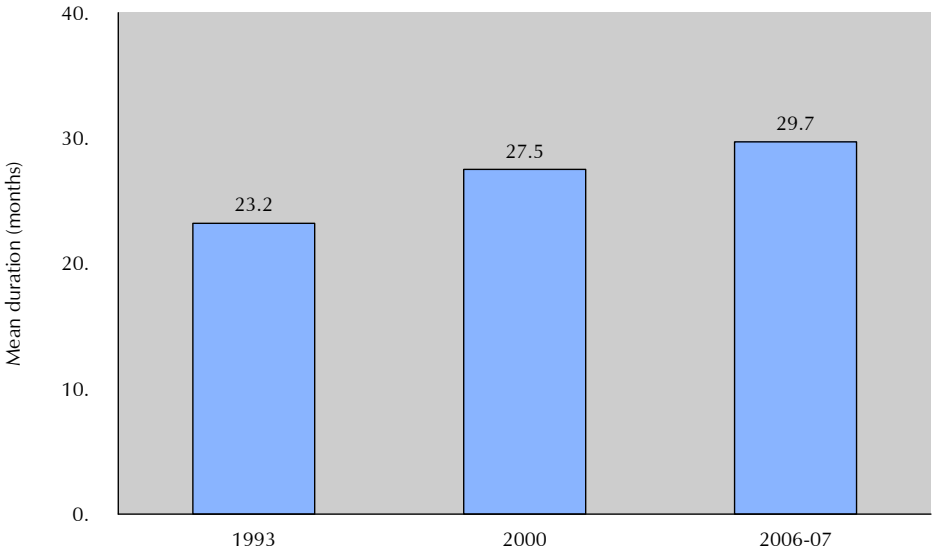
Table 11.5 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years		
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding[1]
Sex			
Male	32.8	4.4	4.7
Female	33.3	4.6	4.9
Residence			
Urban	29.0	3.6	4.0
Rural	33.6	4.7	5.0
Estate	25.4	3.2	3.3
District			
Colombo	30.4	4.5	4.9
Gampaha	34.0	4.2	4.4
Kalutara	u	3.3	3.3
Kandy	u	5.6	5.7
Matale	32.4	5.4	5.5
Nuwara Eliya	29.4	3.1	3.4
Galle	u	3.4	3.4
Matara	u	3.4	4.0
Hambantota	31.8	4.3	5.1
Batticaloa	23.1	4.1	4.6
Ampara	28.9	1.3	2.0
Trincomalee	27.7	3.8	4.8
Kurunegala	u	4.6	4.8
Puttalam	31.8	5.3	5.6
Anuradhapura	u	5.2	5.6
Polonnaruwa	33.3	5.3	6.3
Badulla	u	5.0	5.3
Moneragala	u	5.1	5.9
Ratnapura	u	4.6	5.1
Kegalle	33.8	5.0	5.0
Mother's education			
No education	19.9	3.3	3.7
Primary	30.5	3.9	4.6
Secondary	33.6	4.5	4.8
Passed G.C.E. (O/L)	31.9	4.7	5.2
Higher	33.0	4.6	4.8
Wealth quintile			
Lowest	33.0	4.0	4.5
Second	u	4.7	5.0
Middle	31.5	4.8	5.2
Fourth	u	4.6	4.8
Highest	30.8	4.2	4.5
Total	33.0	4.5	4.8
Mean for all children	29.3	5.1	5.5

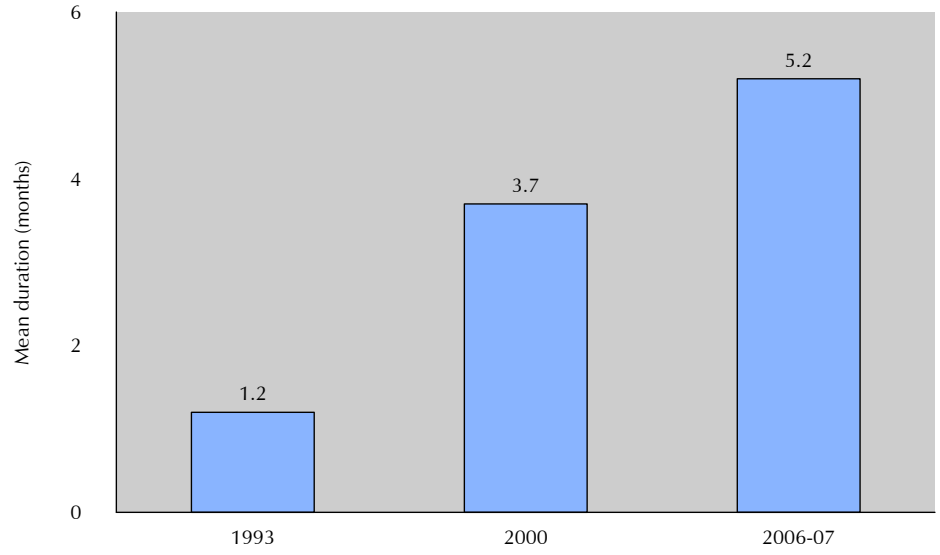
Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey
u = Unavailable due to long duration of breastfeeding
[1] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

Figure 11.5 Trends in Mean Duration of Any Breastfeeding among Children Under Age Three, 1993-2006



Note: 2006-07 data shown here exclude Eastern Province for comparison purposes.
Source: DCS, 2002, p. 195

Figure 11.6 Trends in Mean Duration of Exclusive Breastfeeding among Children Under Age Three, 1993-2006



Note: 2006-07 data shown here exclude Eastern Province for comparison purposes.
Source: DCS, 2002, p. 195

11.5 TYPES OF COMPLEMENTARY FOODS

Sri Lanka has adopted the recommendations of UNICEF and WHO for the introduction of solid food to infants around the age of 6 months. This is necessary since by that age breast milk alone is no longer sufficient to maintain a child's optimal growth. In the 2006-07 SLDHS, information on complementary foods was gathered about the youngest children under three years of age living with their mother on the day or night preceding the interview. Table 11.6 provides information on the types of food given to such children according to their breastfeeding status.

As mentioned earlier (Section 11.3), the majority of children are not fed solid or semisolid foods until 6 months, although some infants are given these foods earlier. Among breastfeeding children age 4-5 months, almost 30 percent are given food made from grain such as rice, bread, or noodles. One in six (16 percent) breastfeeding children 4-5 months of age consumes infant formula. Among breastfeeding children 4-5 months of age, 13 percent received other milk and 17 percent received other liquids.

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under three years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Sri Lanka 2006-07

				Solid or semi-solid foods											
	Liquids														
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vegetables rich in vitamin A[4]	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry, and eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Food made with oil, fat, and butter	Sugary foods	Number of children
BREASTFEEDING CHILDREN															
0-1	5.8	1.9	1.1	0.0	1.1	0.8	1.1	0.8	1.5	1.2	0.8	1.5	0.0	0.3	164
2-3	8.6	4.0	2.7	1.5	2.9	1.4	0.0	0.0	0.3	0.3	0.0	2.9	0.3	0.6	238
4-5	15.9	12.5	17.3	9.9	29.9	14.7	6.9	8.9	10.4	7.1	2.1	32.2	3.2	6.4	224
6-8	30.2	26.0	49.0	37.5	80.6	62.2	29.9	44.3	43.4	38.8	14.1	85.0	20.2	38.0	318
9-11	38.5	34.3	54.6	38.8	97.3	81.5	42.7	59.3	60.8	59.8	24.7	98.1	31.9	61.6	389
12-17	52.0	49.8	67.5	33.8	98.0	84.2	48.8	60.2	61.8	74.8	30.0	99.0	37.7	75.9	643
18-23	66.1	64.2	78.5	27.7	98.9	84.8	50.6	56.5	63.8	79.1	33.6	99.5	37.9	83.4	579
24-35	67.3	64.3	86.2	18.7	99.1	85.6	49.0	57.5	64.8	83.3	27.0	99.8	36.0	84.4	851
6-23	49.9	47.1	65.1	33.6	95.3	80.2	45.0	56.3	59.2	67.2	27.4	96.7	33.7	69.0	1,928
Total	47.0	43.9	59.8	24.5	81.0	67.9	38.3	46.9	50.5	59.4	22.5	82.1	28.3	60.7	3,404
NONBREASTFEEDING CHILDREN															
12-17	93.5	91.1	70.2	44.5	98.1	79.5	35.2	63.2	55.3	75.8	40.1	98.1	41.2	71.8	62
18-23	89.0	85.0	83.3	43.2	98.8	75.0	40.7	58.6	47.0	79.7	30.4	100.0	41.0	83.1	108
24-35	83.0	83.2	82.2	26.0	98.4	79.5	48.2	50.6	53.0	85.7	30.8	98.8	42.2	80.8	400
6-23	90.7	86.6	75.3	44.3	97.7	75.0	39.1	57.9	48.9	74.2	32.7	99.1	40.0	76.1	190
Total	85.4	84.2	79.8	31.9	97.9	77.8	45.1	52.8	51.5	81.8	31.4	98.7	41.4	79.1	593

Note: Breastfeeding status and food consumed refer to a 24-hour" period (yesterday and last night). There are too few nonbreastfeeding children under 12 months to show separately.

[1] Other milk includes fresh, tinned and powdered cow or other animal milk

[2] Doesn't include plain water

[3] Includes fortified baby food

[4] Includes fruits and vegetables such as pumpkin, squash, carrots, dark green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

Above six months of age, there is a marked increase in the types of food given to infants. A large share of children above six months of age consumes food made from grains. The consumption of vitamin A-rich fruits and vegetables is relatively high (62 percent) for children aged 6-8 months, and 39 percent receive meat, fish, poultry, and eggs, which are rich in proteins essential to good health and mental development. Cheese, yoghurt, and other milk products are consumed the least (14 percent).

Comparison of feeding patterns of breastfeeding and non-breastfeeding children shows that the latter group eats an equally diverse diet, although the percentages for non-breastfeeding children are generally higher than for breastfeeding children.

11.6 Infant and Young Child Feeding Practices

Infant and young child feeding (IYCF) practices include timely initiation of feeding solid and semisolid foods from age 6 months, increasing the amount and variety of food, and increasing the frequency of feeding as the child gets older, while maintaining frequent breastfeeding. IYCF practices are ascertained on the basis of the number of food groups and number of times the child was fed during the day or night preceding the survey.

It is recommended that breastfeeding children age 6-23 months should be fed from three or more different food groups. Moreover, infants age 6-8 months should be fed at least twice a day, and children age 9-23 months at least three times a day, to meet the minimum standards. Non-breastfeeding children age 6-23 months should be fed milk or milk products every day. In addition they should be fed from four or more food groups (including milk products) and should be fed four or more times a day to satisfy the minimum standards (WHO, 2005).

Table 11.7 presents survey data on IYCF practices by background characteristics. Information is provided for the youngest child age 6-23 months living with the mother. The results are shown separately for children who are breastfed and those not breastfed, since the appropriate feeding practices are different for these two groups.

The table shows that 89 percent of breastfed children consume food from three or more food groups and 88 percent are fed at least the minimum number of times recommended. Eighty-three percent of breastfeeding children 6-23 months of age are given food from three or more food groups and fed at least the minimum number of times recommended. This is a fairly high level for a developing country.

Among non-breastfeeding children age 6-23 months, 96 percent were given milk or milk products the day before the survey. However, only 77 percent consumed food from four or more food groups, as recommended, and 72 percent were fed four or more times a day. Only 58 percent are fed appropriately according to all three recommended IYCF practices. Figure 11.7 compares IYCF practices by the child's breastfeeding status based on the criteria mentioned above. When breast-feeding and non-breastfeeding children are combined, four out of five children aged 6-23 months are fed appropriately with all three IYCF practices.

Feeding practices—as measured by the proportion of all children 6-23 months who are fed with all three IYCF practices—are least satisfactory in the estate sector (59 percent) compared to urban (79 percent) and rural (83 percent) areas. Adherence to appropriate IYCF practices varies from 59 percent in Trincomalee district to over 90 percent in Kalutara and Kurunegala. Other districts with much better than average feeding practices are Gampaha, Kegalle, Galle, Matara, and Colombo.

The percentage of all children who are fed according to the IYCF practices increases with child's age and mother's education. There are no differences in feeding practices for girls and boys and generally weak or moderate increases with successive wealth quintiles.

Table 11.7 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based upon number of food groups and times they are fed during the day or night preceding the survey by breastfeeding status and background characteristics, Sri Lanka 2006-2007

	Among breastfed children 6-23 months, percentage fed:				Among non-breastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	3+ food groups[1]	Minimum times or more[2]	Both 3+ food groups and minimum times or more	Number of breastfed children 5-23 months	Milk or milk products[3]	4+ food groups	4 times or more	With 3 IYCF practices[4]	Number of non-breast-fed children 6-23 months	Breast-milk or milk products[3]	3+ or 4+ food groups[5]	Minimum times or more[6]	With all 3 IYCF practices	Number of all children 6-23 months
Age in months														
6-8	64.7	76.3	60.7	318	*	*	*	*	8	100.0	63.9	76.0	60.0	325
9-11	88.8	85.0	79.6	389	*	*	*	*	13	100.0	88.0	83.9	78.0	401
12-17	95.7	91.2	89.0	643	97.4	84.4	79.9	71.9	62	99.8	94.7	90.2	87.5	705
18-23	95.4	94.2	91.2	579	93.9	78.1	70.4	55.7	108	99.0	92.7	90.4	85.6	687
Sex														
Male	88.3	88.5	82.9	974	97.9	75.2	74.0	57.7	104	99.8	87.1	87.1	80.4	1,078
Female	89.9	88.3	83.3	955	93.0	79.8	69.3	59.0	86	99.4	89.0	86.7	81.3	1,041
Residence														
Urban	90.3	88.7	82.6	218	96.1	83.8	73.2	62.7	50	99.3	89.1	85.8	78.9	268
Rural	89.7	89.1	84.2	1,610	98.0	81.5	74.5	62.9	117	99.9	89.2	88.1	82.8	1,728
Estate	76.3	77.1	66.2	100	(83.0)	(41.9)	(56.1)	(25.4)	23	96.8	69.8	73.1	58.5	124
District														
Colombo	91.6	90.3	85.1	210	(98.3)	(88.7)	(74.3)	(68.7)	41	99.7	91.1	87.7	82.4	251
Gampaha	90.2	94.6	88.9	242	*	*	*	*	16	100.0	89.8	94.1	88.0	257
Kalutara	93.5	97.5	93.5	105	*	*	*	*	12	99.6	91.6	97.0	90.8	116
Kandy	91.2	81.3	79.3	148	*	*	*	*	11	100.0	89.9	77.9	75.7	158
Matale	90.9	84.7	79.5	42	*	*	*	*	1	100.0	91.1	84.6	79.5	43
Nuwara Eliya	89.7	91.7	86.8	68	*	*	*	*	10	95.6	84.8	85.3	79.3	78
Galle	92.7	93.1	87.8	97	*	*	*	*	8	100.0	91.9	91.2	85.6	105
Matara	91.1	88.2	87.1	86	*	*	*	*	7	100.0	90.0	87.3	85.2	93
Hambantota	86.0	90.8	81.5	61	*	*	*	*	7	98.9	86.3	88.4	80.0	67
Batticaloa	82.8	83.9	76.5	57	*	*	*	*	11	98.2	81.7	79.6	70.5	68
Ampara	94.1	86.2	82.6	72	*	*	*	*	14	100.0	92.3	83.2	78.8	87
Trincomalee	66.8	75.3	62.2	45	*	*	*	*	5	100.0	64.8	74.2	59.2	50
Kurunegala	93.4	94.5	90.8	163	*	*	*	*	8	100.0	93.5	94.2	90.7	171
Puttalam	82.3	72.5	66.2	69	*	*	*	*	7	100.0	83.0	75.0	68.3	75
Anuradhapura	85.2	76.7	71.8	87	*	*	*	*	4	100.0	83.7	77.8	70.9	92
Polonnaruwa	85.6	79.7	74.8	43	*	*	*	*	1	100.0	86.1	80.4	75.6	44
Badulla	75.2	81.0	66.8	80	*	*	*	*	5	100.0	76.1	81.6	67.6	85
Moneragala	88.4	84.0	79.5	54	*	*	*	*	3	98.9	86.7	83.8	78.2	57
Ratnapura	90.5	94.3	87.5	121	*	*	*	*	15	99.3	85.4	91.6	80.7	136
Kegalle	91.8	90.8	88.3	78	*	*	*	*	6	100.0	91.7	88.4	86.1	84
Mother's education														
No education	(71.1)	(75.5)	(60.7)	25	*	*	*	*	9	(97.9)	(65.0)	(63.7)	(47.2)	33
Primary	80.2	83.2	74.8	159	(89.8)	(60.1)	(55.2)	(38.3)	21	98.8	77.9	80.0	70.5	180
Secondary	88.1	87.7	81.7	1,053	94.9	72.4	67.4	51.4	73	99.7	87.1	86.4	79.8	1,126
Passed G.C.E. (O/L)	88.9	85.3	80.6	215	(95.6)	(77.4)	(81.8)	(61.1)	27	99.5	87.6	84.9	78.4	243
Higher	95.2	93.7	91.2	477	99.2	93.4	84.7	79.4	60	99.9	95.0	92.7	89.9	537
Wealth quintile														
Lowest	84.9	86.8	79.4	395	(84.8)	(63.5)	(58.5)	(38.9)	38	98.7	83.0	84.3	75.9	433
Second	85.5	86.6	80.4	418	(98.3)	(68.6)	(64.8)	(43.3)	30	99.9	84.3	85.1	77.9	448
Middle	89.3	88.7	82.7	362	(100.0)	(91.6)	(74.9)	(74.9)	25	100.0	89.5	87.9	82.2	387
Fourth	94.1	89.8	86.8	408	(97.3)	(73.6)	(86.9)	(65.3)	28	99.8	92.8	89.6	85.4	436
Highest	92.1	90.5	86.4	345	98.3	84.9	75.2	66.6	70	99.7	90.9	87.9	83.1	415
Total	89.1	88.4	83.1	1,928	95.7	77.3	71.9	58.3	190	99.6	88.0	86.9	80.9	2,119

Note: Numbers in parentheses are based on 25-49 unweighted children; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Food groups: a) infant formula, milk other than breast milk, cheese or yogurt or other milk products; b) foods made from grains, roots, and tubers, including porridge, fortified baby food from grains; c) vitamin A-rich fruits and vegetables; d) other fruits and vegetables; e) eggs; f) meat, poultry, fish, and shellfish (and organ meats); g) legumes and nuts; h) foods made with oil, fat, or butter

[2] At least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months

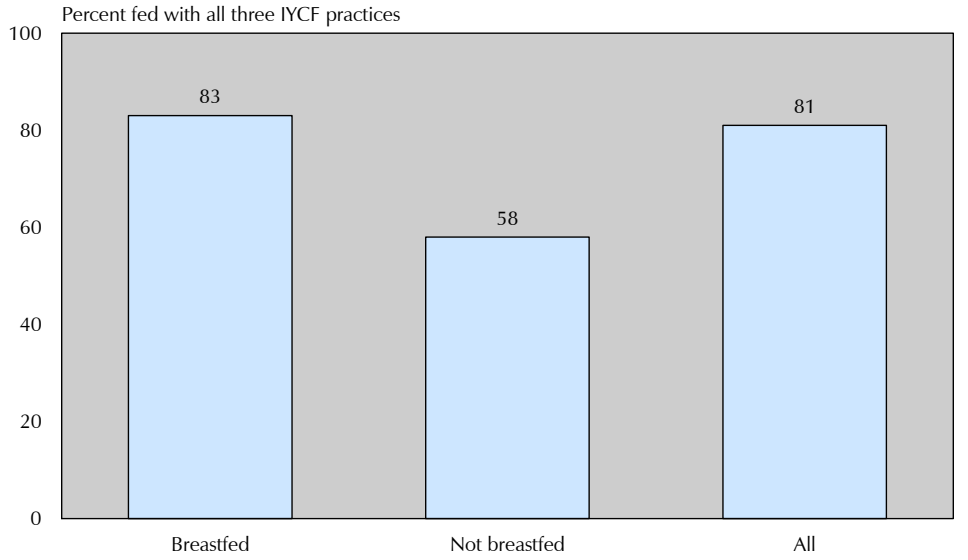
[3] Includes commercial infant formula, fresh, tinned and powdered animal milk, and cheese, yogurt and other milk products

[4] Nonbreastfed children ages 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding practices if they receive other milk or milk products and are fed at least the minimum number of times per day with at least the minimum number of food groups.

[5] 3+ food groups for breastfed children and 4+ food groups for non-breastfed children

[6] Fed solid or semi-solid food at least twice a day for infants 6-8 months, 3+ times for other breastfed children, and 4+ times for non-breastfed children

Figure 11.7 Percentage of Children 6-23 Months Who are Fed According to Infant and Young Child Feeding Practices, by Breastfeeding Status



SLDHS 2006-07

11.7 Presence of Iodised Salt in Households

As iodine is one of the critical micronutrients for health, the use of iodised salt in the household is described before presenting data on micronutrient intake of children.

In 1995 the government of Sri Lanka launched "Universal Salt Iodization" in order to overcome iodine deficiency disorder, which was recognised as a public health problem. As part of the 2006-07 SLDHS, interviewers tested the salt used for food preparation to see if it was sufficiently iodized. Salt in 97 percent of households was tested.

The availability of iodised salt at the household level is satisfactory. Among households with tested salt, Table 11.8 shows that 92 percent had iodised salt, a level that is comparable to reported findings in the survey on iodine nutrition status in Sri Lanka in 2005. Adequately iodized salt was found about equally often in all three areas of residence. The testing found that less than 90 percent of households in four districts (Matale, Trincomalee, Kurunegala, and Puttalam) had adequately iodized salt. It is ironic that the highest percentage (20 percent) of households with no iodine in salt was found in Puttalam district, where one of the salt iodization plants exists. This finding is probably due to the free availability of non-iodized salt at low cost from salterns in the vicinity.

Table 11.8 Presence of iodized salt in household

Percentage of all households with salt tested for iodine content and among households with salt tested, the percent distribution by level of iodine in salt, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Among all households, the percentage with salt tested	Number of households	Among households with tested salt, the percent distribution by iodine content of salt		Total	Number of households
			Colour did not change (not iodized)	Colour changed (iodized)		
Residence						
Urban	95.8	2,483	6.9	93.1	100.0	2,379
Rural	97.3	16,449	7.7	92.3	100.0	16,000
Estate	98.3	931	7.4	92.6	100.0	915
District						
Colombo	96.8	2,369	7.4	92.6	100.0	2,294
Gampaha	94.6	2,481	8.8	91.2	100.0	2,347
Kalutara	95.6	1,153	4.2	95.8	100.0	1,102
Kandy	99.1	1,390	7.2	92.8	100.0	1,378
Matale	95.2	424	12.8	87.2	100.0	404
Nuwara Eliya	96.9	665	8.1	91.9	100.0	645
Galle	97.3	1,159	7.3	92.7	100.0	1,128
Matara	98.4	783	3.2	96.8	100.0	770
Hambantota	98.2	603	5.5	94.5	100.0	592
Batticaloa	99.5	490	4.2	95.8	100.0	487
Ampara	99.5	590	2.7	97.3	100.0	587
Trincomalee	99.4	347	14.4	85.6	100.0	345
Kurunegala	97.4	1,875	14.0	86.0	100.0	1,826
Puttalam	97.7	809	20.1	79.9	100.0	790
Anuradhapura	97.4	840	5.3	94.7	100.0	819
Polonnaruwa	97.4	441	3.7	96.3	100.0	430
Badulla	96.7	871	3.4	96.6	100.0	842
Moneragala	98.1	496	3.8	96.2	100.0	487
Ratnapura	96.8	1,169	5.9	94.1	100.0	1,132
Kegalle	98.4	905	2.8	97.2	100.0	891
Wealth quintile						
Lowest	95.7	4,257	10.0	90.0	100.0	4,075
Second	96.9	4,048	7.6	92.4	100.0	3,924
Middle	97.3	3,937	8.0	92.0	100.0	3,830
Fourth	97.9	3,816	7.5	92.5	100.0	3,737
Highest	98.0	3,805	4.5	95.5	100.0	3,729
Total	97.1	19,862	7.6	92.4	100.0	19,295

11.8 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency has serious consequences for childhood morbidity and mortality. Children can receive micronutrients from food, food fortification, and direct supplementation. Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage. VAD can also increase severity of infections, such as measles and diarrhoeal diseases in children, and slow recovery from illness. The human liver can store an adequate amount of the vitamin for four to six months. Periodic dosing with vitamin A supplements (usually every six months) is one method of ensuring that children at risk do not develop VAD.

The 2006-07 SLDHS collected information on the consumption of foods rich in vitamin A. These foods include meat (and organ meat), fish, poultry, eggs, pumpkin, carrot, squash, dark green leafy vegetables, or other vegetables and fruits that are yellow and orange inside such as ripe mangoes, and papaya.

Table 11.9 shows that over 90 percent of children age 6-35 months consumed foods rich in vitamin A in the previous 24 hours. The consumption of foods rich in vitamin A increases with the age of the child and mother's education. Breastfeeding children are slightly less likely to consume foods rich in vitamin A.

Table 11.9 Micronutrient intake among children

Among youngest children age 6-35 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey; and among all children 6-59 months, the percentages who were given iron supplements in the past seven days and deworming medication in the six months preceding the survey; and among all children age 6-59 months who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Sri Lanka 2006-07

	Among youngest children age 6-35 months living with the mother:			Among all children age 6-59 months:			Among children age 6-59 months living in households tested for iodized salt	
Background characteristic	Percentage who consumed foods rich in vitamin A in past 24 hours[1]	Percentage who consumed foods rich in iron in past 24 hours[2]	Number of children	Percentage given iron supplements in past 7 days	Percentage given deworming medication in past 6 months	Number of children	Percentage living in house-holds with adequately iodized salt[3]	Number of children
Age in months								
6-8	67.4	38.5	325	7.3	1.9	330	92.8	326
9-11	88.4	59.5	401	9.5	7.4	409	92.4	397
12-17	94.0	74.9	705	8.8	43.4	718	93.2	706
18-23	94.4	79.2	687	10.3	75.6	719	92.7	714
24-35	96.0	84.1	1,251	8.2	79.7	1,395	92.0	1,384
36-47	na	na	0	6.3	80.5	1,357	93.9	1,341
48-59	na	na	0	5.6	78.7	1,300	93.5	1,283
Sex								
Male	90.6	72.7	1,727	7.5	66.1	3,209	92.7	3,172
Female	92.6	75.0	1,643	7.6	66.2	3,021	93.4	2,979
Breastfeeding status								
Breastfeeding	91.1	72.1	2,779	7.9	58.3	3,418	92.8	3,370
Not breastfeeding	94.0	82.2	582	7.0	75.9	2,761	93.3	2,730
Residence								
Urban	92.1	74.1	418	12.4	58.7	793	92.4	783
Rural	92.5	75.5	2,775	6.9	68.4	5,074	93.2	5,008
Estate	75.8	46.0	176	6.9	51.3	363	91.7	360
District								
Colombo	93.3	74.2	395	10.9	63.4	739	92.2	730
Gampaha	91.3	70.5	398	7.5	67.6	724	92.8	698
Kalutara	93.7	78.7	197	6.7	74.9	375	95.4	367
Kandy	93.4	73.5	233	6.0	68.4	430	93.3	430
Matale	87.8	69.2	63	7.4	63.5	110	89.4	107
Nuwara Eliya	87.4	59.2	123	7.4	57.0	233	91.1	230
Galle	89.6	81.0	160	9.0	72.4	330	95.6	329
Matara	94.8	84.4	143	2.6	62.4	267	97.6	265
Hambantota	93.1	70.4	110	4.1	63.9	208	94.1	206
Batticaloa	90.0	85.7	113	21.6	40.2	225	96.8	224
Ampara	92.5	81.2	130	15.8	70.3	245	97.5	243
Trincomalee	81.1	69.2	78	5.6	47.1	146	82.3	145
Kurunegala	93.7	76.3	299	6.9	61.6	502	90.2	498
Puttalam	86.9	80.4	141	5.6	66.7	259	78.0	258
Anuradhapura	92.5	72.0	145	1.5	72.8	260	96.3	260
Polonnaruwa	92.8	75.0	80	10.7	77.7	138	93.4	138
Badulla	82.0	51.0	135	8.2	60.4	274	96.9	269
Moneragala	96.1	82.1	92	3.5	71.3	162	97.5	160
Ratnapura	93.0	63.3	198	5.8	72.8	352	93.7	343
Kegalle	94.5	81.2	136	2.2	79.5	249	93.8	249
Mother's education								
No education	75.0	52.8	62	2.5	56.9	149	93.1	149
Primary	83.9	68.9	301	9.5	57.7	611	91.4	600
Secondary	91.2	73.6	1,795	6.5	66.3	3,231	91.8	3,180
Passed G.C.E. (O/L)	92.1	73.0	380	10.1	65.0	708	92.9	704
Higher	96.4	78.1	832	8.5	70.5	1,531	96.1	1,518
Mother's age at birth								
15-19	88.3	74.1	203	8.3	62.7	406	88.1	401
20-29	91.0	72.5	1,828	7.1	66.3	3,397	93.0	3,347
30-39	93.0	75.5	1,242	8.0	67.0	2,265	93.9	2,244
40-49	91.3	77.8	97	9.8	60.6	161	93.1	158
Wealth quintile								
Lowest	86.2	67.9	686	6.0	62.4	1,311	90.6	1,295
Second	90.3	72.5	690	7.3	66.0	1,272	93.5	1,251
Middle	93.5	72.9	635	7.0	66.0	1,150	93.3	1,140
Fourth	94.8	78.1	717	6.6	70.7	1,294	93.2	1,277
Highest	93.4	77.9	642	11.2	65.6	1,202	94.6	1,189
Total	91.6	73.8	3,370	7.6	66.1	6,230	93.0	6,151

Note: Information on iron supplements and deworming medication is based on the mother's recall. Total includes those missing as to breastfeeding status

na = Not applicable

[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, squash, carrots, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A

[2] Includes meat (including organ meat), fish, poultry, and eggs

[3] Excludes children in households in which salt was not tested

Vitamin A-rich food consumption by children under 3 years of age is much lower in the estate areas than urban and rural areas. It is highest in Moneragala district (96 percent), followed closely by Matara and Kegalle (both 95 percent) districts; the lowest consumption is in Trincomalee (81 percent) district.

The percentage of children age 6-35 months who consume foods rich in iron is 74 percent. The patterns of consumption of foods that are good sources of iron for most of the subgroups are quite similar to those for consumption of vitamin A-rich foods.

Few children age 6-59 months were given an iron supplement (8 percent) in the 7 days preceding the survey. Urban children are more likely to receive these supplements than rural and estate children. Relatively high proportions receive iron supplements in Batticaloa (22 percent) and Ampara (16 percent) districts.

Nearly two out of three children were given deworming medication during the last six months, particularly from age 18 months on. Unlike iron supplements, rural children are more likely to be given deworming medication than urban and estate children. Non-breastfeeding children receive deworming medication more often than breastfeeding children, but there is no difference between these two groups on iron supplementation.

Over 90 percent of children age 6-59 months live in households with adequately iodised salt. There are few differentials in this figure by background characteristics; however, children in Puttalam district and those whose mothers were teenagers at the time they gave birth are notably less likely to live in households with iodised salt.

11.9 Nutritional Status of Women

Both height and weight were measured for 94 percent of the 14,692 ever-married women age 15-49 interviewed in the survey.[5] In this report, two indicators of nutritional status based on these data are presented: the percentage of women with very short stature (less than 145 cm) and the body mass index (BMI).

Low pre-pregnancy BMI and short stature of women are risk factors for poor birth outcomes and delivery complications. The height of a woman is associated with past socio-economic status and nutrition during childhood and adolescence. The cut-off point at which mothers can be considered at-risk because of short stature is normally taken as below 145 cm. In developing countries being underweight during pregnancy is the leading risk factor for preventable death and diseases (WHO, 2002).

The BMI, or the Quetelet index, is used to measure thinness or obesity. It is expressed as weight in kilograms divided by height in meters squared (kg/m^2). A cut-off point of 18.5 is used to define thinness or acute under-nutrition. A BMI of 25 or above usually indicates being overweight or obesity, and 29.9 or above indicates obesity (WHO, 1995). The prevalence of overweight women is a concern because it predisposes them to a wide range of health problems such as diabetes and heart disease, as well as poor birth outcomes. On the other end of the continuum, chronic energy deficiency of women leads to low work productivity and reduced resistance to illness.

[5] In some clusters, equipment to measure height was not available at the time of interview, and respondents in these areas were measured later. Consequently, some respondents could not be measured, so the specific completed measurement rates are 94 percent for height and 99 percent for weight.

Tables 11.10 presents the mean values of the two indicators of nutritional status and the proportions of women falling into high-risk categories according to their background characteristics. Respondents for whom there was no information on height and/or weight, or for whom the values obtained were implausible, are excluded from this analysis. The data analysis on BMI is based on 12,757 women (87 percent of all ever-married women 15-49), while the height analysis is based on 13,749 women age 15-49 years (94 percent).

Table 11.10 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Sri Lanka 2006-07

	Height		Body Mass Index								
Background characteristic	Percent-age below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moder-ately and severely thin)	≥25.0 (total over-weight or obese)	25.0-29.9 (over-weight)	≥30.0 (obese)	Number of women
Age											
15-19	6.7	304	19.8	51.8	40.1	21.8	18.3	8.1	6.2	1.8	219
20-29	7.1	3,537	21.9	56.2	22.0	13.5	8.5	21.8	17.4	4.4	2,989
30-39	9.9	5,017	23.3	53.7	14.4	9.0	5.4	31.9	24.5	7.4	4,690
40-49	14.2	4,892	23.7	49.2	13.3	8.0	5.4	37.4	28.4	9.0	4,860
Residence											
Urban	8.6	1,784	24.8	43.1	9.7	5.6	4.0	47.3	33.1	14.2	1,664
Rural	10.5	11,285	22.9	53.8	16.3	9.9	6.4	29.9	23.4	6.5	10,478
Estate	17.1	680	20.4	56.0	33.3	21.6	11.7	10.7	9.2	1.5	616
District											
Colombo	8.2	1,100	24.9	43.0	9.6	5.2	4.4	47.4	34.0	13.4	1,031
Gampaha	7.7	1,828	24.0	48.4	10.9	5.6	5.3	40.7	31.6	9.1	1,710
Kalutara	10.4	690	23.0	53.1	16.8	9.8	7.0	30.1	22.3	7.8	651
Kandy	11.6	1,025	23.2	52.0	14.4	8.1	6.3	33.6	26.8	6.8	950
Matale	9.7	298	21.8	55.6	22.9	16.2	6.7	21.5	18.1	3.4	279
Nuwara Eliya	17.5	497	22.0	57.8	20.1	14.0	6.1	22.0	15.8	6.3	452
Galle	16.8	800	22.7	54.7	18.5	10.7	7.8	26.8	19.2	7.6	751
Matara	10.7	553	22.6	56.1	18.0	10.9	7.1	25.9	21.3	4.6	507
Hambantota	10.3	444	22.7	51.6	19.6	12.2	7.4	28.8	22.8	6.0	399
Batticaloa	8.8	429	24.2	49.4	11.6	6.3	5.3	39.0	25.2	13.8	400
Ampara	8.6	472	23.1	54.7	15.1	9.7	5.4	30.2	22.3	7.9	431
Trincomalee	13.4	263	23.1	47.7	20.1	12.1	8.0	32.2	22.8	9.4	237
Kurunegala	9.9	1,278	22.3	57.5	18.6	11.8	6.7	23.9	19.4	4.5	1,194
Puttalam	7.8	615	23.8	48.6	12.8	7.4	5.4	38.6	28.5	10.0	573
Anuradhapura	9.7	645	22.7	56.0	16.8	10.3	6.5	27.3	21.9	5.4	599
Polonnaruwa	9.3	333	22.6	53.1	19.4	13.6	5.8	27.5	21.6	5.9	311
Badulla	11.0	656	22.2	58.6	18.6	12.8	5.8	22.8	19.1	3.7	599
Moneragala	9.7	398	21.6	55.1	25.5	16.8	8.7	19.4	15.7	3.7	358
Ratnapura	15.1	827	22.2	54.7	20.4	11.6	8.8	24.9	20.7	4.2	772
Kegalle	10.9	597	22.7	52.6	18.2	11.9	6.3	29.1	23.5	5.6	553
Education											
No education	20.4	520	21.4	55.2	26.0	16.5	9.5	18.7	13.9	4.9	504
Primary	18.2	2,040	22.7	52.4	19.2	12.1	7.1	28.3	21.0	7.3	1,970
Secondary	10.6	6,772	22.9	52.3	17.8	10.6	7.2	29.9	22.7	7.2	6,238
Passed G.C.E. (O/L)	7.8	1,488	23.6	52.3	12.6	7.9	4.6	35.2	27.8	7.4	1,367
Higher	5.1	2,929	23.7	52.8	10.4	6.2	4.2	36.8	29.2	7.6	2,679
Wealth quintile											
Lowest	17.0	2,780	21.2	56.8	27.4	17.1	10.2	15.9	13.4	2.5	2,565
Second	12.2	2,853	22.2	54.9	21.2	12.4	8.8	23.9	18.9	5.0	2,642
Middle	9.6	2,786	23.1	54.0	14.7	8.8	5.9	31.3	24.8	6.5	2,586
Fourth	8.2	2,778	23.8	51.1	11.5	7.1	4.4	37.4	28.0	9.4	2,562
Highest	5.6	2,553	25.1	45.4	5.6	3.4	2.1	49.0	35.8	13.2	2,402
Total	10.6	13,749	23.1	52.5	16.2	9.9	6.4	31.2	24.0	7.2	12,757

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilogrammes to the square of height in metres (kg/m^2). In some cases, height measurements were carried out after the main interview and later merged with the questionnaire data. Height is missing for 6 percent of women, weight is missing for 1 percent of women; 13 percent of women are missing either height or weight measurement or have a measurement that falls out of the plausible range.

[1] Excludes pregnant women and women with a birth in the preceding 2 months

11.9.1 Height of Women

The mean height of women is 152.0 cm and mean weight is 53.8 kg (data not shown). Table 11.10 shows that 11 percent of women fall below the cut-off of 145 cm. Small stature is more prevalent among women 40 and older than those under that age. The prevalence of shortness decreases as women's education and household wealth status increase.

Women in the estate sector are almost twice as likely as urban women to be of short stature. Variation among districts occurs, with higher percentages of women below 145 cm in Nuwara Eliya (18 percent), Galle (17 percent), and Ratnapura (15 percent).

11.9.2 Body Mass Index (BMI) of Women

The mean BMI for women age 15-49 years is 23.1. The prevalence of thinness (BMI<18.5) in women is 16 percent. Prevalence varies with residence. One-third of women in estate areas are thin, but the comparable figure is only 10 percent among urban women. Women in the districts of Moneragala (26 percent) and Matale (23 percent) have the highest prevalence of thinness.

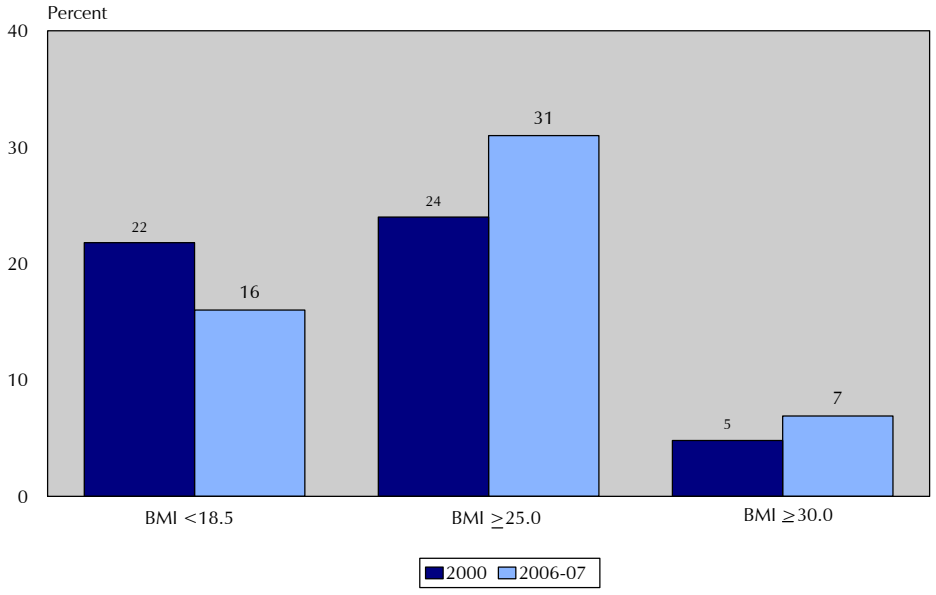
Most women who are thin are mildly thin (10 percent); however, 6 percent of women are moderately or severely thin (BMI<17), which indicates chronic energy deficiency. Moderate to severe thinness is highest in the youngest age group (18 percent). Women in the estate sector are twice as likely to be in this category as rural women, and three times as likely as urban women. As with low stature, the prevalence of severe and moderate thinness decreases with improvement in education status and household wealth.

Almost one-third (31 percent) of women are overweight or obese (BMI>25). The percentage of women who are overweight or obese increases with each succeeding age group. An increasing pattern of being overweight or obese occurs as wealth and education status increase. Although only 7 percent of women overall are obese, urban women (14 percent) and those in the highest wealth quintile (13 percent) are more likely to be obese. Obesity is highest in Batticaloa (14 percent) and Colombo (13 percent).

11.9.3 Trends in Women's Nutritional Status

Figure 11.8 presents trends in women's nutritional status and reveals a mixed picture of changes over time. The proportion of women who are thin (BMI < 18.5) has declined, which indicates improvement since 2000. Conversely, the proportion who are overweight or obese has increased. The mean BMI has increased slightly from 22 in 2000 to 23 in 2006-07 (data not shown).

Figure 11.8 **Trends in Body Mass Index among Ever-Married Women Age 15-49**



11.10 FOODS CONSUMED BY MOTHERS

The quality and quantity of food that mothers consume influences their health and that of their children, especially the health of breastfeeding children. The 2006-07 SLDHS included questions on the types of foods consumed by mothers of children under age three during the day and night preceding the interview. Table 11.11 shows the diversity of food groups consumed by mothers who gave birth in the previous three years, providing important information on dietary patterns of women. This information has policy and programmatic implications as a proxy for the quality of mother's diet.

Food consumption was obtained with a 24-hour dietary recall. Responses were recoded under the specified food groups based on nutritional value. In general, the diet of Sri Lankan mothers is varied and contains key nutritional components. In the 24 hours before the survey, 85 percent of mothers had eaten vitamin A-rich foods, and 86 percent had eaten animal protein (other than dairy). Sixty percent of women ate legumes or legume-based foods in the previous day.

Overall, 73 percent of mothers include milk in their diet. Consumption of milk increases from 60 percent among the youngest women to over 75 percent for those 30-49. There are also marked increases in consumption of milk as the levels of education and wealth improve. It is noteworthy that in the estate sector, the consumption of all key protein sources—milk, meat, legumes and legume-based foods, and cheese or yoghurt—is lower than in urban or rural areas. Foods made with oil, fat, and butter and sugary foods are all consumed less often by estate women than urban or rural women as well.

Table 11.11 Foods consumed by mothers in the day or night preceding the interview

Among mothers age 15-49 with a child under age three years living with them, the percentages who consumed specific types of foods in the day or night preceding the interview, by background characteristics, Sri Lanka 2006-07

	Liquids			Solid or semi-solid foods										
Background characteristic	Milk	Tea/ coffee	Other liquids	Foods made from grains	Foods made from roots/ tubers	Foods made from legumes	Meat/ fish/ shellfish/ poultry/ eggs	Cheese/ yogurt	Vitamin A-rich fruits/ vege-tables[1]	Other fruits/ vege-tables	Other solid or semi-solid food	Foods made with oil/ fat/ butter	Sugary foods	Number of women
Age														
15-19	59.9	86.9	26.2	91.8	44.2	45.3	80.5	13.9	79.9	34.0	7.9	23.1	48.1	136
20-29	70.4	85.9	26.0	96.3	51.5	58.2	85.2	12.6	82.5	47.6	11.3	36.6	51.6	1,962
30-39	75.8	90.6	27.9	97.1	56.0	63.9	86.3	14.8	88.3	48.8	13.9	39.7	51.9	1,682
40-49	75.9	90.9	23.0	95.8	52.2	62.2	86.5	15.5	82.1	44.4	8.6	44.0	49.9	216
Residence														
Urban	78.9	83.9	35.1	94.0	48.3	51.0	84.7	17.9	82.4	46.3	17.5	47.9	47.7	516
Rural	73.7	88.7	26.3	96.8	54.6	62.8	87.2	13.7	86.0	47.7	11.4	37.6	53.3	3,272
Estate	40.1	91.0	11.5	97.1	43.3	46.2	61.3	3.9	72.0	46.3	9.6	16.4	33.8	209
District														
Colombo	84.3	83.5	34.8	96.3	48.1	64.4	87.8	19.1	86.9	45.8	17.7	52.7	48.0	482
Gampaha	86.0	85.1	30.3	98.7	58.6	62.1	84.8	15.2	85.6	49.5	16.7	48.8	47.4	471
Kalutara	78.4	89.9	25.7	93.8	59.9	56.9	85.4	19.1	89.8	24.4	16.2	36.0	35.9	219
Kandy	75.2	94.1	25.4	95.4	50.7	60.8	85.3	14.7	87.0	54.9	14.4	31.3	59.3	284
Matale	58.7	93.5	17.1	98.0	39.4	74.1	76.1	10.9	83.3	39.1	11.4	29.4	52.6	81
Nuwara Eliya	43.5	93.7	8.9	99.2	47.4	68.2	66.9	7.6	83.1	52.4	8.2	21.4	42.3	143
Galle	81.0	94.5	26.0	98.9	59.6	78.0	93.8	15.6	75.9	48.8	6.3	46.6	71.1	191
Matara	74.6	87.6	40.0	99.4	52.7	73.7	95.9	21.8	88.2	76.5	4.6	63.6	82.6	166
Hambantota	72.5	80.9	26.0	97.1	40.3	55.5	84.8	10.1	83.3	33.9	4.6	32.4	52.6	128
Batticaloa	87.5	81.9	47.5	90.0	68.9	30.0	91.5	17.9	84.5	32.1	21.6	20.1	28.6	135
Ampara	72.6	83.2	46.9	88.1	58.0	30.1	85.6	15.6	80.5	42.7	10.2	48.2	43.4	153
Trincomalee	55.6	72.8	20.5	92.2	32.6	22.0	77.7	10.9	72.0	23.9	13.2	46.4	20.5	92
Kurunegala	58.7	93.3	22.7	98.0	54.3	68.2	84.5	8.6	92.0	36.2	10.3	15.9	49.4	347
Puttalam	69.0	90.0	19.0	95.9	41.4	49.2	92.5	9.0	70.2	53.8	9.5	28.3	55.9	158
Anuradhapura	63.0	87.0	19.1	95.5	53.7	61.5	89.7	6.9	86.4	35.5	11.6	29.0	44.8	170
Polonnaruwa	62.6	89.2	19.4	94.8	51.5	50.2	84.4	6.1	82.0	50.0	6.9	27.3	48.0	92
Badulla	61.7	86.3	18.6	94.7	40.8	49.7	66.0	7.8	83.3	52.0	9.7	30.1	39.1	170
Moneragala	63.1	93.8	28.7	97.9	71.1	72.9	94.6	12.3	92.8	51.5	7.0	25.6	47.3	115
Ratnapura	65.0	92.1	14.8	98.9	57.1	65.3	84.0	11.7	84.2	60.0	9.0	42.1	66.6	233
Kegalle	83.3	88.1	22.0	98.5	60.9	72.8	90.7	17.1	83.7	77.3	10.5	44.1	80.6	165
Education														
No education	39.9	94.8	16.9	96.9	46.5	50.1	64.6	9.7	73.6	41.5	5.5	14.4	26.8	68
Primary	56.8	87.6	17.8	95.4	45.1	42.7	79.4	10.7	72.7	33.4	11.8	24.7	37.2	342
Secondary	67.8	89.5	23.8	96.1	51.4	57.9	86.3	10.4	83.1	44.4	10.1	33.5	50.5	2,140
Passed G.C.E. (O/L)	83.3	85.2	36.7	96.9	52.7	64.4	86.0	17.3	87.1	54.6	15.4	47.6	54.8	464
Higher	85.8	86.3	31.7	97.4	60.5	70.8	87.4	20.6	92.3	56.0	15.5	48.9	59.0	983
Wealth quintile														
Lowest	47.3	91.2	18.8	95.7	46.0	56.5	78.6	6.8	76.6	39.4	6.8	22.4	44.3	799
Second	69.4	91.4	20.8	96.2	53.4	58.2	85.6	9.8	83.3	44.9	8.0	32.6	49.8	816
Middle	75.0	88.4	25.5	95.9	50.5	58.9	89.2	12.2	85.2	46.8	10.7	34.6	53.5	773
Fourth	83.5	86.9	30.6	96.7	58.0	63.5	86.5	18.4	87.5	52.9	14.2	43.3	56.0	836
Highest	88.1	82.7	37.6	97.9	57.8	64.8	88.0	21.4	91.5	53.4	21.0	56.6	54.0	773
Total	72.6	88.2	26.6	96.4	53.2	60.4	85.6	13.7	84.8	47.5	12.1	37.8	51.5	3,997

Note: Foods consumed in the last "24-hour" period (yesterday and last night).

[1] Includes foods such as pumpkin, squash, carrots, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

11.11 Micronutrient Intake and Deficiency Status in Women

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation of women during pregnancy protects the mother and infant against anaemia.

During the childbearing years, a woman's diet and micronutrient status can affect her child's health as well as her own. Table 11.12 includes a number of measures that are useful in assessing the extent to which women are receiving adequate intake of vitamin A, iron during pregnancy, and iodine, as well as protection against intestinal parasites—which can lead to anaemia. The first indicators focus on the percentages of women with children under age three who reported that they consumed foods rich in vitamin A and iron during the 24-hour period prior to the interview. Table 11.12 also looks at the extent to which women receive vitamin A supplements following delivery.

The table shows that almost all women with a child under three years living with her report that they ate vitamin A-rich foods the day before the interview. Similarly, 86 percent consume iron-rich foods.

Among these mothers, 58 percent received a mega-dose of vitamin A during the postpartum period. Less than 2 percent of these mothers reported night blindness, a symptom of vitamin A deficiency. Almost all women took iron tablets or syrup for 90 days or more during the pregnancy of their last birth, and 93 percent of women took deworming medication during that pregnancy.

According to the rapid assessment of coverage of micronutrient supplementation in Sri Lanka in 2004, there was satisfactory national coverage of iron supplementation among pregnant women (93 percent) and use of iron tablets (88 percent), ranging from 81 to 92 percent in different provinces (Medical Research Institute/UNICEF, 2004). These results indicate that the overall pattern of micronutrient intake has improved commendably

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Table 11.12 Micronutrient intake among mothers

Among women age 15-49 with a child under age three years living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child; among mothers age 15-49 who during the pregnancy of the last child born in the five years prior to the survey, the percentage who suffered from night blindness, the percentage who took iron tablets or syrup for specific numbers of days, and the percentage who took deworming medication; and among women age 15-49 with a child born in the past five years, who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Sri Lanka 2006-07

Background characteristic	Among women with a child under three years living with her			Among women with a child born in the past five years								Among women with a child born in the past five years, who live in households that were tested for iodized salt	
	Percentage consumed vitamin-A rich foods[1]	Percentage consumed iron-rich foods[2]	Number of women	Percentage who received vitamin A dose postpartum[3]	Percentage who had night blindness during pregnancy of last birth		Number of days women took iron tablets or syrup during pregnancy of last birth			Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Percentage living in households with adequately iodized salt[5]	Number of women
					Reported	Adjusted[4]	None	90+	Don't know/ missing				
Age													
15-19	92.8	80.5	136	56.5	1.5	0.0	0.9	97.9	1.2	88.3	151	85.7	151
20-29	96.8	85.2	1,962	59.0	1.3	0.2	1.3	98.5	0.2	93.0	2,659	92.3	2,617
30-39	97.6	86.3	1,682	58.5	1.6	0.6	1.4	98.1	0.5	93.3	2,717	94.0	2,692
40-49	97.4	86.5	216	49.8	3.0	0.2	1.8	97.5	0.6	88.4	487	94.0	483
Residence													
Urban	96.9	84.7	516	55.9	1.1	0.2	1.7	98.1	0.2	88.4	755	92.6	747
Rural	97.6	87.2	3,272	59.1	1.6	0.4	1.0	98.6	0.5	93.5	4,959	93.1	4,899
Estate	88.0	61.3	209	44.6	2.1	0.3	6.9	92.7	0.4	89.9	300	92.0	298
District													
Colombo	98.3	87.8	482	48.8	1.7	0.7	1.0	98.6	0.4	89.5	726	92.8	720
Gampaha	97.9	84.8	471	46.4	0.8	0.0	0.3	99.5	0.2	92.3	699	92.6	677
Kalutara	97.7	85.4	219	63.6	1.0	0.0	1.3	98.7	0.0	97.8	356	95.3	350
Kandy	96.7	85.3	284	62.7	0.4	0.2	1.2	98.3	0.4	95.5	421	93.4	421
Matale	95.4	76.1	81	71.3	1.8	0.0	0.7	99.3	0.0	94.8	117	89.1	115
Nuwara Eliya	92.8	66.9	143	48.3	1.1	0.5	3.8	96.2	0.0	93.0	205	91.5	202
Galle	99.1	93.8	191	61.4	0.9	0.0	2.2	97.8	0.0	93.6	305	95.3	304
Matara	99.2	95.9	166	69.3	1.2	0.0	0.8	98.6	0.6	96.9	253	97.5	251
Hambantota	95.8	84.8	128	54.5	3.0	1.1	0.0	100.0	0.0	99.2	201	94.8	199
Batticaloa	99.0	91.5	135	71.6	0.7	0.4	4.9	93.6	1.5	62.0	206	96.0	205
Ampara	97.3	85.6	153	67.2	1.2	0.4	2.3	96.7	1.0	91.2	215	97.2	213
Trincomalee	91.9	77.7	92	81.3	3.2	0.0	0.5	97.6	1.9	76.1	137	84.3	136
Kurunegala	96.6	84.5	347	65.3	1.6	0.8	1.6	97.4	1.0	90.3	508	89.5	503
Puttalam	97.3	92.5	158	56.3	2.8	0.6	1.3	98.7	0.0	93.9	251	77.5	250
Anuradhapura	99.2	89.7	170	52.9	2.0	0.5	0.4	99.2	0.4	97.1	263	96.4	263
Polonnaruwa	95.4	84.4	92	58.1	2.5	0.0	0.0	100.0	0.0	96.9	140	95.1	139
Badulla	90.5	66.0	170	55.7	2.6	0.2	1.1	98.3	0.6	96.3	254	97.1	248
Moneragala	99.3	94.6	115	78.1	3.9	0.9	0.0	99.5	0.5	96.9	165	97.1	162
Ratnapura	96.7	84.0	233	42.3	1.5	0.4	3.5	96.5	0.0	96.6	342	93.1	334
Kegalle	97.1	90.7	165	59.9	1.5	0.2	1.1	98.4	0.5	99.2	248	94.5	248
Education													
No education	87.4	64.6	68	57.9	4.3	0.9	3.6	93.7	2.7	82.6	139	93.9	139
Primary	94.4	79.4	342	57.0	4.4	1.3	5.0	94.1	0.9	87.8	541	91.1	532
Secondary	96.6	86.3	2,140	58.8	1.2	0.3	1.1	98.5	0.4	93.8	3,162	91.8	3,116
Passed G.C.E. (O/L)	98.3	86.0	464	58.5	1.3	0.4	0.2	99.8	0.0	94.9	706	92.9	702
Higher	98.9	87.4	983	56.2	1.0	0.1	0.8	98.9	0.3	92.0	1,465	96.2	1,454
Wealth quintile													
Lowest	94.1	78.6	799	59.1	3.1	0.9	2.8	96.4	0.7	92.6	1,220	90.8	1,203
Second	96.5	85.6	816	58.5	2.1	0.6	1.2	98.3	0.5	93.8	1,212	93.2	1,192
Middle	98.5	89.2	773	59.5	1.0	0.0	1.1	98.7	0.2	94.2	1,177	92.8	1,168
Fourth	97.8	86.5	836	58.1	1.0	0.2	0.7	99.0	0.3	94.1	1,254	93.5	1,242
Highest	98.3	88.0	773	54.4	0.5	0.0	0.9	98.7	0.4	88.4	1,151	94.7	1,137
Total	97.0	85.6	3,997	57.9	1.6	0.4	1.4	98.2	0.4	92.7	6,014	93.0	5,943

[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, squash, carrots, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A
[2] Includes meat (and organ meat), fish, poultry, eggs
[3] In the first two months after delivery of most recent birth
[4] Women who reported night blindness but did not report difficulty with vision during the day
[5] Excludes women in households where salt was not tested.

MALARIA 12

C.D. de Silva

Sri Lanka, once among Asia's worst-affected nations for malaria, is now close to eliminating it. Compared with other South Asian countries, mortality due to malaria in Sri Lanka is extremely low. In Sri Lanka two species of malaria, *Plasmodium vivax* and *Plasmodium falciparum*, are present. Between 1992 and 1995, malaria incidence showed a gradual reduction, but it started rising again afterwards. In 2007, only 196 cases were reported to the Anti Malaria Campaign (AMC), of which 189 were *P. vivax* infections and the rest were *P. falciparum* or mixed infections (Anti Malaria Campaign, 2008).

Malaria risk areas in the country are located mainly in the Dry Zone, comprising the Northern and Eastern Provinces and bordering areas of districts in the North Central and Uva Provinces.[1] These areas have been the most malarious districts in the recent past (Anti Malaria Campaign, 2006). Some areas of the country are virtually malaria-free, but other areas range from low to high risk of malaria.

With international assistance, the government has undertaken numerous activities to control malaria, particularly the Roll Back Malaria Initiative (RBM) of the WHO. Since 1993, the malaria control programme in the country has been modified in line with this new global malaria control strategy.

According to the national policy, areas with identified malaria disease need focused attention (MOH, 2008b). The government of Sri Lanka decentralized the Anti Malaria Campaign (AMC)—the main plan in the country—to address the malaria problem in a sustainable manner. Since then the AMC directorate has been involved in formulating malaria control policy, monitoring the country-wide malaria situation, providing technical guidance to provincial malaria control programs, coordinating training and research activities, and guiding inter-provincial coordination (AMC, 2006).

The present objectives of the Anti Malaria Campaign are to reduce the Annual Parasite Incidence (API) among at-risk populations in the country by 2009 to a level less than 25 percent of that in 2005 (the 2005 level was 0.4); to reduce the proportion of *P. falciparum* infections to less than 3 percent of all reported cases by 2009 (in 2005 it was 5.7 percent); to sustain zero mortality from malaria; to prevent outbreaks or epidemics of malaria in the country; to eliminate the occurrence of malaria infections in pregnant women by the year 2009; and to reduce the proportion of malaria infections in children below 5 years to less than 5 percent of all reported infections by 2009 (in 2005 it was 10 percent) (AMC, 2006).

The main activities to fulfill the above targets are detection and treatment of patients (Activated Passive Case Detection, APCD, and Passive Case Detection, PCD); mobile clinics (Activated Case Detection, ACD); home visits (ACD); chemoprophylaxis to selected groups; integrated vector control; indoor residual spraying—perennial, seasonal, and focal; fogging (under special circumstances); larviciding—chemical and biological; and personal protection methods like insecticide-treated nets (ITN), long-lasting insecticide nets (LLIN), and other methods.

[1] Districts of the Eastern, North Central, and Uva Provinces that are wholly or partly in the Dry Zone and included in the 2006-07 SLDHS are: Batticaloa, Trincomalee, Ampara, Hambantota, Anuradhapura, Polonnaruwa, Moneragala, Puttalam.

12.1 HOUSEHOLD OWNERSHIP OF MOSQUITO NETS

Insecticide-treated nets (ITNs) are regarded as a promising malaria control tool, and when used by all or most members of the community, it is anticipated that it may reduce malaria transmission. The use of ever-treated nets and ITNs is a major component of the malaria prevention strategy in Sri Lanka. The survey collected information on the ownership and use of mosquito nets, both treated and untreated.

Ever-treated bednets comprise permanently or temporarily treated nets soaked with insecticide at any time. A permanently treated net is treated at the factory and does not require any further treatment. ITNs are a subset of ever-treated nets. ITNs include the following categories: 1) permanently treated nets, 2) nets treated temporarily before obtaining them within the past 12 months, and 3) nets that have been soaked with insecticide within the past 12 months, regardless of length of ownership.

Table 12.1 provides information on the percentage of households that have any type of net (treated or untreated) according to residence, district, and wealth quintile. Almost two-thirds of households have at least one bednet, and many homes (42 percent) have more than one, for an average of 1.4 nets per household. Despite the fact that mosquito nets are widespread throughout the country, only a very small percentage (6 percent) has been treated with insecticide. Furthermore, possession of ITNs is even lower (5 percent).

The data reveal wide differences in ownership of a mosquito net by residence. Rural households are most likely to own a net (68 percent). Ownership of a net is also common among urban households (55 percent). The lowest proportion (16 percent) in the estate sector is partly due to the higher elevation and cooler climate of some areas where estates are (e.g., tea estates).

As Figure 12.1 shows, the highest ownership of any type of mosquito net is reported from Anuradhapura (94 percent) and Polonnaruwa (93 percent) districts. Other districts with high ownership of any type of net are Kurunegala, Hambantota, Puttalam, and Gampaha. Net ownership is lowest in Batticaloa and Nuwara Eliya (both 23 percent).

With regard to ITNs, a review of data in Table 12.1 by district clearly reveals the effect of the AMC. Households in districts that have historically had a high prevalence of malaria, that is, Polonnaruwa, Anuradhapura, Ampara, Trincomalee, and Moneragala, also are more likely to have ITNs (Figure 12.2). Between 10 percent and 23 percent of households in these districts have ITNs, compared with negligible percentages elsewhere. However, Batticaloa, which also has a relatively high prevalence of malaria, has a very low percentage of ITNs compared with other districts with malaria risk. Households in two other districts, Hambantota and Kurunegala, possess ITNs at levels similar to the first group of districts.

Table 12.1 also shows that ownership of at least one mosquito net increases strongly with the wealth quintile, from 43 percent in the lowest to 73 percent in the highest quintile. Households with greater disposable income are able to buy normal, untreated nets in the marketplace. However, the percentage of households owning either an ever-treated net or an ITN declines with increasing wealth quintile; thus the percentage is highest among the poorest households. Although the absolute difference between lowest to highest is not that large because of the overall low percentage having these types of nets, the pattern is clear. This result reflects the government's program of targeted distribution of ITNs and net treatment, in cooperation with NGOs, to lower-income households in communities at risk for malaria.

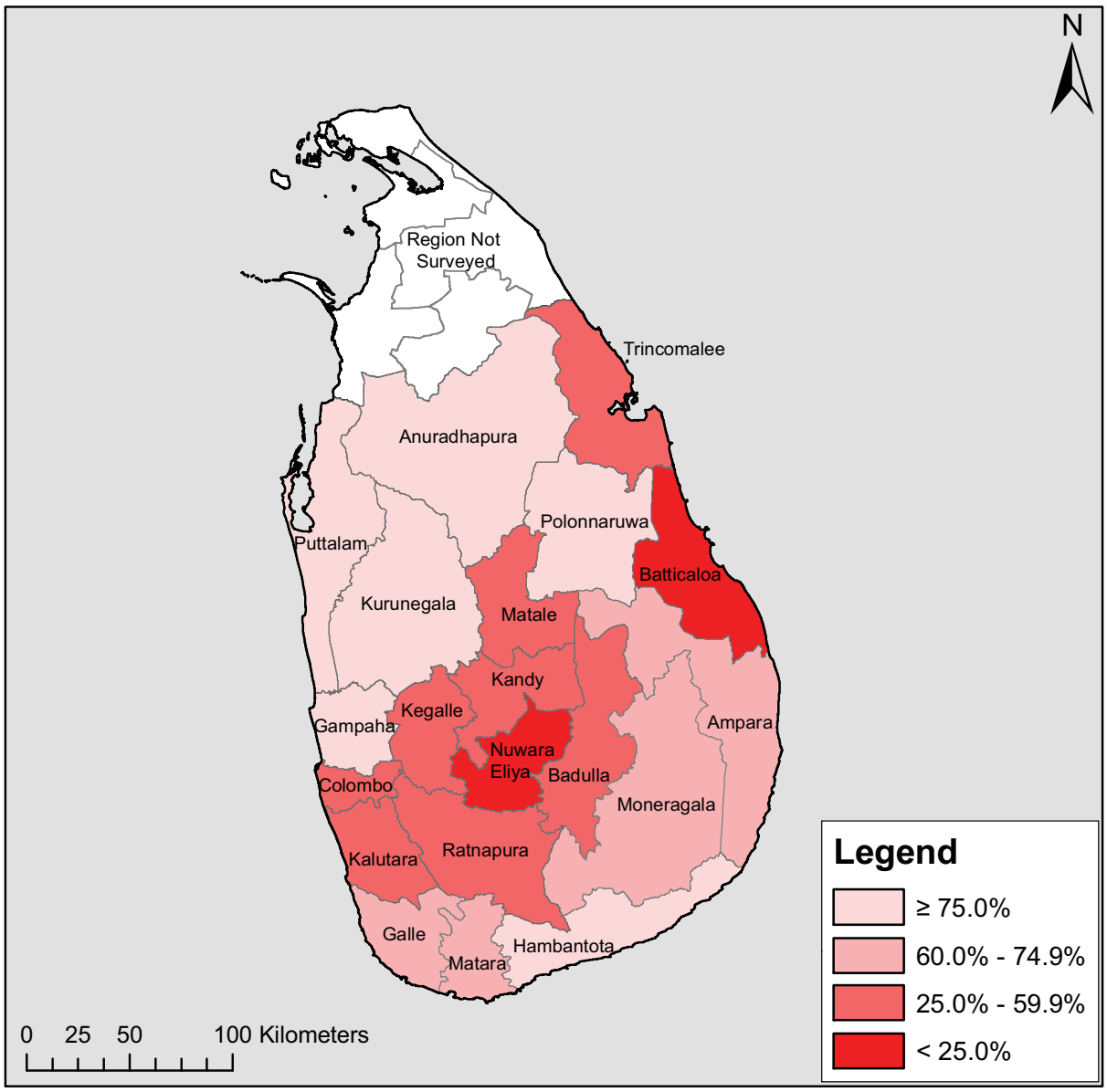
Table 12.1 Ownership of mosquito nets

Percentage of households with at least one and more than one mosquito net (treated or untreated), ever-treated mosquito net and insecticide-treated net (ITN), and the average number of nets per household, by background characteristics, Sri Lanka 2006-07

	Any type of mosquito net			Ever-treated mosquito net[1]			Insecticide-treated mosquito nets (ITNs)[2]			
Background characteristic	Percentage with at least one	Percentage with more than one	Average number of nets per household	Percentage with at least one	Percentage with more than one	Average number of ever- treated nets per household	Percentage with at least one	Percentage with more than one	Average number of ITNs per household	Number of households
Residence										
Urban	55.1	34.8	1.2	2.5	0.7	0.0	1.7	0.4	0.0	2,483
Rural	67.8	44.9	1.4	6.5	1.4	0.1	5.3	0.9	0.1	16,449
Estate	15.8	3.8	0.2	0.8	0.1	0.0	0.5	0.1	0.0	931
District										
Colombo	57.6	38.5	1.2	0.6	0.2	0.0	0.4	0.1	0.0	2,369
Gampaha	75.5	49.9	1.6	0.8	0.5	0.0	0.0	0.0	0.0	2,481
Kalutara	57.1	36.3	1.2	0.5	0.1	0.0	0.1	0.0	0.0	1,153
Kandy	50.0	29.8	1.0	0.7	0.6	0.0	0.1	0.1	0.0	1,390
Matale	56.7	35.7	1.2	1.9	0.7	0.0	0.5	0.5	0.0	424
Nuwara Eliya	22.8	9.0	0.4	0.2	0.0	0.0	0.2	0.0	0.0	665
Galle	69.5	46.7	1.5	2.0	0.6	0.0	1.7	0.6	0.0	1,159
Matara	65.6	43.4	1.4	1.1	0.5	0.0	0.6	0.2	0.0	783
Hambantota	76.7	58.4	1.8	15.5	5.2	0.2	9.4	3.4	0.2	603
Batticaloa	22.7	4.2	0.3	6.0	0.6	0.1	5.3	0.2	0.1	490
Ampara	61.9	38.2	1.2	21.7	4.4	0.3	17.6	3.3	0.2	590
Trincomalee	59.6	29.4	1.0	16.7	3.6	0.2	12.8	2.0	0.2	347
Kurunegala	83.6	61.2	2.0	15.3	2.7	0.2	14.5	2.0	0.2	1,875
Puttalam	76.2	47.9	1.5	6.5	1.0	0.1	4.3	0.4	0.0	809
Anuradhapura	93.6	73.0	2.3	20.6	1.8	0.2	19.1	1.4	0.2	840
Polonnaruwa	93.2	71.7	2.3	24.8	6.5	0.3	23.2	5.3	0.3	441
Badulla	42.0	22.5	0.8	2.4	0.8	0.0	1.6	0.4	0.0	871
Moneragala	63.2	36.8	1.2	15.4	3.2	0.2	10.3	1.4	0.1	496
Ratnapura	54.2	29.7	1.0	0.3	0.1	0.0	0.2	0.1	0.0	1,169
Kegalle	57.9	35.9	1.2	1.2	0.8	0.0	0.3	0.0	0.0	905
Wealth quintile										
Lowest	42.8	17.6	0.7	7.6	1.1	0.1	6.6	0.7	0.1	4,257
Second	57.6	31.6	1.0	6.6	1.4	0.1	5.5	1.1	0.1	4,048
Middle	69.7	46.4	1.4	6.4	1.5	0.1	5.3	0.9	0.1	3,937
Fourth	78.4	58.4	1.9	5.1	1.3	0.1	3.6	0.7	0.0	3,816
Highest	72.9	57.9	1.9	2.4	0.8	0.0	1.7	0.4	0.0	3,805
Total	63.8	41.7	1.4	5.7	1.2	0.1	4.6	0.8	0.1	19,862

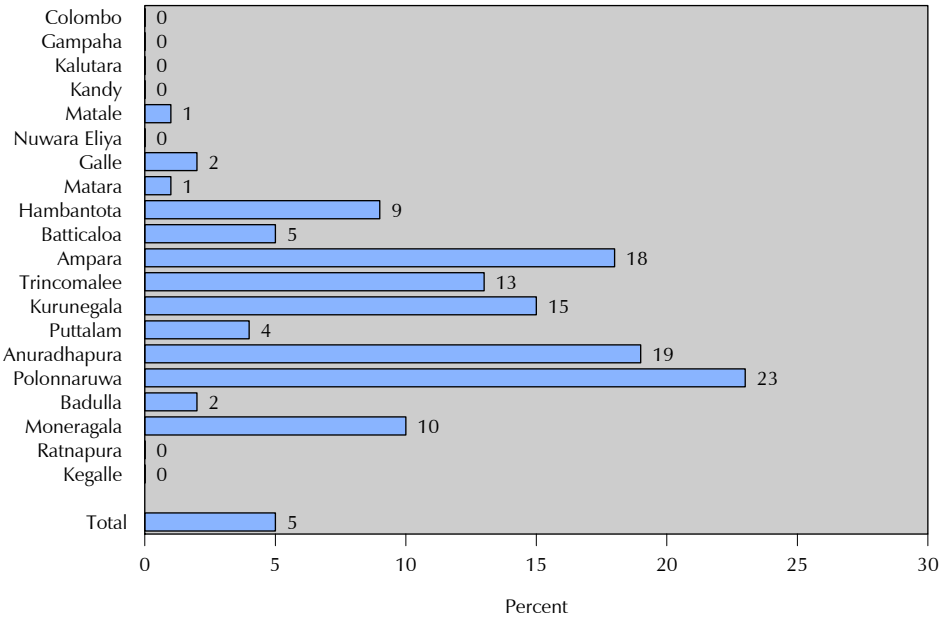
[1] An ever-treated net is 1) a pretreated net or a non-pretreated net that has subsequently been treated with insecticide at any time.
[2] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (permanently treated) or (2) a pretreated net obtained within the past 12 months or (3) a net that has been treated with insecticide within the past 12 months.

Figure 12.1 **Household Ownership of Any Type of Mosquito Net**



Untreated mosquito nets are widely available in markets and shops. However, ITNs are unavailable in the marketplace, according to the Anti Malaria Campaign (AMC, 2008). Some people treat plain nets with insecticide after purchase. Government and NGO distribution and treatment programs donate ITNs to households. At times, they also offer treatment of normal nets. Table 12.2 shows that although donation is the main way ITNs are obtained (85 percent), some ITNs were reported to have been purchased. All other ever-treated nets (excluding ITNs) are primarily purchased (63 percent), but over one-third are donated to households. Figure 12.3 presents this information graphically.

Figure 12.2 **Percentage of Households with Insecticide-Treated Bednets by District**



SLDHS 2006-07

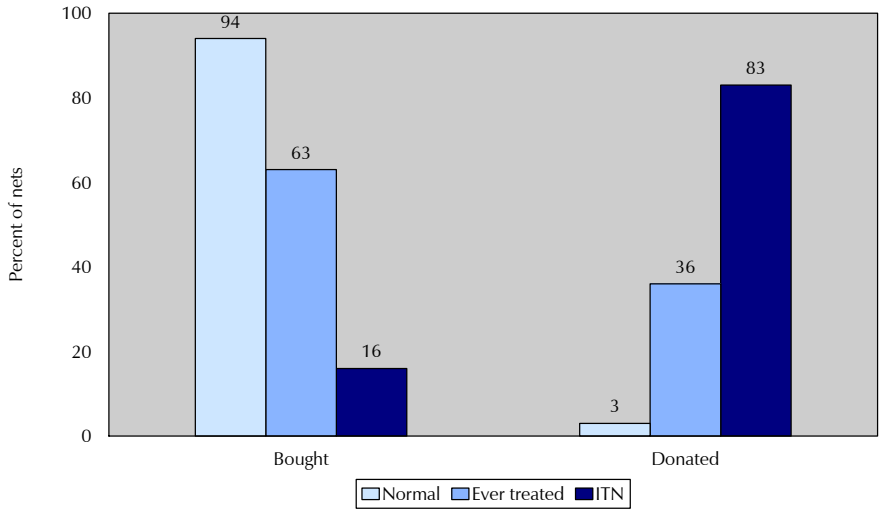
Table 12.2 Source of net by type of net

Percent distribution of all mosquito nets by source of net, according to type of net, Sri Lanka 2006-07

	Type of net			
Source of net	Normal (never treated)	Ever treated	ITN	Total
Donation	3.4	35.7	83.2	7.2
Bought	94.0	63.1	15.9	90.3
Homemade	1.7	1.0	0.4	1.6
Other	0.5	0.0	0.4	0.5
Missing	0.4	0.2	0.1	0.4
Total	100.0	100.0	100.0	100.0
Number of nets	25,350	360	1,116	26,842

Note: Total includes 16 nets for which type of treatment is missing. Net type categories in this table are mutually exclusive. ITNs are not included in the ever-treated category.

Figure 12.3 Source of Mosquito Net by Type of Net



Note: The calculations for this figure and Table 12.2 do not include ITNs in the ever-treated category (as they are in other tables). Therefore, the net type categories are exclusive here.

SLDHS 2006-07

12.2 USE OF MOSQUITO NETS

Children under five years of age are especially vulnerable to malaria. Table 12.3 presents information on the percentage of children under age five who slept under a mosquito net (treated or untreated) the night before the survey interview. It shows that almost two-thirds of children under five slept under a net the night prior to the survey; however, only 4 percent slept under an ever-treated net and 3 percent under an ITN.

The patterns for use of nets by residence and district parallel those noted earlier for a household's possession of nets. Young children sleep under some kind of mosquito net most often in the rural sector (69 percent) and least often in the estate sector (22 percent).

Regional variations show that the proportion of children under five who slept under any type of mosquito net is highest in Anuradhapura, Polonnaruwa, Kurunegala, Hambantota, and Gampaha districts; 80-90 percent sleep under a net in these districts. The lowest percentage of young children sleeping under a net is found in Batticaloa district (13 percent). Also, the highest use of ever-treated nets and ITNs for children is reported in Polonnaruwa, followed closely by Ampara, Kurunegala, and Anuradhapura.

There is a positive association between use of any mosquito net by children and the wealth quintile, going from 46 percent in the lowest quintile to 70 percent in the highest. The converse pattern, noted earlier in Section 12.1, is present for ever-treated nets and ITNs, but the association is weak because of the very low percentages of children sleeping under treated nets.

Table 12.3 Use of mosquito nets by children

Percentage of children under five years of age who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an insecticide-treated net (ITN) the night before the survey, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage who slept under: Any net	An ever-treated net[1]	An ITN[2]	Number of children
Age in years				
<1	68.0	3.4	2.8	1,394
1	68.3	4.7	3.4	1,482
2	64.5	3.3	2.6	1,464
3	60.6	3.6	3.1	1,431
4	58.2	3.7	2.7	1,396
Sex				
Male	64.7	3.8	2.9	3,687
Female	63.3	3.7	2.9	3,481
Residence				
Urban	54.6	2.4	1.6	929
Rural	68.6	4.2	3.3	5,809
Estate	22.3	1.2	0.5	430
District				
Colombo	60.3	0.2	0.1	860
Gampaha	80.8	0.2	0.1	836
Kalutara	66.7	0.8	0.0	411
Kandy	61.2	0.6	0.2	503
Matale	56.3	0.6	0.0	138
Nuwara Eliya	31.3	1.0	1.0	264
Galle	70.6	2.4	2.2	379
Matara	73.9	0.3	0.0	301
Hambantota	79.9	8.7	5.7	229
Batticaloa	12.8	2.6	2.3	258
Ampara	52.2	15.5	11.9	279
Trincomalee	35.9	4.5	2.7	163
Kurunegala	84.6	12.4	11.4	573
Puttalam	57.3	2.2	1.5	292
Anuradhapura	84.7	11.3	10.8	312
Polonnaruwa	89.0	17.8	14.2	159
Badulla	42.8	1.7	1.2	325
Moneragala	58.7	6.5	3.1	194
Ratnapura	60.2	1.0	0.6	401
Kegalle	64.7	1.7	0.4	290
Wealth quintile				
Lowest	46.1	5.4	4.2	1,525
Second	58.8	4.1	3.5	1,473
Middle	71.5	4.6	4.1	1,338
Fourth	75.4	2.7	1.7	1,445
Highest	70.0	1.8	1.1	1,386
Total	64.0	3.8	2.9	7,167

[1] An ever-treated net is 1) a pretreated net or a non-pretreated net that has subsequently been treated with insecticide at any time.
[2] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (permanently treated) or (2) a pretreated net obtained within the past 12 months or (3) a net that has been treated with insecticide within the past 12 months.

Table 12.4 shows the percentage of all women and the percentage of pregnant women who slept under a mosquito net the night prior to the interview by background characteristics.

Table 12.4 Use of mosquito nets by women

Percentage of all women age 15-49 and pregnant women age 15-49 who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an insecticide-treated net (ITN) the night before the survey, by background characteristics, Sri Lanka 2006-07

	Percentage of all women age 15-49 who slept under:				Percentage of pregnant women age 15-49 who slept under:			
Background characteristic	Any net	An ever-treated net[1]	An ITN[2]	Number of women	Any net	An ever-treated net[1]	An ITN[2]	Number of women
Residence								
Urban	40.1	1.2	0.8	2,949	44.7	0.0	0.0	92
Rural	50.7	2.9	2.2	17,680	51.8	2.9	2.4	743
Estate	9.4	0.3	0.2	1,022	14.5	0.0	0.0	50
District								
Colombo	44.9	0.3	0.2	2,737	51.7	0.0	0.0	89
Gampaha	60.2	0.6	0.0	2,729	65.8	0.0	0.0	102
Kalutara	46.0	0.3	0.0	1,251	(50.6)	(0.0)	(0.0)	45
Kandy	36.9	0.7	0.3	1,548	33.5	0.0	0.0	67
Matale	42.2	1.4	0.6	415	*	*	*	14
Nuwara Eliya	15.9	0.2	0.2	733	(13.9)	(0.0)	(0.0)	35
Galle	48.9	1.0	1.0	1,231	(54.3)	(0.0)	(0.0)	41
Matara	47.2	0.6	0.4	872	(37.8)	(0.0)	(0.0)	43
Hambantota	64.0	7.8	5.0	651	(64.4)	(2.5)	(2.5)	37
Batticaloa	3.6	1.3	1.0	615	(4.3)	(4.3)	(4.3)	24
Ampara	38.3	9.9	7.2	717	(47.0)	(13.1)	(6.7)	33
Trincomalee	30.0	5.6	4.3	381	(29.2)	(3.4)	(3.4)	24
Kurunegala	63.3	7.1	6.6	1,868	65.8	11.8	11.8	73
Puttalam	51.2	2.1	1.5	896	(48.9)	(0.0)	(0.0)	39
Anuradhapura	80.0	7.8	7.1	885	(83.3)	(0.0)	(0.0)	39
Polonnaruwa	80.0	12.6	11.1	468	(89.1)	(25.1)	(20.7)	17
Badulla	28.5	1.8	1.1	946	27.7	0.0	0.0	43
Moneragala	38.3	4.6	2.6	553	(40.0)	(5.0)	(2.4)	32
Ratnapura	41.6	0.3	0.2	1,240	(42.9)	(0.0)	(0.0)	48
Kegalle	40.4	0.9	0.3	917	(44.6)	(0.0)	(0.0)	41
Education								
No education	28.2	1.9	1.4	714	(41.2)	(10.3)	(10.3)	41
Primary	39.5	3.4	2.5	3,013	39.1	4.5	1.5	120
Secondary	47.0	2.9	2.2	10,548	49.6	1.6	1.6	458
Passed G.C.E (O/L)	50.0	1.0	0.8	2,463	55.5	0.8	0.8	103
Higher	54.1	2.2	1.7	4,914	52.3	2.2	2.2	163
Wealth quintile								
Lowest	29.3	3.1	2.7	3,980	32.6	1.8	1.2	185
Second	40.2	3.0	2.5	4,217	39.7	4.4	4.4	179
Middle	50.0	3.3	2.6	4,467	54.0	4.4	3.9	171
Fourth	58.3	2.1	1.1	4,545	58.3	1.0	0.0	195
Highest	56.4	1.3	0.9	4,441	61.7	0.7	0.7	155
Total	47.3	2.5	1.9	21,651	49.0	2.4	2.0	885

Note: Numbers in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

[1] An ever-treated net is 1) a pretreated net or a non-pretreated net that has subsequently been treated with insecticide at any time.

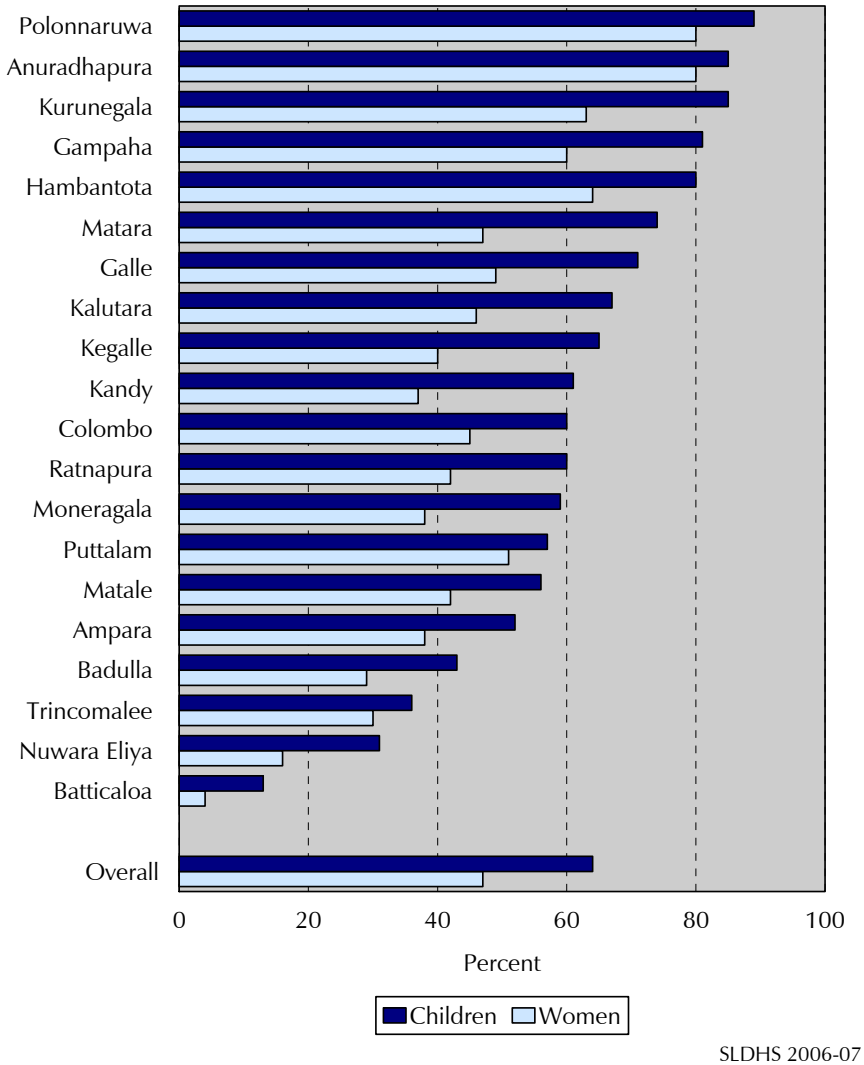
[2] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (permanently treated) or (2) a pretreated net obtained within the past 12 months or (3) a net that has been treated with insecticide within the past 12 months.

As in the case of children five years and under, pregnant women are especially susceptible to malaria. A woman's immunity to malaria is suppressed during pregnancy. Despite this risk, there is no marked difference between the percentage of pregnant and non-pregnant women who slept under a mosquito net, irrespective of the type. Comparing under-five children and women 15–49, it appears that women are less likely to sleep under a net than young children (47 percent versus 64 percent), regardless of residence, district, or wealth quintile. Figure 12.4 shows the consistency of this pattern across districts.

Data on use of nets by women show variations by residence and district similar to those found in the data on net ownership and use of nets by children under age five. Analysis of the data for pregnant women is hampered by the small numbers according to district. Women in rural areas are more likely to have slept under a net the night before the interview than urban women.

Both non-pregnant and pregnant women who are more educated and in the highest wealth quintile are more likely to sleep under any net.

Figure 12.4 **Percent of Children under Five and Women 15-49 Who Slept under Any Net the Night before the Interview by District**



SLDHS 2006-07

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR

13

U.V. Jayakody

13.1 INTRODUCTION

The Human Immunodeficiency Virus (HIV), a special type of virus known as a retrovirus, is a sexually transmitted disease that attacks the body's immune system, making one's body susceptible to opportunistic diseases, which will lead to death through secondary infections if not adequately treated. Although the virus is generally transmitted through sexual contacts, it can also spread through mother-to-child transmission during pregnancy, delivery, or breastfeeding, as well as through sharing needles and infected blood. Acquired Immune Deficiency Syndrome (AIDS) is a term that is used to describe the later stages of HIV infection, when the immune system has stopped working and the person develops a life-threatening condition.

The first HIV-infected person in Sri Lanka was reported in 1986 (National STD/AIDS Control Programme, n.d.), and since then over 996 cases of HIV (National STD/AIDS Control Programme, 2008) have been reported in Sri Lanka. It is believed that the number of HIV-infected persons is actually much larger than the number of reported cases. The future course of the HIV/AIDS epidemic depends on a number of variables. As there is no cure for HIV/AIDS, important strategies to minimize HIV/AIDS prevalence include: comprehensive knowledge among people on how HIV/AIDS is transmitted; prevention of HIV/AIDS by taking precautions; promotion of positive, accepting attitudes and perceptions about HIV-infected people; and reduction in the social stigma attached to HIV/AIDS.

In the 2006-07 Sri Lanka Demographic and Health Survey (SLDHS), information was collected from ever-married women age 15-49, and data are presented at the national level as well as within different subgroups. Information provided in this chapter will be useful for service providers in identifying various socio-economic as well as geographic subgroups who are lacking knowledge on HIV/AIDS and hence are at risk of being infected.

13.2 HIV/AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

13.2.1 Awareness of HIV/AIDS

In the absence of a cure or a vaccine for HIV/AIDS, preventive measures contribute immensely to reducing the spread of the infection. This can be achieved only if individuals have accurate knowledge about the infection.

In order to measure the level the basic of knowledge, respondents in the 2006-07 SLDHS were asked whether they had heard of an illness called AIDS. Table 13.1 shows that 92 percent of ever-married women have heard of HIV/AIDS, but there are notable differences among subgroups. Although ever-married women from urban and rural areas have a very high awareness about HIV/AIDS (94 percent for both groups), only 47 percent of their counterparts living in the estate areas are aware of HIV/AIDS. Only 64 percent of ever-married women in Nuwara Eliya district—which predominantly consists of estates—have heard of the disease, compared with well over 80 percent of women in all the other districts. In four districts (Colombo, Gampaha, Kurunegala, and Polonnaruwa), HIV/AIDS awareness is over 95 percent.

Moreover, there is a positive association between the level of knowledge and both education level and the economic condition of ever-married women. Only 53 percent of women who have no education have heard of HIV/AIDS, whereas knowledge of HIV/AIDS among women with higher education is almost universal.

Table 13.1 Knowledge of AIDS

Percentage of ever-married women age 15-49 who have heard of AIDS, by background characteristics, Sri Lanka 2006-07

Background characteristic	Has heard of AIDS	Number of women
Age		
15-24	91.8	1,684
15-19	88.1	321
20-24	92.7	1,364
25-29	94.7	2,411
30-39	93.4	5,370
40-49	88.7	5,226
Marital status		
Married/living together	92.2	13,748
Divorced/separated/widowed	84.9	944
Residence		
Urban	94.4	1,893
Rural	93.9	12,095
Estate	47.7	703
District		
Colombo	97.4	1,796
Gampaha	97.8	1,839
Kalutara	91.8	837
Kandy	88.6	1,037
Matale	91.3	299
Nuwara Eliya	64.0	504
Galle	93.6	802
Matara	94.4	559
Hambantota	93.5	445
Batticaloa	88.6	434
Ampara	85.9	476
Trincomalee	83.4	266
Kurunegala	98.1	1,281
Puttalam	89.1	628
Anuradhapura	92.7	645
Polonnaruwa	96.0	335
Badulla	83.3	665
Moneragala	87.6	398
Ratnapura	87.6	840
Kegalle	93.5	605
Education		
No education	52.7	538
Primary	73.0	2,102
Secondary	94.8	7,200
Passed G.C.E. (O/L)	99.1	1,672
Higher	99.9	3,181
Wealth quintile		
Lowest	78.6	2,864
Second	89.5	2,944
Middle	94.8	2,937
Fourth	97.4	3,014
Highest	98.1	2,933
Total 15-49	91.8	14,692

13.2.2 Knowledge of HIV Prevention

Most HIV/AIDS programs have been promoting mutual monogamy and using condoms as the primary ways of avoiding HIV infection. Understanding and effectively promoting these behaviours are crucially important in combating the spread of HIV/AIDS. In the 2006-07 SLDHS, if a respondent reported that she had heard of HIV/AIDS, she was asked questions on whether limiting sexual intercourse to one uninfected partner (being faithful), abstinence, and correct and consistent use of condoms can reduce the chances of getting HIV/AIDS.

Table 13.2 shows the percent of ever-married women who, in response to the prompted questions on HIV/AIDS prevention methods, know that HIV transmission can be reduced by adhering to those methods. Almost 80 percent of women know each of two key preventive methods—limiting sexual intercourse to one uninfected partner and abstaining from sexual intercourse. Nearly 60 percent know that condom use can reduce risk, and 56 percent know that the risk of contracting the AIDS virus can be minimized by practicing both condom use and being faithful.

Knowledge of HIV prevention is higher among women who are currently married than among those who are divorced, separated, or widowed. Compared with other sectors, knowledge is extremely low among women in the estate sector, less than 20 percent of whom know that the risk of getting HIV transmission can be reduced by using condoms, and only about one-third of whom know it can be reduced by limiting sexual intercourse to one partner or abstinence. Similarly, very low levels of knowledge are observed in Nuwara Eliya, Badulla, Batticaloa, and Ampara districts.

As shown in Figure 13.1, level of education has a strong positive association with the level of knowledge of the three separate HIV prevention methods, ranging from 15-35 percent for uneducated women up to 80-90 percent for women with some higher education. Similarly, economically privileged women have broader knowledge of HIV prevention methods compared with women in the lower wealth quintiles, although the differences are not as large as for education.

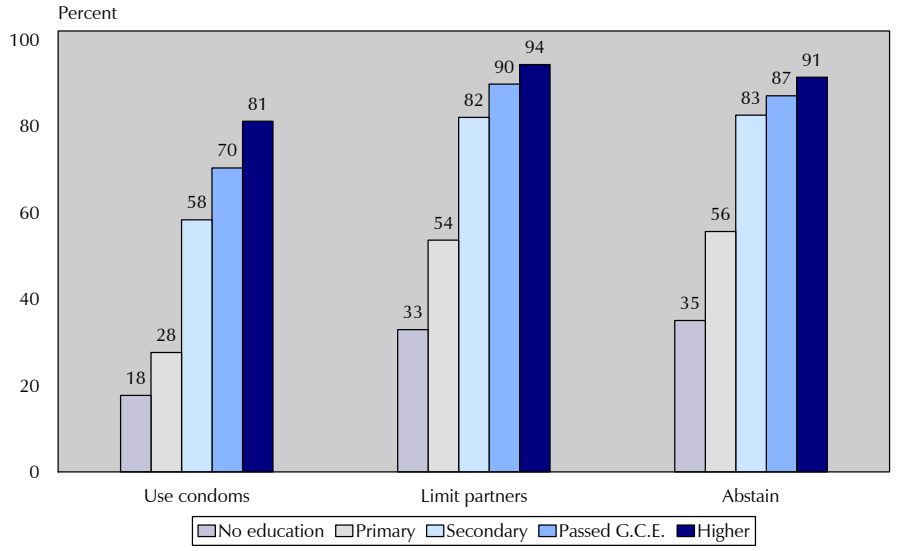
Table 13.2 Knowledge of HIV prevention methods

Percentage of ever-married women 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, by having one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, by background characteristics, Sri Lanka 2006-07

Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1, 2]	Abstaining from sexual intercourse	Number of women
Age					
15-24	58.5	79.2	55.2	79.5	1,684
15-19	47.4	74.9	45.3	75.4	321
20-24	61.1	80.3	57.6	80.5	1,364
25-29	63.3	82.3	60.1	82.3	2,411
30-39	63.4	81.9	60.4	81.2	5,370
40-49	51.8	76.3	49.4	76.0	5,226
Marital status					
Married/living together	59.7	80.4	56.9	80.0	13,748
Divorced/separated/widowed	43.9	68.8	41.4	70.2	944
Residence					
Urban	58.5	77.2	54.2	76.8	1,893
Rural	61.1	82.9	58.5	82.3	12,095
Estate	18.5	31.3	15.3	35.6	703
District					
Colombo	67.4	87.1	65.1	83.9	1,796
Gampaha	61.4	85.8	58.8	83.8	1,839
Kalutara	69.2	83.8	68.3	83.6	837
Kandy	57.2	81.9	56.1	76.2	1,037
Matale	51.5	82.7	49.8	77.9	299
Nuwara Eliya	32.8	50.8	28.9	53.4	504
Galle	73.2	89.7	72.4	86.3	802
Matara	67.6	84.5	64.9	86.1	559
Hambantota	62.2	84.0	60.3	85.0	445
Batticaloa	30.0	31.8	14.0	36.5	434
Ampara	33.4	52.1	26.2	64.9	476
Trincomalee	63.4	64.9	60.0	76.0	266
Kurunegala	65.8	85.4	59.8	88.8	1,281
Puttalam	48.5	77.2	46.6	76.2	628
Anuradhapura	57.3	85.6	56.6	86.0	645
Polonnaruwa	58.5	84.0	57.0	80.2	335
Badulla	42.7	69.6	41.0	70.6	665
Moneragala	52.0	75.6	50.0	75.7	398
Ratnapura	57.7	80.7	55.9	77.2	840
Kegalle	66.7	88.0	65.5	88.7	605
Education					
No education	17.7	32.9	15.9	35.0	538
Primary	27.6	53.6	25.2	55.6	2,102
Secondary	58.3	82.0	55.1	82.5	7,200
Passed G.C.E. (O/L)	70.3	89.7	67.5	87.0	1,672
Higher	81.1	94.2	78.6	91.3	3,181
Wealth quintile					
Lowest	40.6	62.8	37.9	64.3	2,864
Second	51.9	77.4	49.6	76.1	2,944
Middle	59.6	82.5	56.4	83.5	2,937
Fourth	66.7	87.1	64.3	85.9	3,014
Highest	73.9	88.0	70.5	86.4	2,933
Total 15-49	58.7	79.7	55.9	79.3	14,692

[1] Every time they have sexual intercourse
[2] Partner who has no other partners

Figure 13.1 **Knowledge of HIV Prevention Methods by Education among Ever-Married Women 15-49**



SLDHS 2006-07

13.2.3 Rejection of Misconceptions about HIV/AIDS

Correct knowledge of HIV/AIDS not only requires a person to know about the methods of prevention, but also to know which commonly held beliefs are not true. Common misconceptions about HIV/AIDS are that HIV-infected people always appear ill, and that the virus can be transmitted through mosquito bites, by sharing food with someone who is infected, or by supernatural means.

The percentages of ever-married women age 15-49 who correctly reject these misconceptions are shown in Table 13.3. Almost 80 percent of women say that AIDS cannot be transmitted by supernatural means. About three in five women know that a healthy-looking person can be infected with HIV (61 percent) and that a person cannot get infected with HIV by sharing food with someone who has AIDS (60 percent). However, less than half of ever-married women know that mosquitoes do not carry the AIDS virus. Consequently, only 29 percent of ever-married women age 15-49 know that a healthy-looking person can have the AIDS virus and also reject the two most common local misconceptions (sharing food and mosquito bites).

A composite indicator has been developed that combines several of these pieces of data. Comprehensive knowledge about AIDS is defined as knowing that consistent use of condoms and having just one uninfected, faithful partner can reduce the chance of getting the AIDS virus; knowing that a healthy-looking person can have the AIDS virus; and rejecting the two most common misconceptions (that AIDS can be transmitted by mosquito bites and by sharing food with a person who has AIDS). In Sri Lanka, less than one-quarter of the respondents (22 percent) have comprehensive knowledge about HIV/AIDS. Table 13.3 shows wide variation in comprehensive knowledge by background characteristics. There is a weak association between age and comprehensive knowledge up through age 39, but knowledge among women 40 and older drops somewhat.

Table 13.3 Comprehensive knowledge about AIDS

Percentage of ever-married women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Sri Lanka 2006-07

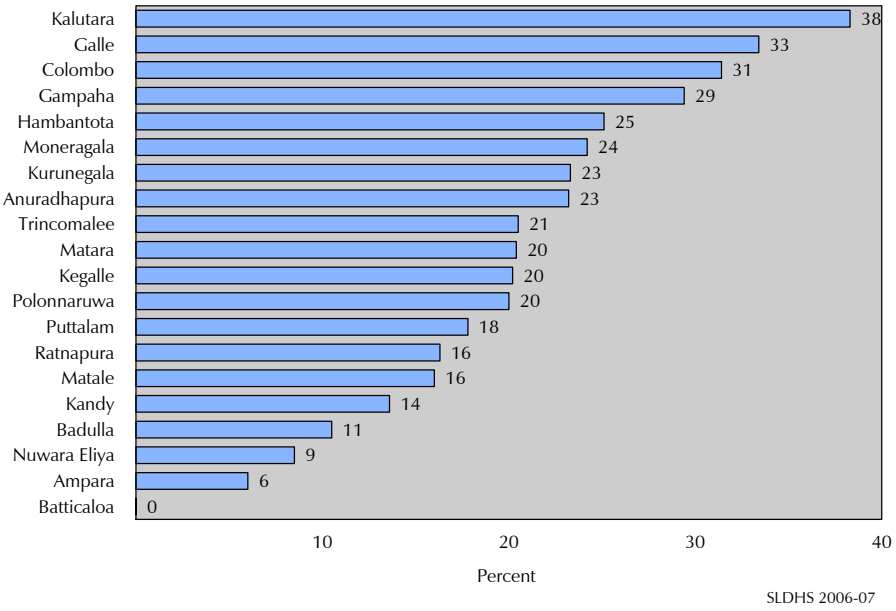
Background characteristic	Percentage of respondents who say that: A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS	A healthy-looking person can have the AIDS virus, and who reject the two most common local misconceptions[1]	Percentage with a comprehensive knowledge about AIDS[2]	Number of women
Age							
15-24	58.0	41.7	78.0	58.9	22.6	17.3	1,684
15-19	55.9	35.5	71.0	48.9	15.2	12.1	321
20-24	58.5	43.2	79.6	61.2	24.3	18.5	1,364
25-29	64.3	48.6	83.9	67.1	30.6	24.0	2,411
30-39	63.4	50.6	80.9	62.8	31.6	25.8	5,370
40-49	58.0	44.6	74.4	53.9	26.8	19.7	5,226
Marital status							
Married/living together	61.8	47.8	79.4	60.8	29.4	23.0	13,748
Divorced/separated/widowed	49.9	37.4	68.5	46.3	19.0	13.5	944
Residence							
Urban	52.6	54.8	81.4	66.7	28.6	22.5	1,893
Rural	64.7	47.6	81.0	61.2	30.1	23.4	12,095
Estate	19.3	18.6	31.6	18.6	5.1	3.5	703
District							
Colombo	65.7	59.6	87.2	74.3	37.7	31.4	1,796
Gampaha	74.0	58.3	86.5	73.9	43.1	29.4	1,839
Kalutara	71.9	58.0	83.8	72.2	43.2	38.3	837
Kandy	45.2	37.1	79.1	55.9	17.2	13.6	1,037
Matale	69.5	43.2	70.1	57.9	26.1	16.0	299
Nuwara Eliya	40.5	23.1	44.3	32.6	11.7	8.5	504
Galle	73.6	54.2	88.8	70.2	38.2	33.4	802
Matara	62.6	43.5	84.6	59.9	24.9	20.4	559
Hambantota	65.7	49.2	77.0	51.1	28.2	25.1	445
Batticaloa	8.1	36.3	67.6	50.9	0.9	0.0	434
Ampara	36.3	30.8	66.4	43.7	10.3	6.0	476
Trincomalee	45.7	30.4	47.3	36.3	22.3	20.5	266
Kurunegala	68.0	53.1	84.1	61.3	32.0	23.3	1,281
Puttalam	47.8	42.9	71.3	54.1	21.5	17.8	628
Anuradhapura	64.2	40.0	83.1	58.1	28.1	23.2	645
Polonnaruwa	65.4	45.5	84.4	62.0	27.1	20.0	335
Badulla	49.1	40.5	67.7	39.3	16.0	10.5	665
Moneragala	59.9	46.7	72.6	55.3	31.6	24.2	398
Ratnapura	65.5	39.9	77.0	50.2	22.4	16.3	840
Kegalle	75.4	38.4	76.2	53.1	24.8	20.2	605
Education							
No education	20.7	17.0	28.3	18.4	5.0	3.9	538
Primary	34.1	24.1	48.0	26.8	8.0	4.7	2,102
Secondary	59.9	43.8	80.7	56.7	22.8	16.7	7,200
Passed G.C.E. (O/L)	72.5	58.1	91.2	76.6	38.1	29.6	1,672
Higher	82.0	69.1	96.6	87.2	54.7	46.2	3,181
Wealth quintile							
Lowest	45.2	31.8	59.6	36.7	14.3	10.1	2,864
Second	54.7	39.9	73.1	50.2	19.7	13.9	2,944
Middle	61.6	44.8	80.4	59.4	25.0	19.3	2,937
Fourth	70.8	53.7	88.0	71.9	37.0	29.1	3,014
Highest	72.1	64.9	91.8	80.3	46.9	39.0	2,933
Total 15-49	61.0	47.1	78.7	59.9	28.7	22.4	14,692

[1] Two most common local misconceptions: mosquito bites and sharing food with someone with AIDS
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

By residential sector, only 4 percent of women in the estate areas have comprehensive knowledge about AIDS. This finding may be attributed to the comparatively lower levels of education for women in estate areas, over 45 percent of whom have not completed even the primary level (see Table 3.2). Figure 13.2 shows that the level of comprehensive knowledge among ever-married women is over 30 percent in only 3 districts (Colombo, Kalutara, and Galle).

Level of education also has a strong positive impact on comprehensive knowledge about AIDS. Comprehensive knowledge increases with the level of education, from only 4 percent of women with no education to 46 percent of those with higher than G.C.E. level. Comprehensive knowledge also increases steadily with wealth quintile.

Figure 13.2 Comprehenisve Knowledge of HIV Prevention Methods by Education among Ever-Married Women 15-49



13.3 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Perinatal transmission is one of the modes of transmission of HIV/AIDS. A mother can pass on the virus to the child during pregnancy, delivery, or through breastfeeding. Therefore knowledge among women that HIV/AIDS can be transmitted from mother to child (MTCT), as well as knowledge that the risk of MTCT can be reduced by using antiretroviral drugs, are important in reducing this type of transmission.

According to the survey findings on knowledge and prevention of mother-to-child transmission shown in Table 13.4, 62 percent of ever-married women know that HIV can be transmitted by breastfeeding, but only 14 percent know that the risk can be reduced by taking special drugs during pregnancy.

Knowledge that HIV can be transmitted by breastfeeding is comparatively low among women in the estate sector (34 percent), women in Batticaloa district (31 percent), and women with no education (30 percent).

Table 13.4 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of ever-married women who know that HIV can be transmitted from mother to child by breastfeeding and who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by mothers taking special drugs during pregnancy, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage who know that: HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mothers taking special drugs during pregnancy	HIV can be transmitted by breastfeeding, and the risk of MTCT can be reduced by mothers taking special drugs during pregnancy	Number of women
Age				
15-24	62.1	13.1	11.7	1,684
15-19	59.9	13.1	11.3	321
20-24	62.6	13.1	11.8	1,364
25-29	63.7	13.3	10.7	2,411
30-39	63.0	14.7	12.3	5,370
40-49	60.3	13.6	11.1	5,226
Marital status				
Married/living together	62.5	14.0	11.6	13,748
Divorced/separated/widowed	55.1	12.4	10.6	944
Currently pregnant				
Pregnant	65.0	15.2	12.4	889
Not pregnant or not sure	61.9	13.8	11.5	13,803
Residence				
Urban	55.4	15.6	11.6	1,893
Rural	64.7	13.7	11.5	12,095
Estate	34.0	12.5	11.8	703
District				
Colombo	54.9	13.1	10.4	1,796
Gampaha	64.8	13.2	11.2	1,839
Kalutara	61.8	18.6	17.9	837
Kandy	64.3	12.9	10.8	1,037
Matale	70.5	12.2	10.0	299
Nuwara Eliya	48.7	13.6	12.1	504
Galle	74.9	18.9	15.5	802
Matara	71.1	13.4	12.3	559
Hambantota	45.6	10.8	7.7	445
Batticaloa	31.4	22.2	4.4	434
Ampara	67.0	12.4	11.4	476
Trincomalee	49.6	20.0	17.0	266
Kurunegala	78.9	14.6	13.6	1,281
Puttalam	56.6	16.2	14.4	628
Anuradhapura	59.8	9.6	8.7	645
Polonnaruwa	59.8	12.2	9.8	335
Badulla	59.6	14.4	12.5	665
Moneragala	62.9	12.6	10.8	398
Ratnapura	57.1	8.9	7.3	840
Kegalle	71.6	11.7	10.1	605
Education				
No education	30.3	6.5	5.1	538
Primary	46.2	10.8	9.7	2,102
Secondary	66.1	14.7	12.4	7,200
Passed G.C.E. (O/L)	67.8	14.9	12.1	1,672
Higher	65.8	14.8	11.5	3,181
Wealth quintile				
Lowest	53.3	12.8	10.8	2,864
Second	61.9	13.1	11.3	2,944
Middle	66.6	13.8	11.8	2,937
Fourth	66.4	13.9	11.7	3,014
Highest	61.8	15.8	12.0	2,933
Total 15-49	62.1	13.9	11.5	14,692

13.4 ATTITUDES TOWARDS PEOPLE LIVING WITH AIDS

In order to evaluate the level of stigma attached to HIV/AIDS, respondents who had heard of AIDS were asked about their attitudes towards people living with the infection. Disgrace attached to being HIV-infected can have an unfavourable effect on people's willingness to test for HIV, admit that they are HIV-infected, and adhere to anti-retroviral treatment. Therefore, acceptance by society of people infected with HIV/AIDS is of particular importance for the success of HIV/AIDS control programs.

Table 13.5 shows the percentage of respondents who express specific accepting attitudes toward people living with AIDS. The data show that supportive social attitudes continue to be limited in Sri Lanka. Among ever-married women who have heard of AIDS, just under half would be willing to care for an infected family member in their own home. Less than 30 percent say they would buy fresh vegetables from a shopkeeper who has the AIDS virus and only 37 percent think that a female teacher with the AIDS virus should be allowed to continue teaching. Two-thirds of the respondents say they would not necessarily want to keep secret that a family member is infected with AIDS virus. Only 8 percent of respondents have accepting attitudes on all four indicators.

Even though there is little variation by age group, marital status, or residential area, the percentage of respondents who express accepting attitudes increases with the level of education and economic status, as shown by the wealth quintile indicator.

Table 13.5 Accepting attitudes towards those living with HIV/AIDS

Among ever-married women age 15-49 who have heard of AIDS, the percentage expressing specific accepting attitudes towards people with AIDS, by background characteristics, Sri Lanka 2006-07

Background characteristic	Among ever-married women who have heard of AIDS: Are willing to care for a family member with the AIDS virus in the woman's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes for all four indicators	Number of women who have heard of AIDS
Age						
15-24	51.5	31.7	42.6	60.8	9.6	1,546
15-19	53.9	30.7	42.8	59.1	7.8	283
20-24	50.9	31.9	42.6	61.2	10.0	1,264
25-29	48.2	36.0	43.9	63.1	10.6	2,283
30-39	45.8	30.8	38.0	66.5	8.3	5,018
40-49	43.0	23.8	31.2	67.3	6.9	4,634
Marital status						
Married/living together	46.2	29.9	37.7	65.5	8.5	12,680
Divorced/separated/widowed	41.7	21.9	29.8	66.9	6.5	802
Residence						
Urban	47.0	36.5	39.0	62.7	9.5	1,787
Rural	45.9	28.5	37.0	65.8	8.3	11,359
Estate	40.7	23.1	34.8	73.8	6.8	336
District						
Colombo	56.2	39.1	42.3	64.7	14.1	1,749
Gampaha	48.9	31.1	35.7	54.9	6.7	1,799
Kalutara	33.8	26.9	39.3	60.9	6.4	769
Kandy	54.6	24.0	37.2	63.1	8.6	919
Matale	45.3	37.9	43.5	68.0	10.6	273
Nuwara Eliya	34.7	30.0	41.7	74.6	7.4	323
Galle	46.8	33.4	33.4	78.3	11.1	751
Matara	34.9	23.8	29.6	85.9	5.3	528
Hambantota	51.5	17.1	22.8	60.6	4.0	416
Batticaloa	21.0	21.5	29.5	62.9	3.2	384
Ampara	37.7	18.9	35.7	74.2	3.7	409
Trincomalee	28.9	13.9	23.6	74.1	1.9	222
Kurunegala	42.2	29.3	39.4	65.1	9.4	1,256
Puttalam	38.7	36.5	34.9	71.1	8.7	560
Anuradhapura	49.6	27.0	42.5	63.1	6.6	598
Polonnaruwa	45.8	31.6	43.0	65.4	8.6	321
Badulla	41.7	24.0	32.9	69.9	7.1	554
Moneragala	40.3	24.7	37.2	68.8	8.1	349
Ratnapura	50.6	30.6	37.0	62.1	7.8	736
Kegalle	60.8	29.9	44.5	62.7	11.4	566
Education						
No education	32.9	12.3	19.8	67.7	3.3	283
Primary	33.3	13.6	20.5	68.7	3.0	1,535
Secondary	41.9	24.4	32.6	68.3	7.2	6,828
Passed G.C.E. (O/L)	50.6	35.5	43.4	64.2	10.5	1,657
Higher	59.2	46.0	53.4	58.8	13.0	3,179
Wealth quintile						
Lowest	35.9	21.1	28.1	69.2	5.9	2,250
Second	41.7	21.9	30.9	69.1	6.4	2,636
Middle	43.2	26.6	35.3	67.0	7.2	2,783
Fourth	50.4	33.8	42.8	63.5	9.8	2,936
Highest	55.5	40.9	46.2	60.2	11.9	2,877
Total 15-49	45.9	29.4	37.2	65.6	8.4	13,482

13.5 COVERAGE OF HIV COUNSELLING AND TESTING

In order to assess respondents' awareness of HIV testing, women interviewed in the 2006-07 SLDHS were asked if they know a place to get an HIV test. Table 13.6 shows that less than half of ever-married women in Sri Lanka know where to get an HIV test.

Knowledge of a place to get an HIV test is comparatively lower among ever-married teenagers, only 32 percent of whom know where to get tested for HIV. Compared to ever-married women living in urban and rural areas, women living in the estate sector are not well-informed about a facility for HIV testing; only 13 percent of women living in the estate sector know of such a place. Women living in Galle and Kurunegala districts are the most knowledgeable about a place to get an HIV test, with 79 percent and 66 percent of respondents knowing a place to get an HIV test, respectively, as opposed to women in Ampara district, of whom only 21 percent know a place that carries out HIV testing. As is true with many other indicators presented in this report, knowledge of a place to get an HIV test is strongly associated with a woman's education level. Almost 70 percent of women at the highest education level know a place, compared with only 16 percent of women who have no education. Knowledge of a place to get tested for HIV also increases steadily with increasing wealth quintile.

Table 13.6 Knowledge of HIV testing

Percentage of ever-married women age 15-49 who know where to get an HIV test, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage who know place to get HIV test	Number of women
Age		
15-24	40.6	1,684
15-19	33.3	321
20-24	42.3	1,364
25-29	47.6	2,411
30-39	50.7	5,370
40-49	45.6	5,226
Marital status		
Married/living together	47.7	13,748
Divorced/separated/widowed	39.8	944
Residence		
Urban	45.8	1,893
Rural	49.4	12,095
Estate	13.0	703
District		
Colombo	48.3	1,796
Gampaha	45.3	1,839
Kalutara	45.3	837
Kandy	43.6	1,037
Matale	43.0	299
Nuwara Eliya	29.9	504
Galle	78.5	802
Matara	52.4	559
Hambantota	37.1	445
Batticaloa	43.7	434
Ampara	21.3	476
Trincomalee	28.1	266
Kurunegala	65.6	1,281
Puttalam	36.1	628
Anuradhapura	47.6	645
Polonnaruwa	53.5	335
Badulla	39.0	665
Moneragala	33.5	398
Ratnapura	46.8	840
Kegalle	55.2	605
Education		
No education	16.1	538
Primary	26.2	2,102
Secondary	43.6	7,200
Passed G.C.E. (O/L)	57.5	1,672
Higher	69.2	3,181
Wealth quintile		
Lowest	34.5	2,864
Second	42.1	2,944
Middle	46.9	2,937
Fourth	52.7	3,014
Highest	59.4	2,933
Total 15-49	47.2	14,692

13.6 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

In addition to knowledge and accepting attitudes about HIV/AIDS, respondents to the 2006-07 SLDHS were asked about their knowledge and experience with other sexually transmitted diseases, which may be co-factors in HIV transmission. Ever-married women were asked if they had had a sexually transmitted infection (STI) in the previous 12 months or if they had had either a bad-smelling, abnormal discharge from the vagina or a genital sore or ulcer.

Table 13.7 shows the self-reported prevalence of STIs and STI symptoms. Hardly any women reported that they had a sexually transmitted infection in the previous 12 months and just 1 percent admitted to having either an STI or any of the STI symptoms. It should also be noted that stigma and discrimination in a traditional society like Sri Lanka may discourage respondents from revealing health problems associated with their sexual activity and therefore may result in an underestimate of the actual prevalence of STIs.

Table 13.7 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among ever-married women age 15-49 who have ever had sexual intercourse, the percentage who reported having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage of women who reported having in the past 12 months: STI	Bad-smelling/ abnormal genital discharge	Genital sore/ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse
Age					
15-24	0.4	1.0	1.0	1.6	1,684
15-19	1.1	1.3	1.6	1.8	321
20-24	0.2	0.9	0.8	1.6	1,364
25-29	0.5	0.7	0.8	1.4	2,411
30-39	0.4	0.7	0.5	1.2	5,370
40-49	0.5	0.5	0.4	1.1	5,226
Marital status					
Married or living together	0.5	0.7	0.6	1.3	13,748
Divorced/separated/widowed	0.3	0.3	0.4	0.9	944
Residence					
Urban	0.5	0.5	0.4	1.1	1,893
Rural	0.5	0.7	0.6	1.2	12,095
Estate	0.1	1.1	1.2	1.7	703
District					
Colombo	0.3	0.6	0.3	1.0	1,796
Gampaha	0.3	0.3	0.2	0.7	1,839
Kalutara	0.4	0.0	0.1	0.5	837
Kandy	0.2	0.0	0.8	1.1	1,037
Matale	0.3	0.6	0.8	1.5	299
Nuwara Eliya	0.0	0.6	0.2	0.6	504
Galle	0.7	0.6	0.3	1.3	802
Matara	0.7	1.2	1.0	1.9	559
Hambantota	0.5	0.5	0.0	1.1	445
Batticaloa	0.0	0.5	0.2	0.5	434
Ampara	0.7	0.5	0.8	1.3	476
Trincomalee	0.0	0.0	0.0	0.0	266
Kurunegala	0.7	1.6	1.0	2.4	1,281
Puttalam	0.6	0.4	0.5	0.8	628
Anuradhapura	0.6	0.8	0.8	0.8	645
Polonnaruwa	1.1	0.9	0.9	1.5	335
Badulla	0.4	1.6	1.6	3.1	665
Moneragala	0.4	1.6	0.4	2.3	398
Ratnapura	0.9	0.7	0.9	1.5	840
Kegalle	0.0	0.4	0.9	1.1	605
Education					
No education	0.3	0.7	0.6	1.2	538
Primary	0.4	0.8	0.6	1.3	2,102
Secondary	0.4	0.7	0.7	1.3	7,200
Passed G.C.E. (O/L)	0.4	0.2	0.4	0.9	1,672
Higher	0.5	0.6	0.4	1.3	3,181
Total 15-49	0.4	0.7	0.6	1.2	14,692

13.7 PREVALENCE OF MEDICAL INJECTIONS

HIV is normally spread through the exchange of bodily fluids between infected and uninfected persons. Sharing needles is one of the ways HIV is spread, so using sterile injections is important in preventing HIV transmission. As persons who have received a medical injection are a broad group of people who are exposed to the risk of catching the virus, SLDHS respondents age 15-49 were asked if they had received an injection in the last 12 months, and if so, the number of injections received. The average number of injections was calculated from this information. It is important that the syringe and needle for each injection are sterile, and therefore respondents who had at least one injection in the previous 12 months were asked whether the syringe and needle were taken from a new, unopened package.

Table 13.8 shows that almost one-third of ever-married women received a medical injection in the 12 months before the survey. Of these women, 94 percent had their last injection with a syringe and needle taken from a new, unopened package. Although there are no noteworthy differences among various socio-economic groups, it can be seen that only 68-75 percent of women living in the three districts of Batticaloa, Ampara, and Trincomalee in the Eastern Province had sterile injections.

Table 13.8 Prevalence of medical injections

Percentage of ever-married women age 15-49 who received at least one medical injection in the past 12 months, the average number of medical injections per person in the past 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women who received medical injections in the past 12 months
Age					
15-24	49.7	1.4	1,684	93.8	837
15-19	51.8	1.3	321	89.5	166
20-24	49.2	1.4	1,364	94.9	671
25-29	47.0	1.4	2,411	94.6	1,134
30-39	31.6	1.1	5,370	93.7	1,696
40-49	16.6	0.8	5,226	91.6	869
Residence					
Urban	28.1	1.0	1,893	91.3	531
Rural	31.6	1.1	12,095	94.1	3,828
Estate	25.1	0.8	703	88.5	176
District					
Colombo	28.5	1.0	1,796	92.6	513
Gampaha	34.4	1.1	1,839	95.1	633
Kalutara	24.5	0.7	837	94.7	205
Kandy	30.0	0.9	1,037	97.8	311
Matale	34.6	1.0	299	95.6	103
Nuwara Eliya	34.7	1.0	504	91.1	175
Galle	29.0	0.9	802	97.7	232
Matara	33.1	1.0	559	95.4	185
Hambantota	33.3	1.5	445	95.4	148
Batticaloa	22.5	0.9	434	67.8	97
Ampara	28.3	1.2	476	71.5	135
Trincomalee	18.4	0.6	266	74.5	49
Kurunegala	31.1	1.1	1,281	95.0	398
Puttalam	33.3	1.2	628	90.4	209
Anuradhapura	37.1	1.3	645	97.1	240
Polonnaruwa	37.9	1.3	335	95.2	127
Badulla	25.6	0.8	665	95.4	170
Moneragala	34.9	1.4	398	90.2	139
Ratnapura	30.5	1.3	840	97.1	256
Kegalle	34.6	1.0	605	99.5	210
Education					
No education	21.9	1.2	538	83.7	118
Primary	22.8	0.9	2,102	87.9	478
Secondary	34.0	1.1	7,200	94.1	2,445
Passed G.C.E. (O/L)	30.8	1.0	1,672	95.2	516
Higher	30.8	1.0	3,181	95.2	979
Wealth quintile					
Lowest	32.7	1.2	2,864	93.0	937
Second	32.2	1.1	2,944	93.6	947
Middle	32.0	1.1	2,937	93.6	940
Fourth	30.9	1.1	3,014	93.9	932
Highest	26.6	0.8	2,933	93.7	780
Total 15-49	30.9	1.1	14,692	93.5	4,536

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker.

13.8 HIV/AIDS KNOWLEDGE AMONG YOUTH

In 2007, there were 33 million HIV-infected persons around the world, with young people age 15-24 accounting for 45 percent of new infections in adults (UNAIDS, 2008). In combating HIV/AIDS, it is of the utmost importance to improve knowledge among youth between 15-24 years as well as to promote safe sex practices, especially among teenagers and young adults.

Table 13.9 shows the level of comprehensive knowledge and the percentage of ever-married women age 15-24 who know a condom source by background characteristics. Condom use among young adults plays an important role in the prevention of transmission of HIV and other sexually transmitted infections, as well as unwanted pregnancies. The results indicate that only 1 in 5 ever-married young women has comprehensive knowledge of HIV/AIDS, though slightly more than half of them know where to get condoms.

Young women living in estate areas lack knowledge on HIV/AIDS and sources for condoms, compared with young women in urban and other rural areas. Youth in Central province (Matale, Kandy, and Nuwara Eliya districts), Eastern province (Ampara, Batticaloa, and Trincomalee districts), and Badulla and Puttalam districts are much lower than the average on comprehensive knowledge. As with all ever-married women, young women's level of education has a positive association with their knowledge about HIV/AIDS. Altogether these data suggest specific geographic areas to target for communication directed towards young people on HIV/AIDS prevention.

Table 13.9 Comprehensive knowledge about AIDS and knowledge of a source of condoms among young women

Percentage of ever-married young women age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Sri Lanka 2006-07

Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of women
Age			
15-19	12.1	40.4	321
15-17	12.2	42.9	75
18-19	12.1	39.6	246
20-24	18.5	54.8	1,364
20-22	18.7	53.3	662
23-24	18.3	56.2	702
Residence			
Urban	16.7	40.6	204
Rural	18.5	56.0	1,381
Estate	1.5	19.8	99
District			
Colombo	21.3	49.9	167
Gampaha	26.1	56.6	183
Kalutara	27.3	57.9	82
Kandy	9.6	38.0	119
Matale	9.8	28.3	37
Nuwara Eliya	12.7	36.8	59
Galle	28.1	73.3	89
Matara	21.0	60.9	70
Hambantota	22.8	72.2	60
Batticaloa	0.0	14.1	60
Ampara	4.5	41.1	61
Trincomalee	(7.4)	(52.4)	38
Kurunegala	14.2	76.2	155
Puttalam	7.2	39.1	90
Anuradhapura	24.7	60.1	90
Polonnaruwa	19.4	73.6	42
Badulla	4.5	28.5	75
Moneragala	18.9	63.2	54
Ratnapura	16.5	38.8	98
Kegalle	(28.1)	(50.8)	55
Education			
No education	(6.2)	(1.0)	23
Primary	0.9	25.7	86
Secondary	13.4	48.9	1,061
Passed G.C.E. (O/L)	24.6	59.0	225
Higher	31.5	70.3	289
Wealth quintile			
Lowest	9.4	44.9	412
Second	13.7	44.7	382
Middle	16.4	60.8	361
Fourth	24.1	59.0	348
Highest	31.5	53.0	180
Total	17.3	52.1	1,684

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.
[2] Friends, family members, and home are not considered sources for condoms.

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

14

I.R. Bandara

The 2006-07 Sri Lanka Demographic and Health Survey (SLDHS) collected data from eligible respondents on general background characteristics (e.g., age, education, wealth quintile, and employment status) of female respondents. It also collected data more specific to women's empowerment, such as receipt of cash earnings, the magnitude of women's earnings relative to those of her husband or partner, and control over the use of her own earnings and those of her husband or partner.

The SLDHS questionnaire also collected data on a woman's participation in household decision-making and her attitude towards wife beating. For this report, two separate indices of empowerment were developed based on the number of household decisions in which the respondent participates and her opinion on the number of circumstances when wife beating might be justified. The ranking of women on these two indices is then related to selected demographic and health outcomes including contraceptive use, ideal family size, unmet need for contraception, and obtaining health care services during pregnancy.

14.1 EMPLOYMENT AND FORM OF EARNINGS

Like education, employment can also be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income. Control over use of earnings may vary by socio-cultural groups. In the 2006-07 SLDHS, eligible respondents were asked a number of questions about employment, including whether they were currently working, and, if not, whether they had worked during the 12 months before the survey. Women who were currently working were asked a number of questions about the kind of work they were doing and whether they were paid in cash, in kind, or not paid.

14.1.1 Women's Control over Their Own Earnings and Relative Magnitude of Women's Earnings

Table 14.1 shows that 41 percent of currently married women were employed at the time of the survey. Of these women, the majority (75 percent) earned only cash income, while almost 20 percent worked without pay. Unpaid workers typically work on the family's farm or in the family's business. Although they do not receive wages, their work results in income for the family. Only 4 percent of currently married working women had both cash and in-kind earnings.

The percentage currently employed rises with age from 16 percent among currently married women age 15-19 to a peak of 52 percent among women age 40-44. Currently married employed women in the youngest age group (15-19) show the highest percentage (81 percent) for earning only cash, whereas the corresponding percentage is lowest (70 percent) for women in the oldest age group (45-49). Instead, 23 percent of the oldest women work as unpaid workers. Otherwise, there is no clear variation in type of earnings by women's age.

Currently married and employed women who earn cash for their work were asked the relative magnitude of their earnings compared with their husband's earnings. In addition, they were asked who the main decisionmaker is with regard to the use of their earnings. This information may provide some insight into women's empowerment in the family and the extent of their control over decisionmaking in the household. It is expected that employment and earnings are more likely to empower women if women themselves control their own earnings and perceive their earnings as significant relative to those of their husband.

Table 14.1 Employment and cash earnings of currently married women

Percentage of currently married women age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women employed in the past 12 months by type of earnings, according to age, Sri Lanka 2006-07

	Currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings					
Age	Percentage employed	Number of women	Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of women
15-19	16.4	314	81.3	2.6	6.8	9.3	100.0	52
20-24	26.1	1,332	77.3	3.8	0.9	18.0	100.0	347
25-29	30.3	2,356	76.6	2.3	0.6	20.5	100.0	715
30-34	37.9	2,549	77.0	3.2	1.7	18.2	100.0	965
35-39	45.9	2,589	75.1	5.1	1.2	18.4	100.0	1,187
40-44	51.9	2,456	76.4	4.2	0.8	18.5	100.0	1,274
45-49	50.2	2,152	69.6	5.8	1.7	22.8	100.0	1,080
Total 15-49	40.9	13,748	75.1	4.2	1.3	19.4	100.0	5,621

For currently married women who had cash earnings in the past 12 months, Table 14.2 shows their control over their own earnings and their perception of the magnitude of their earnings relative to those of their husband by background characteristics. Overall, more than 90 percent of respondents contribute to decisions (either alone or jointly with her husband) on how their income is used.

Furthermore, joint decisions and autonomous decisions occur equally often. Table 14.2 shows that 46 percent of working women decide by themselves how their cash earnings are used and the same percent make decisions jointly with their husbands. Seven percent of women are not involved in making these decisions at all.

The proportion of women who are sole decisionmakers about their own income increases slightly with increasing age of the women. Women's degree of control over their earnings also increases with the number of living children she has. Urban and rural women are about equally as likely to make their own decisions about how to use their cash earnings without involving others, but estate women are noticeably less likely to make the decision alone. The corresponding percentages for urban, rural, and estate women are 50, 48, and 29 percent, respectively. Nearly one-quarter of women in the estate sector reported that their husbands make the decisions about her cash earnings.

There are variations by district in the way decisions are made on how women's earnings are used. Women in four districts are particularly likely to report that their husbands decide on the use of their wives' earnings: Nuwara Eliya (22 percent), Batticaloa (21 percent), Badulla (15 percent), and Polonnaruwa (14 percent).[1] Women in Gampaha (60 percent) are more independent in making decisions about how to use their earnings than women in the other districts.

Sole decisionmaking is common in all education groups. Decisions on use of women's earnings show an interesting relationship to their level of education. The majority of highly educated women (57 percent) decide jointly with their husbands, whereas 40 percent of women with lowest education decide jointly. Husband's control over women's earnings is higher among women without any education (15 percent) than women with higher education (4 percent).

A similar pattern to education—though weaker—appears for husbands' deciding on women's earnings according to wealth quintile. Husband's decisionmaking control is higher for women in the lowest quintile (10 percent) and lowest for women in the highest quintile (5 percent). Otherwise, there is no clear pattern for decisions about women's earnings on this characteristic.

[1] Data for Trincomalee are not included in this discussion because of the small number of women with cash earnings in this district.

Table 14.2 Control over women's cash earnings and relative magnitude of women's earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Person who decides how the wife's cash earnings are used						Women's cash earnings compared with husband's cash earnings					
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	More	Less	About the same	Don't know/ missing	Total	Number of women
Age												
15-19	(29.9)	(50.1)	(15.2)	(4.8)	(0.0)	100.0	(11.9)	(84.5)	(3.7)	(0.0)	100.0	43
20-24	42.7	45.3	8.1	3.5	0.3	100.0	8.7	81.4	7.4	2.5	100.0	282
25-29	43.4	48.2	6.6	1.6	0.3	100.0	15.5	73.3	9.1	2.1	100.0	564
30-34	37.9	54.0	7.5	0.3	0.3	100.0	17.3	70.6	9.1	3.0	100.0	774
35-39	46.6	46.7	5.6	0.2	0.9	100.0	20.4	65.7	10.9	2.9	100.0	953
40-44	52.3	41.7	5.4	0.3	0.4	100.0	22.3	65.5	9.6	2.6	100.0	1,027
45-49	50.8	42.3	5.7	0.3	0.9	100.0	26.0	58.4	11.1	4.5	100.0	815
Number of living children												
0	39.0	53.2	5.7	1.8	0.3	100.0	17.7	68.9	11.4	2.0	100.0	514
1-2	45.7	47.4	5.7	0.6	0.5	100.0	19.2	69.0	9.1	2.7	100.0	2,587
3-4	49.8	41.5	7.4	0.3	0.9	100.0	22.2	63.6	10.4	3.9	100.0	1,207
5+	53.6	36.8	8.5	0.5	0.6	100.0	20.2	63.3	11.4	5.1	100.0	149
Residence												
Urban	50.2	43.4	5.4	0.4	0.6	100.0	18.7	68.7	8.3	4.3	100.0	501
Rural	48.1	46.8	4.2	0.3	0.6	100.0	18.5	69.2	9.3	3.0	100.0	3,504
Estate	28.8	44.0	23.4	3.6	0.2	100.0	32.3	51.1	15.3	1.3	100.0	452
District												
Colombo	55.5	39.3	4.1	0.7	0.3	100.0	18.2	70.9	7.2	3.7	100.0	584
Gampaha	60.4	36.2	2.3	0.2	0.9	100.0	16.8	73.1	6.6	3.5	100.0	601
Kalutara	44.4	47.8	6.7	0.0	1.1	100.0	29.3	55.9	11.9	2.9	100.0	275
Kandy	39.8	55.0	4.8	0.5	0.0	100.0	18.5	68.9	9.4	3.1	100.0	309
Matale	45.7	46.2	7.0	0.0	1.0	100.0	12.0	77.1	8.0	2.9	100.0	81
Nuwara Eliya	31.8	41.4	22.3	4.5	0.0	100.0	27.2	56.5	16.0	0.4	100.0	273
Galle	43.9	51.7	4.0	0.0	0.5	100.0	21.4	67.6	7.5	3.4	100.0	295
Matara	48.1	48.8	1.9	0.0	1.2	100.0	14.9	76.5	4.8	3.8	100.0	152
Hambantota	46.6	46.4	4.9	0.9	1.2	100.0	14.9	68.6	14.2	2.3	100.0	129
Batticaloa	29.7	48.0	20.7	1.6	0.0	100.0	13.8	69.1	15.8	1.4	100.0	58
Ampara	21.2	72.1	6.2	0.0	0.5	100.0	16.6	71.6	9.5	2.2	100.0	70
Trincomalee	(11.1)	(53.8)	(32.3)	(0.0)	(2.8)	100.0	(38.2)	(55.1)	(0.7)	(6.0)	100.0	22
Kurunegala	49.3	45.6	4.7	0.4	0.0	100.0	17.9	64.6	17.1	0.3	100.0	423
Puttalam	41.9	54.1	4.0	0.0	0.0	100.0	15.3	75.7	7.0	2.1	100.0	162
Anuradhapura	48.2	46.3	2.7	0.0	2.8	100.0	19.4	65.3	8.9	6.4	100.0	121
Polonnaruwa	40.7	43.2	13.8	1.2	1.1	100.0	8.2	76.2	5.7	9.9	100.0	73
Badulla	31.4	50.5	15.1	1.7	1.3	100.0	27.5	56.4	7.8	8.2	100.0	241
Moneragala	53.4	44.4	1.6	0.5	0.0	100.0	15.0	70.7	10.3	4.0	100.0	100
Ratnapura	38.7	55.2	5.7	0.0	0.5	100.0	26.6	62.6	9.4	1.3	100.0	281
Kegalle	53.3	43.9	2.3	0.6	0.0	100.0	18.3	69.3	12.4	0.0	100.0	206
Education												
No education	43.2	39.6	15.1	1.6	0.4	100.0	27.3	58.3	11.7	2.8	100.0	209
Primary	46.6	40.3	11.2	0.8	1.1	100.0	24.0	60.7	12.0	3.3	100.0	710
Secondary	52.5	40.7	5.3	1.1	0.3	100.0	17.1	70.2	9.2	3.6	100.0	1,738
Passed G.C.E (O/L)	50.1	43.3	5.4	0.0	1.3	100.0	16.8	73.0	6.3	3.8	100.0	388
Higher	38.1	57.4	3.9	0.1	0.4	100.0	21.0	66.9	10.2	1.9	100.0	1,413
Wealth quintile												
Lowest	44.3	43.0	10.4	1.6	0.8	100.0	23.9	61.7	11.7	2.7	100.0	972
Second	49.9	42.0	6.6	0.8	0.6	100.0	19.8	67.4	9.4	3.4	100.0	809
Middle	51.6	43.1	4.6	0.3	0.4	100.0	19.0	67.8	9.7	3.5	100.0	789
Fourth	43.7	50.1	5.0	0.7	0.4	100.0	18.3	69.7	9.5	2.5	100.0	858
Highest	43.6	51.4	4.5	0.0	0.5	100.0	18.1	70.2	8.7	3.0	100.0	1,029
Total	46.3	46.1	6.3	0.7	0.6	100.0	19.9	67.3	9.8	3.0	100.0	4,457

Note: Numbers in parentheses are based on 25-49 unweighted numbers.

The right side of Table 14.2 presents the percent distribution of women's perceptions about their earnings compared to their husband's earnings. Twenty percent of married working women stated that they earn more than their husbands. However, two-thirds of women earn less than their husbands, so the main breadwinner of Sri Lankan households is the husband. Another 1 in 10 women reported that their earnings are about the same as their husband's.

The percentage of women who believe their income is more than their husband's increases with age. For instance, 9 percent of women age 20-24 earn more than their husbands, but for women 45-49 the corresponding percentage is 26.

The situation of women in the estate sector is complex. Although one-third say they earn more than their husbands—more than in urban (19 percent) or rural (19 percent) areas—they have the lowest independent decision control over their earnings, as described earlier. Although there is generally no gender difference in the wage rates for men and women on the estates, women tend to work more days than men, giving them higher income.

There are district variations in comparisons of women's earnings to husband's earnings. Women residing in Kalutara district have the highest percentage (29 percent) earning more than their husbands. More than 25 percent of women living in Nuwara Eliya, Badulla, and Ratnapura reported that their cash earnings are more than that of their husbands. In contrast, more than 75 percent of women living in Matale, Matara, Polonnaruwa, and Puttalam reported that their husbands earn more than they themselves do.

The weak inverse relationships of woman's education and the wealth quintile to the wife's having higher earnings than the husband are probably largely related to the pattern noted for women living in the estate sector. The percentage of women who earn more than their husbands is slightly larger for uneducated women (27 percent) than women with higher education (21 percent). Nearly one-fourth of women in the lowest wealth quintile earn more than their husbands do, but only 18 percent of women in the highest quintile earn more cash than their husbands.

In summary, women in Sri Lanka have considerable control over decisions about spending their earnings. Despite the fact that a large majority earns less than their husbands, almost half of women have autonomy on spending decisions for their earnings.

14.1.2 Control over Husband's Earnings

Table 14.3 shows the percent distribution of currently married women 15-49 whose husbands receive cash earnings by the person who decides how their husband's cash earnings are used, according to background characteristics. The majority of couples (60 percent) make joint decisions about how to use the husband's cash income. A considerable number of women (23 percent) reported that they have the power to decide how to use the husband's earnings, whereas another 16 percent of women reported that mainly husbands decide.

Older women are the main decisionmakers about the husband's earnings somewhat more often than younger women. There is some variation in the decisionmaker about husband's earnings by residence. Rural women (62 percent) report joint decisionmaking about husband's earnings most often, and women in the estate sector (24 percent) most frequently report that mainly husbands make this decision.

Table 14.3 Control over men's cash earnings

Percent distribution of currently married women 15-49 whose husbands receive cash earnings, by person who decides how men's cash earnings are used, according to background characteristics, Sri Lanka 2006-07

Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number
Age							
15-19	17.5	66.4	14.8	1.4	0.0	100.0	311
20-24	19.4	62.9	16.1	1.5	0.1	100.0	1,327
25-29	20.9	64.2	14.1	0.6	0.2	100.0	2,346
30-34	22.1	62.7	14.9	0.1	0.1	100.0	2,538
35-39	23.3	60.6	15.9	0.1	0.1	100.0	2,568
40-44	27.5	55.1	17.0	0.2	0.2	100.0	2,418
45-49	26.5	53.5	19.4	0.4	0.2	100.0	2,073
Number of living children							
0	19.1	65.8	13.7	1.4	0.0	100.0	1,402
1-2	23.0	61.4	15.2	0.3	0.1	100.0	8,113
3-4	25.9	54.9	18.9	0.2	0.1	100.0	3,600
5+	25.3	55.5	18.9	0.0	0.3	100.0	467
Residence							
Urban	27.6	52.4	19.6	0.4	0.1	100.0	1,737
Rural	22.8	61.6	15.2	0.3	0.1	100.0	11,221
Estate	22.2	50.8	24.3	2.5	0.1	100.0	624
District							
Colombo	30.7	47.7	20.8	0.6	0.2	100.0	1,664
Gampaha	28.2	53.7	17.9	0.1	0.0	100.0	1,679
Kalutara	21.5	60.1	17.7	0.6	0.2	100.0	785
Kandy	20.3	64.2	15.1	0.5	0.0	100.0	975
Matale	20.9	63.9	14.6	0.0	0.5	100.0	277
Nuwara Eliya	20.2	58.7	18.6	2.6	0.0	100.0	460
Galle	27.5	59.0	13.5	0.0	0.0	100.0	740
Matara	25.3	57.5	16.2	0.7	0.2	100.0	521
Hambantota	19.2	65.9	14.6	0.0	0.4	100.0	421
Batticaloa	15.3	76.1	8.6	0.0	0.0	100.0	386
Ampara	7.4	82.6	9.8	0.0	0.2	100.0	428
Trincomalee	16.4	52.0	31.2	0.0	0.3	100.0	248
Kurunegala	22.0	66.8	11.0	0.3	0.0	100.0	1,186
Puttalam	17.0	69.8	12.6	0.4	0.2	100.0	566
Anuradhapura	29.4	53.4	16.5	0.6	0.1	100.0	608
Polonnaruwa	34.3	45.7	19.3	0.2	0.5	100.0	312
Badulla	16.7	63.8	18.2	0.6	0.8	100.0	613
Moneragala	19.0	67.9	12.7	0.4	0.0	100.0	377
Ratnapura	20.3	63.4	16.3	0.0	0.0	100.0	776
Kegalle	27.6	56.2	15.8	0.3	0.0	100.0	560
Education							
No education	25.1	50.8	22.6	1.2	0.4	100.0	434
Primary	26.9	53.9	18.6	0.5	0.1	100.0	1,797
Secondary	24.9	58.6	15.9	0.5	0.2	100.0	6,681
Passed G.C.E (O/L)	23.5	60.9	15.1	0.3	0.2	100.0	1,591
Higher	17.9	67.1	14.9	0.1	0.0	100.0	3,078
Wealth quintile							
Lowest	25.3	57.3	16.8	0.4	0.2	100.0	2,554
Second	24.1	59.1	16.2	0.5	0.1	100.0	2,688
Middle	24.6	60.2	14.7	0.4	0.1	100.0	2,703
Fourth	22.7	62.4	14.5	0.4	0.1	100.0	2,852
Highest	20.5	60.3	18.8	0.2	0.1	100.0	2,785
Total 15-49	23.4	59.9	16.2	0.4	0.1	100.0	13,582

By district, differences in decisionmaking about the husband's cash earnings are not large, although some districts stand out. For example, the vast majority of women in Ampara (83 percent) and Batticaloa (76 percent) make joint decisions about how to use their husband's income, higher than the overall percent. Women in Colombo and Polonnaruwa have the lowest percentages of joint decisions on husband's earnings. On the other hand, women in Polonnaruwa have the highest percent (34 percent) who report that they are the main decisionmakers on husband's cash earnings. Women in Trincomalee are most likely to state that decisions on husband's earnings are made mainly by the husband (31 percent).

Education seems to affect decisions about use of the husband's earnings. As women's level of education increases, the percentage of women who make joint decisions on husband's earnings also goes up. There is no variation with wealth quintile.

Table 14.4 compares who decides on the use of woman's and husband's cash earnings based on which partner's earnings are greater. Regardless of which partner is the main income earner, almost half of couples make joint decisions on how to use the woman's income. Similarly, for decisions about the husband's income, the majority of women report that they make joint decisions, whether or not he is the main income earner, but somewhat more often than for the wife's earnings.

Table 14.4 also shows that the percentage of women who mainly decide how to use their own cash earnings when they earn more than their husband (44 percent) is actually slightly less than women who earn less than their husband (49 percent). However, when the wife is the main income earner, they do not exert greater decision power over use of the husband's earnings of their husbands (24 percent). Rather, in this circumstance, the couple employs joint decisionmaking or the husband still decides how his earnings are used. The highest degree of joint decisionmaking about each partner's income occurs when the earnings of both partners are about the same: 58 percent for wife's and 70 percent for husband's cash earnings. Joint decisionmaking about use of the husband's cash earnings also remains strong in couples where the woman did not work in the previous 12 months or has no cash earnings.

All these findings imply that women have a strong degree of power in their homes on cash control for the wellbeing of their families.

Table 14.4 Women's control over her own earnings and over those of her husband

Percent distributions of currently married women age 15-49 with cash earnings in the past 12 months by person who decides how the woman's cash earnings are used and of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between woman's and husband's cash earnings, Sri Lanka 2006-07

	Person who decides how the wife's cash earnings are used						Number of women with cash earnings	Person who decides how husband's cash earnings are used						
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total		Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women
More than husband	44.0	48.1	6.8	1.0	0.0	100.0	886	24.3	57.0	17.8	0.6	0.3	100.0	806
Less than husband	49.0	44.7	5.7	0.6	0.0	100.0	3,001	22.4	60.7	16.5	0.4	0.0	100.0	2,997
Same as husband	33.4	57.8	8.5	0.3	0.0	100.0	437	14.6	70.0	15.3	0.1	0.0	100.0	437
Woman has no cash earnings	na	na	na	na	na	na	na	19.2	63.4	16.9	0.2	0.2	100.0	1,159
Woman did not work in past 12 months	na	na	na	na	na	na	na	24.8	58.9	15.7	0.4	0.1	100.0	8,070
Don't know/missing	45.7	26.3	8.7	1.1	18.3	100.0	134	16.6	55.8	20.5	1.6	5.4	100.0	113
Total	46.3	46.1	6.3	0.7	0.6	100.0	4,457	23.4	59.9	16.2	0.4	0.1	100.0	13,582

na = Not applicable

14.2 WOMEN'S EMPOWERMENT

In addition to educational attainment, employment status, and control over earnings, the SLDHS collected information on some direct measures of women's autonomy and status. To assess women's decisionmaking autonomy, information was sought on women's participation in four different types of household decisions: the respondent's own health care, major household purchases, household purchases for daily needs, and visits to her family or relatives. Having a final say in decision making processes is the highest degree of autonomy. Women are considered to participate in a decision if they alone or jointly with their husband have the final say in that decision. Table 14.5 shows the percent distribution of currently married women according to the person in the household who mainly makes decisions concerning these matters.

Table 14.5 Women's participation in decision making

Percent distribution of currently married women by person who usually makes decisions about four kinds of issues, Sri Lanka 2006-2007

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Missing	Total	Number of women
Own health care	33.4	44.3	20.9	1.3	0.1	100.0	13,748
Major household purchases	25.3	57.6	14.6	2.4	0.1	100.0	13,748
Purchases of daily household needs	42.6	37.1	16.3	3.9	0.1	100.0	13,748
Visits to her family or relatives	22.0	65.1	11.6	1.2	0.1	100.0	13,748

14.2.1 Women's Participation in Household Decisionmaking

Women in Sri Lanka are active decisionmakers. As Figure 14.1 shows, over 60 percent participate (solely or jointly) in all four of the decisions studied, and 80 percent in three or four of the decisions.

Figure 14.1 **Number of Decisions in Which Women Participate**

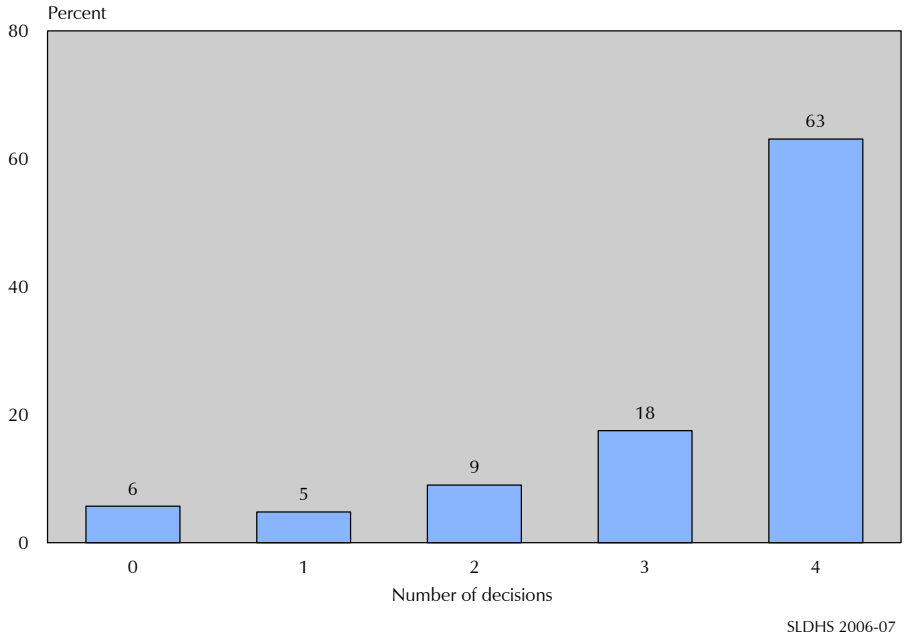


Table 14.5 shows that women commonly make joint decisions with their husbands for three of the four aspects of household decisionmaking investigated in the survey. For instance, 44 percent of women make joint decisions with their husbands about the woman's own health care. The corresponding percentages for major household purchases and visits to her family or relatives are 58 and 65, respectively. Women have a much greater say in purchases of daily household needs (43 percent) than other decisions taken mainly by women, since cooking is often perceived as women's work in Sri Lanka. More than 20 percent of women reported that they also have self-autonomy in deciding about their own health care, making major household purchases, and visits to her family or relatives. However, it is a concern that one in five women reports that her husband is the main decisionmaker about her own health care.

In general, these figures suggest that Sri Lankan women are more empowered than women in other countries in the region. For example, one-third of women in Sri Lanka decide on their own about their health care, whereas only 20 percent in Nepal and 18 percent in Bangladesh do so (Ministry of Health and Population *et al.*, 2007; National Institute of Population Research and Training *et al.*, 2005).

Table 14.6 elaborates on the previous table's data by exploring women's involvement in making each of the four decisions by background characteristics, combining participation solely or jointly in decisions. Looking at each of the decisions in the survey, over three-fourths of women participate, either by themselves or jointly with their husband. Women's highest involvement is in making decisions about visiting her family or relatives (87 percent), followed by decisions about major household purchases (83 percent), and purchases for daily household needs (80 percent), and finally decisions on the woman's own health care (78 percent).

Women's decisionmaking participation rises with increasing age of the woman, both overall and for each of the decision types. Overall, the proportion who participate in all four decisions increases from about half of women age 15-19 to about two-thirds of women who are 35 and older. There is a small differential in non-participation in any of the four decisions by age: from 10 percent for the youngest age cohort to 5 percent for the oldest women. Mirroring the trend by age, the percentage of women who participate in all four decisions is lowest (54 percent) among women without any children, and increases somewhat among women with children.

It is interesting to observe that there is hardly any variation in women's household decision participation by employment status, although it is slightly lower for women employed without cash earnings (59 percent). Likewise, there is a slight decrease in women's participation in decisions on their own health care for those employed without cash earnings (72 percent) than those either unemployed or employed (78 percent).

Women's participation in all four decisions in the estate sector (38 percent) is nearly half of the percent for the other two sectors—urban (63 percent) and rural (64 percent). Women in the estate sector have the lowest percentages involved in making each of the four types of decisions compared to women in other two sectors. Table 14.6 also shows that there are large differentials in women's participation in decisionmaking by district. The percentage of women who participate in all four decisions is lowest among women in Nuwara Eliya (34 percent) and highest among women in Kalutara, Batticaloa, and Kurunegala districts (about 80 percent in each). The percentage of women who do not participate in any of the four decisions is lowest among women in Puttalam and Hambantota districts (2 percent only) and highest among women in Trincomalee district (33 percent). In general, the districts' rankings on individual decision-making items are similar to their rankings overall.

Table 14.6 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Sri Lanka 2006-07

Background characteristic	Type of decision				Percentage who participate in all four decisions	Percentage who participate in none of the four decisions	Number of women
	Own health care	Major household purchases	Purchases for daily household needs	Visits to her family or relatives			
Age							
15-19	68.6	77.7	64.3	76.4	49.3	9.9	314
20-24	71.2	75.8	70.0	81.0	51.4	7.9	1,332
25-29	76.1	82.9	78.2	86.1	60.7	6.1	2,356
30-34	79.5	84.8	80.8	87.5	64.7	5.2	2,549
35-39	79.4	84.5	82.2	88.6	66.4	5.3	2,589
40-44	78.7	84.9	82.7	89.1	65.7	4.7	2,456
45-49	79.3	81.9	82.2	89.0	65.9	5.1	2,152
Employment (past 12 months)							
Not employed	78.2	81.7	79.2	85.5	63.2	6.6	8,125
Employed for cash	78.2	85.2	80.6	89.3	64.0	4.4	4,457
Employed not for cash	71.8	82.8	80.5	89.7	58.6	3.8	1,162
Number of living children							
0	73.0	79.8	70.5	83.3	53.9	7.0	1,422
1-2	79.0	84.7	81.2	88.2	64.7	4.8	8,187
3-4	77.4	81.0	80.1	87.0	63.6	6.6	3,659
5+	70.5	77.2	79.3	80.5	57.2	8.9	480
Residence							
Urban	78.8	81.1	81.2	85.5	63.2	6.3	1,747
Rural	79.1	84.4	80.4	88.2	64.5	4.9	11,353
Estate	49.7	62.1	63.9	72.1	37.8	17.2	649
District							
Colombo	74.2	81.4	80.1	86.7	58.5	5.1	1,687
Gampaha	84.7	86.5	81.9	89.7	68.3	3.5	1,717
Kalutara	89.3	84.6	81.6	88.0	79.6	9.6	785
Kandy	71.5	84.0	84.0	84.4	58.3	5.3	982
Matale	70.9	75.9	79.6	84.5	51.0	4.3	280
Nuwara Eliya	48.6	67.1	68.4	76.4	34.4	12.3	474
Galle	81.5	86.7	82.1	87.2	63.7	3.7	748
Matara	82.2	81.5	73.9	89.0	61.9	4.8	527
Hambantota	73.5	88.1	79.5	92.0	59.3	2.2	424
Batticaloa	87.4	87.0	89.3	87.7	79.0	5.6	388
Ampara	84.6	81.4	80.3	87.5	70.0	8.5	432
Trincomalee	59.5	57.4	61.8	58.4	51.8	33.2	250
Kurunegala	89.9	89.3	86.5	91.0	79.4	3.6	1,191
Puttalam	82.4	87.2	87.6	91.3	68.9	1.6	572
Anuradhapura	66.3	82.9	77.9	88.7	54.2	3.6	611
Polonnaruwa	71.1	82.8	78.1	88.8	61.3	6.3	315
Badulla	76.7	78.5	76.7	82.3	63.3	9.7	631
Moneragala	73.4	83.7	78.8	87.2	56.2	3.4	379
Ratnapura	74.8	79.5	71.8	87.8	54.7	5.1	785
Kegalle	72.5	83.2	71.3	89.6	54.2	4.0	570
Education							
No education	65.8	70.4	71.9	77.5	55.0	14.3	448
Primary	71.0	76.9	77.7	83.1	57.7	9.2	1,843
Secondary	77.4	82.6	79.7	86.4	62.7	5.7	6,754
Passed G.C.E (O/L)	79.9	86.1	81.3	89.5	66.4	4.7	1,601
Higher	82.8	87.4	81.4	91.1	66.4	2.8	3,102
Wealth quintile							
Lowest	71.8	78.7	76.5	83.5	58.6	8.5	2,605
Second	75.1	82.3	78.9	84.7	60.9	7.1	2,724
Middle	80.3	83.8	80.5	87.6	64.5	4.4	2,746
Fourth	81.0	85.6	81.2	89.8	66.0	4.3	2,868
Highest	79.8	84.0	81.4	89.5	65.0	4.2	2,805
Total	77.7	82.9	79.7	87.1	63.1	5.7	13,748

Note: Total includes 4 women missing information on employment

Women's level of education is a contributory factor to women's participation in decisionmaking for each of the four decisions. As women's level of education rises, the percentage of women who participate in each decision and in all four decisions also increases, going from 55 percent to 66 percent for all four decisions. Overall, 14 percent of women without any education do not participate in any of the four decisions considered here. As noted in previous sections, the pattern for wealth quintile is very close to the pattern of education; however, the differential between lowest and highest is not as large as for education.

14.2.2 Attitudes about Violence against Women

The 2006-07 SLDHS focused on women's attitudes towards wife beating as one indicator of violence against women. The rationale for this section is that holding the view that it is justifiable for husbands to be physically abusive to their wives reflects a low status of women. Women who believe that a husband is justified in hitting or beating his wife for any of the specific reasons may believe themselves to be low in status both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for women themselves and their children, affect their attitude toward contraceptive use, and impact their general wellbeing. The responses in this section, juxtaposed with other aspects in this chapter, suggest complexity in women's status in Sri Lanka. Analysis in this section conveys acceptance of norms that are conducive to men's use of force against women, which is a violation of human rights. Violence against women has serious consequences for their mental and physical wellbeing, including their reproductive and sexual health (WHO, 1999).

In the 2006-07 SLDHS, women were asked whether they thought that a husband is justified in beating his wife in each of five scenarios: if she burns the food, argues with him, goes out without telling him, neglects the children, and refuses sexual relations with him.

Figure 14.2 shows that slightly less than half of women think that none of these reasons would justify physical abuse of a wife by the husband. Only a small minority (11 percent) believe that all five behaviours by a wife would justify a husband's hitting his wife.

Figure 14.2 **Number of Reasons for Which Women Believe that Wife Beating is Justified**

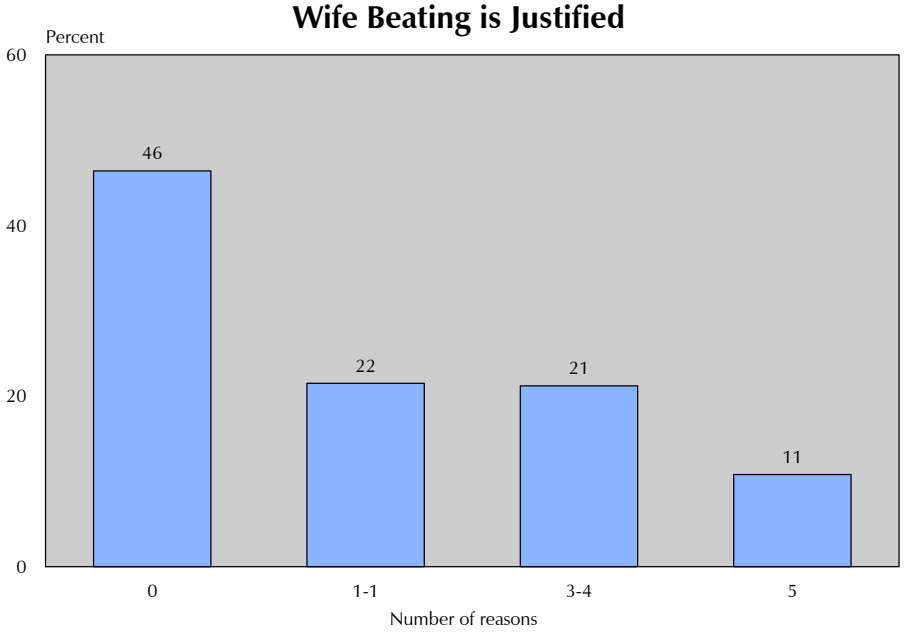


Table 14.7 summarizes women's attitudes toward wife beating in these five specific circumstances. The most frequently cited reason is neglect of children (42 percent), followed closely by arguing with the husband (41 percent). Slightly more than one-third of women think wife beating is justified when the wife goes out without telling the husband, and 21 percent agree a husband is justified to beat his wife when she refuses to have sex with him. The least frequently accepted reason is burning the food (18 percent).

Table 14.7 Attitude toward wife beating

Percentage of ever-married women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Sri Lanka 2006-07

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	18.3	45.5	41.6	45.5	20.4	54.4	321
20-24	15.7	42.7	34.9	43.7	18.6	55.6	1,364
25-29	16.0	41.5	34.4	41.6	18.9	53.5	2,411
30-34	16.4	39.4	33.9	40.9	19.1	52.0	2,642
35-39	19.0	41.6	34.9	43.6	22.3	53.5	2,728
40-44	19.1	41.2	35.2	41.3	21.7	53.8	2,702
45-49	19.6	40.0	35.6	40.0	21.9	51.6	2,524
Employment (past 12 months)							
Not employed	18.1	41.4	35.6	42.4	20.5	53.4	8,489
Employed for cash	17.0	39.6	33.0	40.7	19.7	51.8	5,008
Employed not for cash	19.2	44.4	38.8	42.6	25.5	56.9	1,189
Marital status							
Married or living together	18.0	41.4	35.1	42.2	20.9	53.6	13,748
Divorced/separated/widowed	15.8	35.2	33.4	36.4	17.0	47.3	944
Number of living children							
0	14.2	37.8	32.3	37.7	17.6	50.9	1,499
1-2	16.7	39.8	33.5	41.3	19.4	52.3	8,684
3-4	20.4	44.1	38.2	43.8	23.5	55.4	3,974
5+	27.4	47.1	42.2	47.5	27.1	57.3	534
Residence							
Urban	17.3	34.5	28.3	36.0	18.4	46.8	1,893
Rural	17.8	42.4	36.2	43.0	21.2	54.5	12,095
Estate	20.3	34.6	31.6	37.7	15.6	47.8	703
District							
Colombo	12.2	29.6	22.2	33.1	15.9	42.3	1,796
Gampaha	14.1	33.8	30.7	39.1	18.9	47.6	1,839
Kalutara	25.1	31.4	21.1	34.6	25.1	38.5	837
Kandy	25.2	64.2	52.0	65.8	31.1	75.5	1,037
Matale	29.9	71.0	62.6	73.0	43.4	88.7	299
Nuwara Eliya	29.8	52.0	51.3	54.2	29.1	69.6	504
Galle	14.3	45.5	37.8	44.8	21.0	58.5	802
Matara	25.8	38.2	31.9	40.0	23.2	49.6	559
Hambantota	11.4	31.8	30.1	23.6	15.8	33.6	445
Batticaloa	50.4	58.1	44.9	61.4	17.6	75.5	434
Ampara	37.9	59.3	57.7	61.4	35.1	76.1	476
Trincomalee	0.8	6.3	4.0	5.1	1.1	10.9	266
Kurunegala	13.1	49.5	50.1	54.9	17.5	68.2	1,281
Puttalam	27.9	46.2	40.7	45.8	28.4	54.2	628
Anuradhapura	10.1	44.9	32.0	32.1	17.3	51.8	645
Polonnaruwa	9.3	47.9	28.9	34.9	15.4	53.8	335
Badulla	19.2	37.3	36.3	39.3	19.6	46.7	665
Moneragala	15.9	42.6	41.3	44.4	24.4	58.5	398
Ratnapura	7.5	32.3	25.0	28.7	14.3	43.6	840
Kegalle	4.6	22.5	16.7	18.3	8.9	32.9	605
Education							
No education	30.7	47.0	44.6	46.2	28.7	57.8	538
Primary	24.7	45.7	40.7	44.3	26.2	56.6	2,102
Secondary	19.5	45.5	39.3	45.4	22.6	57.2	7,200
Passed G.C.E (O/L)	15.8	36.3	29.3	39.9	19.5	49.7	1,672
Higher	8.4	29.3	22.6	32.4	11.6	42.7	3,181
Wealth quintile							
Lowest	22.3	45.3	40.9	45.2	23.4	57.3	2,864
Second	19.7	45.0	38.7	45.8	22.9	56.7	2,944
Middle	19.7	44.3	37.8	44.0	21.5	55.4	2,937
Fourth	16.1	40.4	33.5	41.4	20.8	53.6	3,014
Highest	11.5	30.3	24.1	32.7	14.4	42.9	2,933
Total	17.8	41.0	35.0	41.8	20.6	53.2	14,692

Note: Total includes 6 women missing as to employment status

The lack of strong differences or patterns among categories of many of the background characteristics is striking, particularly ones that are associated with other variables reported on elsewhere in this report (e.g., age, residence). The overall level of acceptability of at least one reason (53 percent) and similar levels of acceptability in all age groups suggest that these attitudes are pervasive and trenchant. Yet, family size—which has frequently shown similar patterns as age—does show a modest association with holding any of these ideas. The percentage of women who agree with any of the scenarios as justification for wife beating increases from 51 percent for women without children to 57 percent for those with five or more children. This pattern holds for each of the five situations. There is about a 10 percentage point difference on each of the five scenarios. For instance, only 14 percent of women without any children accept wife beating if the food gets burned, but this percentage essentially doubles among women with 5 or more children. From these results, it seems that when women have more children their acceptance of violence against themselves also increases.

Women who are divorced, separated, or widowed show a slightly lower percentage agreeing with any of the five attitudes (47 percent), suggesting that they have slightly better attitudes about their social status than currently married women (54 percent). Considering their marital status, it may be that they have developed this view from bitter experience.

Overall, acceptance of violence against women is slightly higher for rural women than women in other sectors. This pattern also holds among all the specific scenarios except if the wife burns the food.

Woman's education is linked to her attitudes about domestic violence. Women's acceptance of the rationales for violence against women declines as education level rises. Overall, 58 percent of women with no education think at least one of the scenarios would be justifiable grounds for a husband to beat his wife, compared with a smaller proportion (43 percent) of women in the highest educational group. The differential between lowest and highest education levels is two- or three-fold for three of the five component situations. Nevertheless, it is surprising that so many of the most educated respondents would consider violence against women to ever be acceptable.

14.2.3 Women's Empowerment Indicators

The two sets of empowerment indicators, namely, women's participation in making household decisions and their attitude toward wife beating, can be summarized into two separate indices. The first index shows the number of decisions (see Table 14.6 for the specific decisions) in which women participate alone or jointly with their husband. This index ranges in value from 0 to 4 and is hypothesized to be positively related to women's empowerment. It reflects the degree of decisionmaking control that women are able to exercise in areas that affect their own lives and environments.

The second index, which ranges in value from 0 to 5, is the total number of reasons (see Table 14.7 for the specific reasons) for which the respondent feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement, self-esteem, and higher status of women. These two indices were used to analyse women's empowerment status in following events.

14.2.4 Current Use of Contraception by Women's Empowerment Status

It might be expected that use of contraception would be associated with active decision participation at home, since controlling fertility is a step that could contribute to achievement of some personal goals, and increased self-esteem and control over one's life. Table 14.8 shows that as the number of household decisions in which women participate increases (i.e., as empowerment increases), use of any contraceptive method also increases, albeit modestly. For instance, the percentage using a family planning method goes up from 62 to 69 percent for women who make no decisions and 3-4 decisions, respectively. Non-use of any family planning method is modestly associated with no decision participation. Women's use of a traditional method doubles with high decision participation.

Table 14.8 Current use of contraception by women's empowerment status

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's empowerment, Sri Lanka 2006-07

			Modern methods[1]							
Empowerment indicator	Any method	Any modern method	Female sterili-zation	Male sterili-za tion	Temporary modern female methods	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[2]										
0	61.5	53.9	19.4	1.2	28.6	4.7	7.7	38.5	100.0	778
1-2	66.6	52.0	15.7	0.4	30.5	5.4	14.6	33.4	100.0	1,896
3-4	69.2	52.5	16.2	0.7	29.8	5.8	16.7	30.8	100.0	11,074
Number of reasons for which wife beating is justified[3]										
0	67.5	50.1	14.9	0.5	28.4	6.3	17.4	32.5	100.0	6,384
1-2	68.6	53.1	15.1	0.8	30.5	6.7	15.5	31.4	100.0	2,958
3-4	69.9	55.3	18.5	0.9	31.2	4.7	14.6	30.1	100.0	2,915
5	68.7	55.9	20.5	0.7	31.7	3.0	12.8	31.3	100.0	1,491
Total	68.4	52.5	16.3	0.7	29.8	5.7	15.9	31.6	100.0	13,748

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, male condom, and lactational amenorrhoea method
[2] See Table 14.5 for the decisions.
[3] See Table 14.7 for the reasons.

For the indicator on attitudes towards violence against women, there are weak associations with modern and traditional method use, but in opposite directions to what might be expected. Women's status is thought to decrease with increasing numbers of reasons that women feel wife beating is justified. Although there is no association with use of 'any method' of contraception, there is slightly greater use of modern methods by women who have more accepting attitudes toward wife beating (i.e., lower empowerment). Women who do not agree that wife beating is acceptable in any of the five circumstances (i.e., higher sense of empowerment) are somewhat more likely to use traditional methods than women who feel wife beating is justifiable. Perhaps this result and the earlier finding about use of traditional methods imply that when women have more self-esteem, sense of control, respect from their husband, and good communication with him, they tend to choose traditional methods, which require a strong degree of self-discipline and the husband's cooperation to use them effectively.

14.2.5 Ideal Family Size and Unmet Need by Women's Status

Table 14.9 presents the mean ideal number of children for currently married women 15-49 and the percentage with an unmet need for family planning, by the two indices of women's empowerment. The mean ideal number of children declines slightly as the number of decisions in which women participates increases. Women who do not participate in any decisions are slightly more likely (12 percent) to have unmet need for family planning than more active decision participants. There is no clear variation for either unmet need for family planning or mean ideal number of children by the number of reasons accepted as grounds for spousal physical violence.

Table 14.9 Women's empowerment and ideal number of children and unmet need for family planning

Mean ideal number of children for currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Sri Lanka 2006-07

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of women with an unmet need for family planning[2]			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate[3]						
0	2.9	765	7.2	4.5	11.7	778
1-2	2.7	1,857	4.1	3.2	7.3	1,896
3-4	2.6	10,889	3.2	3.8	7.0	11,074
Number of reasons for which wife beating is justified[4]						
0	2.6	6,274	3.4	3.7	7.1	6,384
1-2	2.7	2,916	4.3	3.5	7.8	2,958
3-4	2.7	2,870	3.2	3.8	7.0	2,915
5	2.8	1,451	3.5	4.5	8.0	1,491
Total	2.7	13,511	3.5	3.8	7.3	13,748

[1] Mean excludes respondents who gave non-numeric responses.
[2] See Table 7.3 for the definition of unmet need for family planning.
[3] See Table 14.5 for the decisions.
[4] See Table 14.7 for the reasons.

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SAMPLE IMPLEMENTATION

Appendix A

Table A.1 Final sample allocation by district and sector (number of blocks), Sri Lanka 2006-07

District	Total	Urban		Rural		Estate	Number of camps/ transitional houses
		Not tsunami affected	Tsunami affected	Not tsunami affected	Tsunami affected	Not tsunami affected	
Colombo	272	181	6	80	0	2	3
Gampaha	208	52	4	147	2	2	1
Kalutara	122	18	2	89	3	7	3
Kandy	148	28	0	95	0	25	0
Matale	**65**	**6**	**0**	**49**	**0**	**10**	**0**
Nuwara Eliya	107	7	0	30	0	70	0
Galle	104	13	5	71	7	3	5
Matara	90	7	3	68	5	3	4
Hambantota	**66**	**2**	**2**	**55**	**2**	**2**	**3**
Jaffna	**80**	**18**	**3**	**53**	**4**	**0**	**2**
Mannar	**65**	**0**	**0**	**65**	**0**	**0**	**0**
Vavunia	**65**	**5**	**0**	**60**	**0**	**0**	**0**
Mulativu	**65**	**0**	**0**	**61**	**2**	**0**	**2**
Killinochchi	**65**	**0**	**0**	**65**	**0**	**0**	**0**
Batticaloa	**65**	**16**	**4**	**35**	**5**	**0**	**5**
Ampara	80	16	4	49	8	0	3
Trincomalee	**66**	**3**	**2**	**52**	**5**	**0**	**4**
Kurunegala	143	6	0	135	0	2	0
Puttalam	92	10	0	80	0	2	0
Anuradhapura	90	8	0	80	0	2	0
Polonnaruwa	**67**	**0**	**0**	**65**	**0**	**2**	**0**
Badulla	119	8	0	75	0	36	0
Moneragala	**65**	**0**	**0**	**63**	**0**	**2**	**0**
Ratnapura	104	6	0	80	0	18	0
Kegalle	87	5	0	70	0	12	0
Total	2,500	415	35	1,772	43	200	35

Note: Oversampled districts are shown in bold.

Table A.2 Number of primary sampling units covered by district and sector, Sri Lanka 2006-07

District	Urban	Rural	Estate	Total
Colombo	190	80	2	272
Gampaha	57	149	2	208
Kalutara	20	92	7	119
Kandy	28	95	25	148
Matale	6	49	9	64
Nuwara Eliya	7	30	69	106
Galle	20	80	3	103
Matara	12	74	3	89
Hambantota	5	57	2	64
Batticaloa	19	39	0	58
Ampara	21	55	0	76
Trincomalee	2	43	0	45
Kurunegala	6	135	2	143
Puttalam	10	79	2	91
Anuradhapura	8	74	2	84
Polonnaruwa	0	61	2	63
Badulla	8	75	36	119
Moneragala	0	63	2	65
Ratnapura	6	79	17	102
Kegalle	5	70	12	87
Total	430	1,479	197	2,106

Note: Oversampled districts are shown in bold.

Table A.3 Sample implementation

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to urban-rural residence and district, Sri Lanka 2006-07

	Residence		District																				
Result	Urban	Rural	Estate	Colom-bo	Gam-paha	Kalu-tara	Kandy	Matale	Nuwara Eliya	Galle	Matara	Ham-ban-tota	Batt-icaloa	Ampara	Trin-coma-lee	Kuru-negala	Putt-alam	Anur-adhapura	Pol-onna-ruwa	Bad-ulla	Mon-era-gala	Ratna-pura	Keg-alle	Total
Selected households																							
Completed (C)	90.7	94.1	90.0	89.1	97.3	95.9	89.6	93.2	89.9	95.9	97.3	90.5	93.7	95.9	96.4	95.1	86.1	94.2	95.4	91.8	94.2	92.2	92.5	93.0
Household present but no competent respondent at home (HP)	2.6	1.3	1.9	3.8	0.7	0.5	3.6	0.0	1.9	0.0	0.0	3.4	1.2	0.0	0.6	0.6	4.1	0.5	1.1	1.4	2.0	1.8	1.5	1.6
Postponed (P)	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.7	0.1	0.1	0.9	0.0	0.1	0.1	0.2	0.2	0.0	0.0	0.2	0.0	0.0	1.5	0.1	0.1	0.0	0.0	0.1	0.0	0.3	0.0	0.2
Dwelling not found (DNF)	0.3	0.2	0.4	0.2	0.0	0.2	0.4	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.4	0.1	0.2	0.5	0.0	0.8	0.8	0.2
Household absent (HA)	1.2	0.9	2.4	1.2	0.1	0.7	1.8	1.2	2.9	0.7	0.2	0.9	2.7	2.0	0.4	0.4	0.9	1.1	0.3	1.9	0.9	1.7	0.5	1.1
Dwelling vacant/address not a dwelling (DV)	3.8	2.7	4.5	3.8	1.5	2.1	4.0	4.8	4.4	3.1	2.2	4.5	1.7	1.7	0.6	3.0	5.7	3.6	2.5	3.2	2.1	2.9	3.9	3.1
Dwelling destroy (DD)	0.4	0.5	0.7	0.4	0.3	0.6	0.3	0.6	0.6	0.4	0.0	0.5	0.0	0.3	0.2	0.6	1.0	0.6	0.5	0.7	0.8	0.3	0.8	0.5
Other (O)	0.3	0.1	0.2	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.0	0.1	1.7	0.0	0.0	0.4	0.0	0.1	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	4,440	14,926	1,991	2,815	2,127	1,212	1,516	643	1,071	1,040	897	644	587	763	471	1,426	918	842	637	1,201	655	1,014	878	21,357
Household response rate (HRR)	96.1	98.3	97.5	94.5	99.3	99.1	95.6	99.8	97.6	100.0	100.0	96.2	98.4	99.9	97.6	99.2	94.8	99.4	98.7	97.9	97.9	97.0	97.6	97.8
Eligible women																							
Completed (EWC)	96.3	98.0	96.1	95.6	99.1	96.0	95.4	98.8	97.4	99.4	99.8	98.4	99.8	98.5	99.4	98.1	95.8	99.5	99.1	94.9	98.8	97.2	95.3	97.5
Not at home (EWNH)	1.5	1.4	3.0	1.9	0.4	3.2	3.2	0.7	2.3	0.6	0.2	0.5	0.0	0.8	0.6	0.8	2.9	0.2	0.6	4.1	0.8	2.2	3.4	1.6
Postponed (EWP)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Refused (EWR)	0.5	0.0	0.1	0.6	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.1
Partly completed (EWPC)	0.2	0.1	0.1	0.4	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.1	0.2	0.1
Incapacitated (EWI)	0.7	0.2	0.1	0.7	0.2	0.5	0.8	0.2	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.3	0.6	0.2	0.0	0.1	0.0	0.1	0.4	0.3
Other (EWO)	0.7	0.3	0.4	0.9	0.1	0.2	0.3	0.2	0.1	0.0	0.0	0.7	0.0	0.5	0.0	0.6	0.2	0.0	0.2	0.7	0.2	0.3	0.7	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,149	10,570	1,349	1,937	1,579	879	1,021	422	734	707	640	429	494	608	358	953	621	617	469	855	504	687	554	15,068
Eligible women response rate (EWRR)	96.3	98.0	96.1	95.6	99.1	96.0	95.4	98.8	97.4	99.4	99.8	98.4	99.8	98.5	99.4	98.1	95.8	99.5	99.1	94.9	98.8	97.2	95.3	97.5
Overall response rate (ORR)	92.6	96.3	93.7	90.3	98.4	95.2	91.2	98.7	95.0	99.4	99.8	94.6	98.2	98.4	97.1	97.3	90.9	98.9	97.9	92.8	96.8	94.3	93.0	95.3

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{100 * EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

[3] The overall response rate (ORR) is calculated as:

$$ORR = HRR * EWRR/100$$

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2006-07 Sri Lanka Demographic and Health Survey (SLDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2006-07 SLDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2006-07 SLDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2006-07 SLDHS is a Macro SAS procedure. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } \; z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,

x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2006-07 SLDHS, there were 2,106 non-empty clusters. Hence, 2,106 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 2,106 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 2,105 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the procedure computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. The procedure also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2006-07 SLDHS are calculated for selected variables considered to be of primary interest for the women's survey and for the men's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban, rural and estate areas, and for each of the 20 districts of the country. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.25 present the value of the statistic (R), its standard error (SE), the number of unweighted (N-UNWE) and weighted (N-WEIG) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for *children ever born*) can be interpreted as follows: the overall average from the national sample is 1.434 and its standard error is 0.026. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 1.434±2×0.026. There is a high probability (95 percent) that the *true* average number of children ever born to all women is between 1.381 and 1.487.

For the total sample, the value of the DEFT, averaged over all variables, is 1.104. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.104 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Sri Lanka 2006-07

Variable	Estimate	Base population
Urban	Proportion	Ever-married women
No education	Proportion	Ever-married women
Secondary or higher	Proportion	Ever-married women
Passed G.C.E. (O/L) or higher	Proportion	Ever-married women
Watches TV at least once a week	Proportion	Ever-married women
Currently married	Proportion	All women
Married before age 20	Proportion	All women age 20-49
*Currently pregnant**	*Proportion*	*All women*
Children ever born	Mean	All women
Children surviving	Mean	All women
Children ever born to women age 40-49	*Mean*	*All women age 40-49*
Knows any contraceptive method	Proportion	Currently married women
Knows a modern method	Proportion	Currently married women
Ever used any contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	*Proportion*	*Currently married women*
Currently using modern method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using IUD	Proportion	Currently married women
Currently using injectables	Proportion	Currently married women
Currently using condoms	Proportion	Currently married women
Currently using female sterilization	Proportion	Currently married women
Currently using a traditional method	Proportion	Currently married women
Currently using rhythm method	Proportion	Currently married women
Currently using withdrawal	Proportion	Currently married women
Used public sector source	Proportion	Current users of modern methods
Want no more children or sterilized	*Proportion*	*Currently married women*
Want to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	*Mean*	*Ever-married women*
Mothers received antenatal care for last birth	*Proportion*	*Women with at least one live birth in five years before survey*
Mothers protected against tetanus for last birth	*Proportion*	*Women with at least one live birth in five years before survey*
Mothers received medical assistance at delivery	*Proportion*	*Births occurring 1-59 months before interview*
Having diarrhoea in two weeks before survey	Proportion	Children age 0-59 months
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhoea in two weeks before interview
Taken to a health provider	Proportion	Children with diarrhoea in two weeks before interview
Vaccination card seen	Proportion	Children age 12-23 months
Received BCG	Proportion	Children age 12-23 months
Received DPT (3 doses)	Proportion	Children age 12-23 months
Received Polio (3 doses)	Proportion	Children age 12-23 months
Received measles	Proportion	Children age 12-23 months
Fully vaccinated	*Proportion*	*Children age 12-23 months*
Heard about AIDS	Proportion	Ever-married women
Knows about HIV transmitted via breastfeeding and has heard of special drugs	Proportion	Ever-married women
Accepting attitudes towards people with HIV	Proportion	Ever-married women who have heard of HIV/AIDS
Total fertility rate (3 years)	*Rate*	*All women 15-49*
Neonatal mortality (0-4 years)[1]	*Rate*	*Children exposed to the risk of mortality*
Post-neonatal mortality (0-4 years)[1]	*Rate*	*Children exposed to the risk of mortality*
Infant mortality (0-4 years)[1]	*Rate*	*Children exposed to the risk of mortality*
Child mortality (0-4 years)[1]	*Rate*	*Children exposed to the risk of mortality*
Under-five mortality (0-4 years)[1]	*Rate*	*Children exposed to the risk of mortality*

[1] 0-4 years for national only; 0-9 years for background characteristics
* Only the variables in italics were calculated for urban, rural, estate, and each of the districts separately

Table B.2 Sampling errors for National sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Urban	0.129	0.003	14692	14692	0.957	0.021	0.124	0.134
No education	0.037	0.002	14692	14692	1.099	0.047	0.033	0.040
Secondary or higher	0.820	0.004	14692	14692	1.214	0.005	0.813	0.828
Passed G.C.E. (O/L) or higher	0.330	0.005	14692	14692	1.362	0.016	0.320	0.341
Watches TV at least once a week	0.776	0.004	14692	14692	1.291	0.006	0.767	0.785
Currently married	0.644	0.011	21628	21336	1.013	0.017	0.622	0.666
Married before age 20	0.267	0.004	17880	17850	1.156	0.013	0.260	0.274
Currently pregnant	0.042	0.002	21628	21336	1.042	0.037	0.039	0.045
Children ever born	1.434	0.026	21628	21336	1.007	0.018	1.381	1.487
Children surviving	1.388	0.025	21628	21336	1.008	0.018	1.338	1.439
Children ever born to women age 40-49	2.565	0.021	5570	5555	1.151	0.008	2.522	2.607
Knows any contraceptive method	0.997	0.000	13711	13748	0.954	0.000	0.996	0.998
Knows a modern method	0.996	0.001	13711	13748	0.999	0.001	0.995	0.997
Ever used any contraceptive method	0.869	0.003	13711	13748	1.206	0.004	0.862	0.875
Currently using any contraceptive method	0.684	0.005	13711	13748	1.173	0.007	0.675	0.693
Currently using a modern method	0.525	0.005	13711	13748	1.177	0.010	0.515	0.535
Currently using a traditional method	0.159	0.004	13711	13748	1.158	0.023	0.152	0.166
Currently using pill	0.081	0.003	13711	13748	1.134	0.033	0.076	0.086
Currently using IUD	0.065	0.002	13711	13748	1.161	0.038	0.060	0.069
Currently using condoms	0.057	0.002	13711	13748	1.143	0.040	0.052	0.061
Currently using injectables	0.148	0.003	13711	13748	1.152	0.024	0.141	0.155
Currently using female sterilization	0.163	0.004	13711	13748	1.164	0.023	0.156	0.170
Currently using withdrawal	0.058	0.002	13711	13748	1.153	0.040	0.053	0.062
Currently using periodic abstinence	0.101	0.003	13711	13748	1.187	0.030	0.095	0.107
Used public sector source	0.752	0.006	7201	7203	1.190	0.008	0.740	0.765
Want no more children or sterilized	0.602	0.005	13711	13748	1.092	0.008	0.593	0.611
Want to delay birth at least 2 years	0.174	0.003	13711	13748	1.072	0.020	0.167	0.181
Ideal family size	2.660	0.012	14411	14415	1.319	0.004	2.637	2.684
Mothers received antenatal care for last birth	0.994	0.001	6029	6014	1.115	0.001	0.992	0.996
Mothers protected against tetanus for last birth	0.916	0.004	6029	6014	1.202	0.005	0.908	0.925
Mothers received medical assistance at delivery	0.986	0.002	7086	6989	1.079	0.002	0.983	0.990
Having diarrhoea in the last 2 weeks	0.033	0.002	6962	6864	1.012	0.069	0.028	0.037
Treated with oral rehydration salts (ORS)	0.511	0.035	250	225	1.007	0.069	0.441	0.582
Taken to a health provider	0.818	0.026	250	225	0.943	0.031	0.767	0.870
Vaccination card seen	0.933	0.007	1455	1438	1.014	0.007	0.919	0.946
Received BCG	0.996	0.001	1455	1438	0.857	0.001	0.993	0.999
Received DPT (3 doses)	0.995	0.002	1455	1438	0.880	0.002	0.991	0.998
Received polio (3 doses)	0.994	0.002	1455	1438	0.860	0.002	0.990	0.998
Received measles	0.972	0.005	1455	1438	1.092	0.005	0.962	0.981
Fully immunized	0.970	0.005	1455	1438	1.074	0.005	0.960	0.979
Heard about HIV/AIDS	0.918	0.003	14692	14692	1.181	0.003	0.912	0.923
Knows about HIV transmitted via breastfeeding and has heard of special drugs	0.115	0.003	14692	14692	1.145	0.026	0.109	0.121
Accepting attitudes towards people with HIV	0.084	0.003	13164	13482	1.128	0.032	0.078	0.089
Total fertility rate (past 3 years)	2.349	0.034	na	60732	1.138	0.014	2.281	2.416
Neonatal mortality (past 0-4 years)	10.772	1.341	7137	7047	1.100	0.125	8.090	13.454
Post-neonatal mortality (past 0-4 years)	4.526	0.849	7135	7057	1.045	0.188	2.827	6.224
Infant mortality (past 0-4 years)	15.298	1.609	7138	7047	1.086	0.105	12.080	18.516
Child mortality (past 0-4 years)	5.302	1.221	7018	6924	1.261	0.230	2.859	7.745
Under-five mortality (past 0-4 years)	20.519	2.052	7153	7061	1.156	0.100	16.415	24.622

na = Not applicable

Table B.3 Sampling errors for Urban sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.034	0.003	4300	2736	1.062	0.091	0.028	0.041
Children ever born to women age 40-49	2.333	0.048	1174	735	1.265	0.020	2.238	2.428
Currently using any contraceptive method	0.599	0.011	2808	1747	1.222	0.019	0.577	0.622
Want no more children or sterilized	0.581	0.010	2808	1747	1.069	0.017	0.561	0.601
Ideal family size	2.602	0.028	2959	1848	1.355	0.011	2.547	2.658
Mothers received antenatal care for last birth	0.995	0.002	1210	755	1.149	0.002	0.990	0.999
Mothers protected against tetanus for last birth	0.905	0.012	1210	755	1.398	0.013	0.881	0.929
Mothers received medical assistance at delivery	0.992	0.003	1451	903	1.060	0.003	0.987	0.997
Fully immunized	0.963	0.011	309	188	1.006	0.011	0.942	0.985
Total fertility rate (past 3 years)	2.239	0.067	na	8358	1.057	0.030	2.106	2.372
Neonatal mortality (past 0-9 years)	6.393	1.505	2705	1690	0.955	0.235	3.383	9.403
Post-neonatal mortality (past 0-9 years)	3.497	1.123	2694	1684	0.988	0.321	1.252	5.743
Infant mortality (past 0-9 years)	9.890	1.852	2705	1690	0.960	0.187	6.186	13.594
Child mortality (past 0-9 years)	8.856	3.824	2638	1646	1.696	0.432	1.207	16.505
Under-five mortality (past 0-9 years)	18.658	4.109	2706	1690	1.362	0.220	10.441	26.876

na = Not applicable

Table B.4 Sampling errors for Rural sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.042	0.002	15395	17571	0.998	0.042	0.039	0.046
Children ever born to women age 40-49	2.589	0.025	3899	4552	1.100	0.010	2.540	2.639
Currently using any contraceptive method	0.699	0.005	9711	11353	1.132	0.008	0.689	0.710
Want no more children or sterilized	0.600	0.005	9711	11353	1.056	0.009	0.590	0.611
Ideal family size	2.668	0.013	10177	11878	1.273	0.005	2.641	2.694
Mothers received antenatal care for last birth	0.994	0.001	4274	4959	1.096	0.001	0.992	0.997
Mothers protected against tetanus for last birth	0.918	0.005	4274	4959	1.149	0.005	0.909	0.928
Mothers received medical assistance at delivery	0.987	0.002	4903	5681	1.087	0.002	0.983	0.991
Fully immunized	0.974	0.005	994	1164	1.060	0.005	0.963	0.985
Total fertility rate (past 3 years)	2.349	0.039	na	49397	1.108	0.017	2.271	2.428
Neonatal mortality (past 0-9 years)	15.282	1.374	9508	10977	1.060	0.090	12.534	18.030
Post-neonatal mortality (past 0-9 years)	3.919	0.642	9498	10966	0.995	0.164	2.636	5.203
Infant mortality (past 0-9 years)	19.201	1.532	9510	10978	1.034	0.080	16.137	22.266
Child mortality (past 0-9 years)	3.415	0.636	9398	10829	1.046	0.186	2.143	4.687
Under-five mortality (past 0-9 years)	22.551	1.702	9517	10986	1.054	0.075	19.147	25.955

na = Not applicable

Table B.5 Sampling errors for Estate sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.050	0.005	1933	1028	1.042	0.105	0.040	0.060
Children ever born to women age 40-49	2.779	0.057	497	268	0.989	0.020	2.666	2.892
Currently using any contraceptive method	0.647	0.016	1192	649	1.163	0.025	0.615	0.679
Want no more children or sterilized	0.693	0.014	1192	649	1.045	0.020	0.665	0.721
Ideal family size	2.688	0.031	1275	689	1.194	0.012	2.625	2.750
Mothers received antenatal care for last birth	0.988	0.005	545	300	0.983	0.005	0.979	0.997
Mothers protected against tetanus for last birth	0.906	0.013	545	300	1.073	0.015	0.879	0.932
Mothers received medical assistance at delivery	0.965	0.008	732	405	0.965	0.008	0.949	0.981
Fully immunized	0.924	0.028	152	85	1.310	0.030	0.869	0.980
Total fertility rate (past 3 years)	2.527	0.117	na	2983	1.075	0.046	2.294	2.760
Neonatal mortality (past 0-9 years)	17.521	4.586	1337	743	1.091	0.262	8.349	26.694
Post-neonatal mortality (past 0-9 years)	11.177	3.171	1336	743	1.047	0.284	4.834	17.520
Infant mortality (past 0-9 years)	28.698	5.581	1338	744	1.086	0.194	17.537	39.859
Child mortality (past 0-9 years)	4.791	2.306	1312	735	1.176	0.481	0.180	9.402
Under-five mortality (past 0-9 years)	33.352	6.517	1339	744	1.157	0.195	20.317	46.386

na = Not applicable

Table B.6 Sampling errors for Colombo sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.033	0.004	2997	2730	1.044	0.122	0.025	0.041
Children ever born to women age 40-49	2.091	0.047	727	702	1.186	0.022	1.997	2.184
Currently using any contraceptive method	0.652	0.014	1726	1687	1.182	0.021	0.625	0.679
Want no more children or sterilized	0.592	0.013	1726	1687	1.109	0.022	0.566	0.618
Ideal family size	2.383	0.028	1807	1763	1.204	0.012	2.327	2.439
Mothers received antenatal care for last birth	0.995	0.003	726	726	1.149	0.003	0.989	1.001
Mothers protected against tetanus for last birth	0.902	0.014	726	726	1.291	0.016	0.874	0.930
Mothers received medical assistance at delivery	0.991	0.005	857	837	1.235	0.005	0.981	1.001
Fully immunized	0.950	0.021	174	177	1.269	0.022	0.909	0.991
Total fertility rate (past 3 years)	2.168	0.094	na	7805	1.062	0.043	1.980	2.357
Neonatal mortality (past 0-9 years)	11.715	3.708	1584	1531	1.214	0.316	4.300	19.130
Post-neonatal mortality (past 0-9 years)	2.950	1.336	1579	1522	0.973	0.453	0.279	5.622
Infant mortality (past 0-9 years)	14.666	3.889	1584	1531	1.172	0.265	6.888	22.443
Child mortality (past 0-9 years)	1.244	0.735	1538	1485	0.842	0.591	0.000	2.713
Under-five mortality (past 0-9 years)	15.891	3.928	1584	1531	1.156	0.247	8.034	23.748

na = Not applicable

Table B.7 Sampling errors for Gampaha sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.037	0.005	2321	2716	1.067	0.121	0.028	0.046
Children ever born to women age 40-49	2.173	0.057	617	742	1.189	0.026	2.059	2.286
Currently using any contraceptive method	0.673	0.013	1452	1717	1.021	0.019	0.648	0.698
Want no more children or sterilized	0.615	0.014	1452	1717	1.135	0.024	0.586	0.644
Ideal family size	2.582	0.030	1557	1834	1.123	0.012	2.522	2.642
Mothers received antenatal care for last birth	0.993	0.004	603	699	1.052	0.004	0.986	1.000
Mothers protected against tetanus for last birth	0.918	0.012	603	699	1.073	0.013	0.893	0.942
Mothers received medical assistance at delivery	0.994	0.003	701	813	1.064	0.003	0.988	1.000
Fully immunized	0.985	0.009	154	169	0.930	0.010	0.967	1.004
Total fertility rate (past 3 years)	2.163	0.096	na	7823	1.112	0.044	1.971	2.355
Neonatal mortality (past 0-9 years)	10.807	3.705	1307	1543	1.303	0.343	3.397	18.218
Post-neonatal mortality (past 0-9 years)	3.431	1.764	1311	1548	1.087	0.514	0.000	6.960
Infant mortality (past 0-9 years)	14.238	4.571	1307	1543	1.224	0.321	5.096	23.381
Child mortality (past 0-9 years)	1.018	1.019	1268	1504	1.119	1.001	0.000	3.057
Under-five mortality (past 0-9 years)	15.242	5.047	1308	1545	1.196	0.331	5.149	25.335

na = Not applicable

Table B.8 Sampling errors for Kalutara sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.038	0.005	1196	1208	0.921	0.132	0.028	0.048
Children ever born to women age 40-49	2.150	0.078	335	330	1.182	0.036	1.994	2.306
Currently using any contraceptive method	0.698	0.019	789	785	1.179	0.028	0.659	0.737
Want no more children or sterilized	0.618	0.020	789	785	1.169	0.033	0.578	0.659
Ideal family size	2.303	0.045	810	804	1.659	0.019	2.214	2.393
Mothers received antenatal care for last birth	0.997	0.003	353	356	1.076	0.003	0.990	1.003
Mothers protected against tetanus for last birth	0.950	0.014	353	356	1.237	0.015	0.922	0.979
Mothers received medical assistance at delivery	0.996	0.003	401	401	0.988	0.003	0.990	1.002
Fully immunized	0.982	0.018	87	84	1.251	0.019	0.945	1.018
Total fertility rate (past 3 years)	2.158	0.133	na	3610	1.209	0.062	1.892	2.425
Neonatal mortality (past 0-9 years)	4.554	2.605	775	772	1.079	0.572	0.000	9.764
Post-neonatal mortality (past 0-9 years)	1.422	1.425	778	776	1.061	1.002	0.000	4.272
Infant mortality (past 0-9 years)	5.977	2.946	775	772	1.069	0.493	0.085	11.868
Child mortality (past 0-9 years)	2.546	1.961	787	780	1.139	0.770	0.000	6.468
Under-five mortality (past 0-9 years)	8.508	3.478	775	772	1.075	0.409	1.552	15.463

na = Not applicable

Table B.9 Sampling errors for Kandy sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.044	0.005	1443	1560	0.921	0.114	0.034	0.054
Children ever born to women age 40-49	2.583	0.076	375	391	1.108	0.029	2.431	2.736
Currently using any contraceptive method	0.691	0.018	918	982	1.180	0.026	0.655	0.727
Want no more children or sterilized	0.602	0.017	918	982	1.041	0.028	0.569	0.636
Ideal family size	2.828	0.044	959	1021	1.227	0.015	2.741	2.916
Mothers received antenatal care for last birth	0.995	0.004	404	421	1.148	0.004	0.986	1.003
Mothers protected against tetanus for last birth	0.853	0.021	404	421	1.208	0.025	0.810	0.896
Mothers received medical assistance at delivery	0.993	0.004	478	492	1.113	0.004	0.985	1.002
Fully immunized	0.983	0.013	103	108	1.017	0.013	0.958	1.009
Total fertility rate (past 3 years)	2.378	0.146	na	4403	1.195	0.062	2.085	2.671
Neonatal mortality (past 0-9 years)	17.652	5.531	916	962	1.194	0.313	6.589	28.715
Post-neonatal mortality (past 0-9 years)	4.092	2.220	917	965	0.983	0.543	0.000	8.533
Infant mortality (past 0-9 years)	21.744	5.880	916	962	1.152	0.270	9.984	33.505
Child mortality (past 0-9 years)	3.156	1.927	888	931	0.990	0.611	0.000	7.011
Under-five mortality (past 0-9 years)	24.832	6.288	917	963	1.161	0.253	12.256	37.407

na = Not applicable

Table B.10 Sampling errors for Matale sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.034	0.009	587	414	1.182	0.265	0.016	0.052
Children ever born to women age 40-49	2.587	0.095	165	118	1.059	0.037	2.397	2.776
Currently using any contraceptive method	0.707	0.036	392	280	1.568	0.051	0.634	0.779
Want no more children or sterilized	0.597	0.027	392	280	1.092	0.045	0.542	0.651
Ideal family size	2.755	0.064	415	297	1.365	0.023	2.627	2.883
Mothers received antenatal care for last birth	1.000	0.000	164	117	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.976	0.011	164	117	0.942	0.012	0.953	0.998
Mothers received medical assistance at delivery	0.983	0.009	188	133	1.001	0.010	0.964	1.002
Fully immunized	0.957	0.036	41	28	1.095	0.037	0.885	1.028
Total fertility rate (past 3 years)	2.441	0.214	na	1235	1.279	0.088	2.013	2.870
Neonatal mortality (past 0-9 years)	22.533	9.223	353	252	1.182	0.409	4.087	40.980
Post-neonatal mortality (past 0-9 years)	3.169	3.182	351	251	1.049	1.004	0.000	9.533
Infant mortality (past 0-9 years)	25.703	9.599	353	252	1.156	0.373	6.505	44.901
Child mortality (past 0-9 years)	5.857	4.274	330	236	1.030	0.730	0.000	14.405
Under-five mortality (past 0-9 years)	31.409	10.304	353	252	1.130	0.328	10.800	52.018

na = Not applicable

Table B.11 Sampling errors for Nuwara Eliya sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.051	0.007	952	692	1.015	0.136	0.037	0.064
Children ever born to women age 40-49	2.785	0.062	299	209	0.857	0.022	2.660	2.909
Currently using any contraceptive method	0.695	0.022	672	474	1.222	0.031	0.651	0.738
Want no more children or sterilized	0.690	0.017	672	474	0.952	0.025	0.656	0.724
Ideal family size	2.721	0.035	707	500	0.972	0.013	2.650	2.791
Mothers received antenatal care for last birth	0.993	0.004	290	205	0.854	0.004	0.984	1.001
Mothers protected against tetanus for last birth	0.950	0.015	290	205	1.186	0.016	0.920	0.980
Mothers received medical assistance at delivery	0.958	0.014	374	258	1.209	0.014	0.931	0.986
Fully immunized	0.952	0.021	81	56	0.868	0.022	0.910	0.994
Total fertility rate (past 3 years)	2.559	0.170	na	2025	1.193	0.066	2.218	2.899
Neonatal mortality (past 0-9 years)	10.167	4.281	688	475	1.005	0.421	1.605	18.729
Post-neonatal mortality (past 0-9 years)	8.473	3.611	693	478	0.907	0.426	1.251	15.696
Infant mortality (past 0-9 years)	18.640	5.315	688	475	0.925	0.285	8.011	29.270
Child mortality (past 0-9 years)	3.648	2.758	689	475	1.156	0.756	0.000	9.164
Under-five mortality (past 0-9 years)	22.221	5.915	688	475	0.930	0.266	10.390	34.052

na = Not applicable

Table B.12 Sampling errors for Galle sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.031	0.006	1265	1270	0.958	0.200	0.019	0.044
Children ever born to women age 40-49	2.662	0.077	276	311	1.006	0.029	2.508	2.816
Currently using any contraceptive method	0.736	0.021	657	748	1.201	0.028	0.695	0.778
Want no more children or sterilized	0.580	0.020	657	748	1.022	0.034	0.541	0.619
Ideal family size	2.633	0.045	673	766	1.207	0.017	2.543	2.723
Mothers received antenatal care for last birth	1.000	0.000	272	305	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.913	0.020	272	305	1.186	0.022	0.872	0.954
Mothers received medical assistance at delivery	0.995	0.004	330	371	0.996	0.004	0.988	1.003
Fully immunized	0.938	0.033	58	66	1.038	0.035	0.873	1.004
Total fertility rate (past 3 years)	2.067	0.142	na	3493	1.062	0.069	1.784	2.351
Neonatal mortality (past 0-9 years)	14.453	4.754	680	778	1.039	0.329	4.946	23.960
Post-neonatal mortality (past 0-9 years)	3.593	2.178	676	775	0.948	0.606	0.000	7.949
Infant mortality (past 0-9 years)	18.046	5.132	680	778	1.008	0.284	7.781	28.311
Child mortality (past 0-9 years)	5.772	3.294	668	769	1.139	0.571	0.000	12.359
Under-five mortality (past 0-9 years)	23.714	6.476	680	778	1.118	0.273	10.761	36.666

na = Not applicable

Table B.13 Sampling errors for Matara sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.051	0.008	935	822	1.123	0.155	0.035	0.067
Children ever born to women age 40-49	2.851	0.129	215	188	1.243	0.045	2.594	3.109
Currently using any contraceptive method	0.688	0.020	600	527	1.048	0.029	0.648	0.728
Want no more children or sterilized	0.530	0.021	600	527	1.026	0.039	0.488	0.572
Ideal family size	2.480	0.041	630	552	1.181	0.016	2.399	2.562
Mothers received antenatal care for last birth	0.998	0.002	286	253	0.817	0.002	0.993	1.002
Mothers protected against tetanus for last birth	0.991	0.005	286	253	0.956	0.005	0.980	1.002
Mothers received medical assistance at delivery	0.987	0.006	335	295	1.056	0.006	0.975	1.000
Fully immunized	1.000	0.000	69	61	na	0.000	1.000	1.000
Total fertility rate (past 3 years)	2.385	0.166	na	2439	1.056	0.069	2.053	2.716
Neonatal mortality (past 0-9 years)	14.284	5.186	628	546	1.009	0.363	3.912	24.657
Post-neonatal mortality (past 0-9 years)	0.000	0.000	626	545	na	na	0.000	0.000
Infant mortality (past 0-9 years)	14.284	5.186	628	546	1.009	0.363	3.912	24.657
Child mortality (past 0-9 years)	4.190	2.757	614	538	1.043	0.658	0.000	9.704
Under-five mortality (past 0-9 years)	18.415	5.706	628	546	1.001	0.310	7.002	29.827

na = Not applicable

Table B.14 Sampling errors for Hambantota sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.060	0.010	600	613	1.040	0.167	0.040	0.080
Children ever born to women age 40-49	3.110	0.105	182	194	1.014	0.034	2.900	3.320
Currently using any contraceptive method	0.695	0.024	404	424	1.046	0.035	0.647	0.743
Want no more children or sterilized	0.565	0.026	404	424	1.060	0.046	0.512	0.617
Ideal family size	2.832	0.068	394	416	1.289	0.024	2.696	2.967
Mothers received antenatal care for last birth	1.000	0.000	189	201	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.958	0.016	189	201	1.132	0.017	0.925	0.991
Mothers received medical assistance at delivery	0.990	0.007	215	229	1.022	0.007	0.977	1.004
Fully immunized	0.977	0.023	46	45	0.977	0.023	0.931	1.022
Total fertility rate (past 3 years)	2.347	0.206	na	1840	1.140	0.088	1.936	2.758
Neonatal mortality (past 0-9 years)	18.915	6.658	405	427	1.001	0.352	5.600	32.231
Post-neonatal mortality (past 0-9 years)	0.000	0.000	406	430	na	na	0.000	0.000
Infant mortality (past 0-9 years)	18.915	6.658	405	427	1.001	0.352	5.600	32.231
Child mortality (past 0-9 years)	0.000	0.000	406	431	na	na	0.000	0.000
Under-five mortality (past 0-9 years)	18.915	6.658	405	427	1.001	0.352	5.600	32.231

na = Not applicable

Table B.15 Sampling errors for Batticaloa sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.035	0.008	792	671	1.140	0.228	0.019	0.051
Children ever born to women age 40-49	3.063	0.150	173	149	1.262	0.049	2.763	3.364
Currently using any contraceptive method	0.345	0.026	440	388	1.160	0.076	0.292	0.397
Want no more children or sterilized	0.565	0.025	440	388	1.064	0.045	0.514	0.615
Ideal family size	2.691	0.059	493	434	1.065	0.022	2.572	2.809
Mothers received antenatal care for last birth	1.000	0.000	232	206	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.894	0.021	232	206	1.034	0.023	0.853	0.936
Mothers received medical assistance at delivery	0.984	0.008	277	248	1.146	0.009	0.967	1.001
Fully immunized	0.941	0.036	49	43	1.046	0.038	0.869	1.012
Total fertility rate (past 3 years)	2.763	0.184	na	1764	1.189	0.067	2.395	3.131
Neonatal mortality (past 0-9 years)	1.497	1.500	547	484	0.903	1.002	0.000	4.498
Post-neonatal mortality (past 0-9 years)	3.661	2.597	545	482	1.008	0.709	0.000	8.855
Infant mortality (past 0-9 years)	5.159	2.984	547	484	0.982	0.579	0.000	11.128
Child mortality (past 0-9 years)	3.151	3.154	539	475	1.245	1.001	0.000	9.459
Under-five mortality (past 0-9 years)	8.294	4.205	548	485	1.065	0.507	0.000	16.703

na = Not applicable

Table B.16 Sampling errors for Ampara sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.053	0.009	780	625	1.100	0.165	0.035	0.070
Children ever born to women age 40-49	3.505	0.203	226	177	1.463	0.058	3.100	3.910
Currently using any contraceptive method	0.557	0.034	545	432	1.609	0.062	0.489	0.626
Want no more children or sterilized	0.548	0.025	545	432	1.194	0.046	0.497	0.599
Ideal family size	3.278	0.082	589	468	1.573	0.025	3.114	3.443
Mothers received antenatal care for last birth	0.980	0.009	268	215	1.038	0.009	0.963	0.998
Mothers protected against tetanus for last birth	0.777	0.033	268	215	1.293	0.042	0.712	0.843
Mothers received medical assistance at delivery	0.968	0.012	341	276	1.068	0.013	0.943	0.992
Fully immunized	0.960	0.024	78	66	1.086	0.025	0.912	1.007
Total fertility rate (past 3 years)	2.923	0.186	na	1874	1.164	0.064	2.551	3.294
Neonatal mortality (past 0-9 years)	13.074	4.575	627	513	1.026	0.350	3.925	22.223
Post-neonatal mortality (past 0-9 years)	14.282	4.393	624	510	0.951	0.308	5.497	23.068
Infant mortality (past 0-9 years)	27.356	5.876	628	513	0.932	0.215	15.604	39.108
Child mortality (past 0-9 years)	27.318	12.447	623	507	1.552	0.456	2.424	52.213
Under-five mortality (past 0-9 years)	53.927	12.410	631	515	1.273	0.230	29.107	78.747

na = Not applicable

Table B.17 Sampling errors for Trincomalee sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.062	0.010	519	391	0.971	0.163	0.042	0.082
Children ever born to women age 40-49	3.759	0.241	103	77	1.155	0.064	3.277	4.241
Currently using any contraceptive method	0.528	0.046	336	250	1.682	0.087	0.436	0.620
Want no more children or sterilized	0.434	0.039	336	250	1.447	0.090	0.356	0.512
Ideal family size	3.756	0.152	355	265	1.831	0.040	3.452	4.060
Mothers received antenatal care for last birth	0.973	0.018	186	137	1.502	0.018	0.938	1.009
Mothers protected against tetanus for last birth	0.799	0.034	186	137	1.162	0.043	0.730	0.868
Mothers received medical assistance at delivery	0.965	0.016	224	165	1.302	0.017	0.933	0.997
Fully immunized	0.977	0.022	39	30	0.936	0.023	0.933	1.021
Total fertility rate (past 3 years)	2.862	0.213	na	1120	1.009	0.075	2.436	3.289
Neonatal mortality (past 0-9 years)	11.327	4.714	430	313	0.917	0.416	1.898	20.755
Post-neonatal mortality (past 0-9 years)	9.584	7.522	430	313	1.539	0.785	0.000	24.627
Infant mortality (past 0-9 years)	20.910	9.088	430	313	1.158	0.435	2.734	39.087
Child mortality (past 0-9 years)	4.887	3.456	416	303	0.989	0.707	0.000	11.799
Under-five mortality (past 0-9 years)	25.695	10.687	430	313	1.258	0.416	4.322	47.069

na = Not applicable

Table B.18 Sampling errors for Kurunegala sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.041	0.006	1323	1783	1.065	0.149	0.029	0.053
Children ever born to women age 40-49	2.471	0.074	341	469	1.099	0.030	2.324	2.618
Currently using any contraceptive method	0.755	0.016	869	1191	1.080	0.021	0.724	0.787
Want no more children or sterilized	0.635	0.015	869	1191	0.927	0.024	0.605	0.665
Ideal family size	2.482	0.039	923	1264	1.367	0.016	2.403	2.561
Mothers received antenatal care for last birth	0.984	0.007	369	508	1.063	0.007	0.970	0.998
Mothers protected against tetanus for last birth	0.899	0.019	369	508	1.203	0.021	0.861	0.937
Mothers received medical assistance at delivery	0.977	0.008	407	561	1.031	0.008	0.962	0.992
Fully immunized	0.982	0.012	90	123	0.824	0.012	0.958	1.005
Total fertility rate (past 3 years)	2.457	0.140	na	5163	1.106	0.057	2.177	2.736
Neonatal mortality (past 0-9 years)	24.977	5.433	754	1046	0.980	0.218	14.111	35.843
Post-neonatal mortality (past 0-9 years)	3.666	2.122	749	1039	0.960	0.579	0.000	7.911
Infant mortality (past 0-9 years)	28.643	5.983	754	1046	0.966	0.209	16.678	40.608
Child mortality (past 0-9 years)	3.068	2.200	733	1017	1.055	0.717	0.000	7.468
Under-five mortality (past 0-9 years)	31.624	6.900	754	1046	1.013	0.218	17.823	45.424

na = Not applicable

Table B.19 Sampling errors for Puttalam sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.041	0.009	941	967	1.044	0.220	0.023	0.059
Children ever born to women age 40-49	2.868	0.127	199	207	1.213	0.044	2.615	3.122
Currently using any contraceptive method	0.661	0.023	542	572	1.123	0.035	0.615	0.706
Want no more children or sterilized	0.601	0.023	542	572	1.114	0.039	0.555	0.648
Ideal family size	2.850	0.070	582	615	1.535	0.024	2.711	2.990
Mothers received antenatal care for last birth	0.995	0.005	238	251	1.063	0.005	0.986	1.005
Mothers protected against tetanus for last birth	0.942	0.018	238	251	1.222	0.020	0.905	0.979
Mothers received medical assistance at delivery	0.993	0.005	272	285	0.977	0.005	0.983	1.003
Fully immunized	0.940	0.036	45	46	1.016	0.039	0.868	1.013
Total fertility rate (past 3 years)	2.050	0.122	na	2617	0.908	0.060	1.805	2.294
Neonatal mortality (past 0-9 years)	14.817	5.124	548	579	0.997	0.346	4.569	25.065
Post-neonatal mortality (past 0-9 years)	8.484	4.198	549	581	1.078	0.495	0.088	16.879
Infant mortality (past 0-9 years)	23.301	6.231	548	579	0.975	0.267	10.839	35.763
Child mortality (past 0-9 years)	8.778	4.119	573	607	1.044	0.469	0.541	17.015
Under-five mortality (past 0-9 years)	31.874	7.773	549	580	1.068	0.244	16.328	47.421

na = Not applicable

Table B.20 Sampling errors for Anuradhapura sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.043	0.008	849	889	1.003	0.175	0.028	0.059
Children ever born to women age 40-49	2.823	0.120	204	213	1.198	0.042	2.584	3.062
Currently using any contraceptive method	0.740	0.024	581	611	1.332	0.033	0.691	0.788
Want no more children or sterilized	0.563	0.020	581	611	0.981	0.036	0.522	0.603
Ideal family size	2.988	0.079	611	642	1.717	0.026	2.831	3.145
Mothers received antenatal care for last birth	1.000	0.000	250	263	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.970	0.013	250	263	1.239	0.014	0.944	0.997
Mothers received medical assistance at delivery	0.981	0.015	276	290	1.552	0.015	0.952	1.011
Fully immunized	1.000	0.000	58	60	na	0.000	1.000	1.000
Total fertility rate (past 3 years)	2.277	0.156	na	2556	0.900	0.068	1.965	2.589
Neonatal mortality (past 0-9 years)	24.434	7.232	569	599	0.997	0.296	9.971	38.897
Post-neonatal mortality (past 0-9 years)	3.029	2.210	563	592	0.945	0.730	0.000	7.450
Infant mortality (past 0-9 years)	27.463	7.391	569	599	0.982	0.269	12.682	42.244
Child mortality (past 0-9 years)	1.927	1.929	555	581	0.976	1.001	0.000	5.785
Under-five mortality (past 0-9 years)	29.337	7.395	569	599	0.963	0.252	14.546	44.128

na = Not applicable

Table B.21 Sampling errors for Polonnaruwa sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.038	0.008	696	438	0.967	0.202	0.022	0.053
Children ever born to women age 40-49	2.696	0.114	169	125	1.154	0.042	2.468	2.924
Currently using any contraceptive method	0.778	0.022	437	315	1.086	0.028	0.735	0.821
Want no more children or sterilized	0.613	0.026	437	315	1.120	0.043	0.561	0.665
Ideal family size	2.721	0.059	463	333	1.266	0.022	2.604	2.839
Mothers received antenatal care for last birth	1.000	0.000	191	140	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.938	0.020	191	140	1.130	0.021	0.899	0.977
Mothers received medical assistance at delivery	0.995	0.005	209	154	1.045	0.005	0.984	1.005
Fully immunized	1.000	0.000	39	30	na	0.000	1.000	1.000
Total fertility rate (past 3 years)	2.494	0.187	na	1295	1.085	0.075	2.120	2.868
Neonatal mortality (past 0-9 years)	3.702	3.712	371	271	1.174	1.003	0.000	11.125
Post-neonatal mortality (past 0-9 years)	1.100	1.103	370	270	na	1.003	0.000	3.305
Infant mortality (past 0-9 years)	4.801	3.864	371	271	1.174	0.805	0.000	12.529
Child mortality (past 0-9 years)	8.042	6.850	369	271	1.565	0.852	0.000	21.743
Under-five mortality (past 0-9 years)	12.805	7.702	371	271	1.422	0.601	0.000	28.209

na = Not applicable

Table B.22 Sampling errors for Badulla sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.050	0.007	1117	911	1.050	0.139	0.036	0.063
Children ever born to women age 40-49	2.683	0.091	307	249	1.212	0.034	2.500	2.866
Currently using any contraceptive method	0.724	0.017	763	631	1.046	0.023	0.690	0.758
Want no more children or sterilized	0.703	0.017	763	631	1.055	0.025	0.668	0.738
Ideal family size	2.641	0.046	806	660	1.270	0.018	2.548	2.733
Mothers received antenatal care for last birth	0.992	0.005	312	254	0.955	0.005	0.983	1.002
Mothers protected against tetanus for last birth	0.858	0.024	312	254	1.212	0.028	0.810	0.906
Mothers received medical assistance at delivery	0.960	0.010	397	315	0.841	0.011	0.940	0.981
Fully immunized	0.960	0.023	72	58	0.999	0.024	0.913	1.006
Total fertility rate (past 3 years)	2.415	0.142	na	2565	1.007	0.059	2.131	2.700
Neonatal mortality (past 0-9 years)	21.553	5.329	831	671	0.998	0.247	10.896	32.210
Post-neonatal mortality (past 0-9 years)	8.948	3.241	822	664	0.997	0.362	2.466	15.429
Infant mortality (past 0-9 years)	30.501	6.543	832	671	1.010	0.215	17.415	43.586
Child mortality (past 0-9 years)	2.749	2.046	829	673	1.086	0.744	0.000	6.841
Under-five mortality (past 0-9 years)	33.166	7.383	832	671	1.077	0.223	18.400	47.931

na = Not applicable

Table B.23 Sampling errors for Moneragala sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.057	0.009	699	562	0.983	0.151	0.040	0.075
Children ever born to women age 40-49	3.505	0.181	181	144	1.320	0.052	3.143	3.867
Currently using any contraceptive method	0.711	0.019	474	379	0.911	0.027	0.673	0.749
Want no more children or sterilized	0.568	0.020	474	379	0.884	0.035	0.528	0.608
Ideal family size	2.996	0.068	489	391	1.275	0.023	2.861	3.132
Mothers received antenatal care for last birth	0.987	0.008	206	165	0.952	0.008	0.972	1.002
Mothers protected against tetanus for last birth	0.933	0.018	206	165	1.041	0.019	0.897	0.969
Mothers received medical assistance at delivery	0.992	0.006	237	188	0.977	0.006	0.980	1.003
Fully immunized	0.961	0.027	51	41	0.990	0.028	0.907	1.015
Total fertility rate (past 3 years)	2.509	0.143	na	1599	0.874	0.057	2.222	2.795
Neonatal mortality (past 0-9 years)	16.008	5.195	462	365	0.919	0.324	5.619	26.398
Post-neonatal mortality (past 0-9 years)	4.980	2.987	461	364	0.959	0.600	0.000	10.953
Infant mortality (past 0-9 years)	20.989	6.330	463	366	0.953	0.302	8.328	33.649
Child mortality (past 0-9 years)	7.095	4.055	464	367	1.025	0.572	0.000	15.205
Under-five mortality (past 0-9 years)	27.934	7.063	464	367	0.931	0.253	13.809	42.060

na = Not applicable

Table B.24 Sampling errors for Ratnapura sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.036	0.006	1088	1361	1.043	0.180	0.023	0.048
Children ever born to women age 40-49	2.620	0.094	262	320	1.140	0.036	2.433	2.807
Currently using any contraceptive method	0.734	0.019	620	785	1.086	0.026	0.695	0.772
Want no more children or sterilized	0.628	0.021	620	785	1.095	0.034	0.585	0.670
Ideal family size	2.552	0.041	641	804	1.184	0.016	2.470	2.634
Mothers received antenatal care for last birth	1.000	0.000	269	342	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.962	0.013	269	342	1.136	0.014	0.936	0.989
Mothers received medical assistance at delivery	0.993	0.005	311	393	1.016	0.005	0.983	1.003
Fully immunized	0.951	0.028	72	91	1.088	0.029	0.895	1.006
Total fertility rate (past 3 years)	2.381	0.172	na	3726	1.112	0.072	2.038	2.724
Neonatal mortality (past 0-9 years)	13.353	4.897	592	752	0.947	0.367	3.559	23.146
Post-neonatal mortality (past 0-9 years)	2.434	1.736	593	753	0.838	0.713	0.000	5.906
Infant mortality (past 0-9 years)	15.787	5.117	592	752	0.908	0.324	5.553	26.021
Child mortality (past 0-9 years)	4.208	3.004	585	736	1.089	0.714	0.000	10.217
Under-five mortality (past 0-9 years)	19.929	5.754	592	752	0.928	0.289	8.420	31.437

na = Not applicable

Table B.25 Sampling errors for Kegalle sample, Sri Lanka 2006-07

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
Currently pregnant	0.055	0.008	660	753	0.926	0.147	0.039	0.072
Children ever born to women age 40-49	2.197	0.086	207	240	1.075	0.039	2.024	2.369
Currently using any contraceptive method	0.709	0.023	494	570	1.134	0.033	0.662	0.755
Want no more children or sterilized	0.609	0.024	494	570	1.087	0.039	0.562	0.657
Ideal family size	2.648	0.061	507	585	1.357	0.023	2.526	2.769
Mothers received antenatal care for last birth	1.000	0.000	221	248	na	0.000	1.000	1.000
Mothers protected against tetanus for last birth	0.977	0.010	221	248	0.991	0.010	0.957	0.997
Mothers received medical assistance at delivery	0.994	0.005	256	285	0.915	0.005	0.985	1.003
Fully immunized	0.991	0.009	49	55	0.678	0.009	0.972	1.009
Total fertility rate (past 3 years)	2.546	0.187	na	2260	1.194	0.073	2.172	2.921
Neonatal mortality (past 0-9 years)	13.710	6.331	483	534	1.180	0.462	1.047	26.372
Post-neonatal mortality (past 0-9 years)	4.105	2.894	485	536	0.981	0.705	0.000	9.893
Infant mortality (past 0-9 years)	17.814	6.862	483	534	1.132	0.385	4.090	31.539
Child mortality (past 0-9 years)	0.961	0.963	474	524	0.660	1.002	0.000	2.887
Under-five mortality (past 0-9 years)	18.758	6.918	484	534	1.116	0.369	4.922	32.594

na = Not applicable

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Sri Lanka 2006-07

	Female		Male	
Age	Number	Percent	Number	Percent
0	705	1.7	747	2.0
1	720	1.7	741	1.9
2	710	1.7	770	2.0
3	699	1.7	728	1.9
4	668	1.6	725	1.9
5	722	1.7	700	1.8
6	641	1.5	703	1.8
7	672	1.6	661	1.7
8	640	1.5	707	1.9
9	634	1.5	706	1.9
10	723	1.7	688	1.8
11	683	1.6	708	1.9
12	718	1.7	740	1.9
13	714	1.7	725	1.9
14	761	1.8	693	1.8
15	727	1.7	726	1.9
16	742	1.8	688	1.8
17	655	1.6	686	1.8
18	686	1.6	656	1.7
19	651	1.6	576	1.5
20	617	1.5	601	1.6
21	678	1.6	593	1.6
22	637	1.5	616	1.6
23	670	1.6	611	1.6
24	658	1.6	607	1.6
25	726	1.7	587	1.5
26	695	1.7	587	1.5
27	651	1.6	635	1.7
28	623	1.5	562	1.5
29	588	1.4	526	1.4
30	612	1.5	550	1.4
31	630	1.5	427	1.1
32	571	1.4	516	1.4
33	623	1.5	520	1.4
34	594	1.4	523	1.4
35	602	1.4	546	1.4
36	596	1.4	554	1.5
37	586	1.4	527	1.4
38	602	1.4	482	1.3
39	563	1.3	524	1.4
40	627	1.5	509	1.3
41	585	1.4	471	1.2
42	552	1.3	518	1.4
43	589	1.4	481	1.3
44	590	1.4	513	1.3
45	584	1.4	552	1.4
46	572	1.4	522	1.4
47	563	1.3	480	1.3
48	550	1.3	466	1.2
49	454	1.1	414	1.1
50	596	1.4	485	1.3
51	493	1.2	403	1.1
52	510	1.2	500	1.3
53	506	1.2	408	1.1
54	488	1.2	441	1.2
55	502	1.2	434	1.1
56	425	1.0	388	1.0
57	407	1.0	394	1.0
58	431	1.0	377	1.0
59	376	0.9	318	0.8
60	404	1.0	338	0.9
61	296	0.7	222	0.6
62	371	0.9	284	0.7
63	270	0.6	230	0.6
64	343	0.8	272	0.7
65	298	0.7	237	0.6
66	221	0.5	165	0.4
67	224	0.5	186	0.5
68	184	0.4	186	0.5
69	213	0.5	182	0.5
70+	2,085	5.0	1,576	4.1
Don't know/missing	16	0.0	13	0.0
Total	41,724	100.0	38,135	100.0

Table C.2 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Sri Lanka 2006-07

Age group	Household population of women age 10-54	Ever-married women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
			Number	Percent	
10-14	3,599	14	na	na	na
15-19	3,461	329	318	2.2	96.8
20-24	3,261	1,434	1,373	9.4	95.7
25-29	3,283	2,465	2,400	16.4	97.4
30-34	3,030	2,713	2,635	18.0	97.1
25-39	2,950	2,760	2,709	18.5	98.2
40-44	2,943	2,762	2,690	18.4	97.4
45-49	2,723	2,570	2,491	17.0	96.9
50-54	2,594	2,423	na	na	na
15-49	21,651	15,032	14,617	100.0	97.2

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Sri Lanka 2006-07

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in past 15 years		
Month only		0.34	19,581
Month and year		0.04	19,581
Age at death	Deceased children born in the past 15 years	0.27	444
Age/date at first union[1]	Ever-married women	0.12	14,692
Respondent's education	All women	0.00	14,692
Diarrhoea in past 2 weeks	Living children 0-59 months	0.19	6,864
Anthropometry	Living children age 0-59 months (from household questionnaire)		
Height		6.98	7,166
Weight		3.35	7,166
Height or weight		7.09	7,166
Anaemia	Living children age 6-59 months (from household questionnaire)		
Children		21.40	6,520
Women	All women (from household questionnaire)	19.94	14,967

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Sri Lanka 2006-07

Calendar year	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
	L	D	T	L	D	T	L	D	T	L	D	T
2007	253	3	256	100.0	100.0	100.0	128.7	0.0	125.7	na	na	na
2006	1,282	22	1,304	100.0	100.0	100.0	102.3	345.6	104.2	na	na	na
2005	1,413	22	1,435	100.0	100.0	100.0	100.1	61.5	99.3	103.3	89.7	103.0
2004	1,455	26	1,481	100.0	100.0	100.0	110.4	184.8	111.4	106.5	115.3	106.7
2003	1,319	24	1,342	100.0	100.0	100.0	95.2	304.0	97.0	95.3	81.2	95.1
2002	1,311	32	1,343	100.0	100.0	100.0	106.4	54.4	104.8	99.8	132.3	100.4
2001	1,307	25	1,333	99.9	100.0	99.9	106.4	181.6	107.4	100.7	65.6	99.7
2000	1,285	44	1,329	99.8	89.6	99.5	103.5	118.6	104.0	103.5	148.6	104.5
1999	1,177	34	1,211	99.8	95.3	99.6	109.0	130.1	109.6	93.2	85.4	93.0
1998	1,239	36	1,275	99.8	95.3	99.6	105.9	224.9	108.1	104.0	111.4	104.2
2003-2007	5,722	97	5,819	100.0	100.0	100.0	103.1	167.0	103.9	na	na	na
1998-2002	6,319	172	6,491	99.8	95.4	99.7	106.2	126.1	106.7	na	na	na
1993-1997	6,115	142	6,258	99.5	89.9	99.3	103.2	168.3	104.3	na	na	na
1988-1992	5,251	193	5,444	99.4	78.1	98.6	100.2	165.7	101.9	na	na	na
<1988	6,217	366	6,583	98.4	76.9	97.3	104.7	118.6	105.5	na	na	na
All	29,624	970	30,595	99.4	84.6	99.0	103.6	139.3	104.5	na	na	na

[1] Both year and month of birth given
[2] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively
[3] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x
na = Not applicable

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Sri Lanka 2006-07

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	17	17	17	28	80
1	17	37	33	37	125
2	14	6	8	9	37
3	3	12	8	16	39
4	4	11	3	2	20
5	2	6	6	4	18
6	0	3	0	0	4
7	7	2	6	3	18
8	1	1	0	2	4
9	1	1	1	4	8
10	0	1	1	1	3
11	1	2	1	0	5
12	0	2	1	1	4
13	0	0	3	0	3
14	0	0	0	2	2
15	0	2	3	0	5
16	0	0	0	1	1
18	0	3	0	1	4
19	2	0	0	1	3
20	0	1	0	0	1
21	2	0	0	1	4
22	0	1	0	0	1
23	0	0	1	0	1
24	0	0	0	0	0
26	2	0	0	0	2
27	0	0	1	1	2
28	0	3	0	0	3
29	0	0	0	1	1
Missing	1	0	0	0	1
Total 0-30	73	113	93	116	395
Percent early neonatal[1]	77.6	82.3	80.4	84.1	81.5

[1] ≤6 days/≤30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Sri Lanka 2006-07

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1[a]	74	113	93	116	396
1	10	4	6	9	29
2	3	3	4	6	16
3	4	2	6	6	18
4	3	1	3	1	8
5	1	2	1	1	6
6	6	2	0	4	12
7	2	2	1	0	5
8	1	0	2	1	4
9	1	1	1	3	6
10	1	2	0	1	4
11	1	2	0	1	4
12	3	5	3	3	14
16	1	0	0	1	2
17	1	1	0	0	2
18	3	0	2	2	6
20	0	0	0	1	1
21	2	0	0	0	2
Missing	0	0	0	1	1
1 year	1	0	0	1	2
Total 0-11	106	135	119	148	508
Percent neonatal[1]	70.2	83.7	78.5	78.0	78.0

[1] Under one month/under one year

[a] Includes deaths under one month reported in days

Table C.7 Nutritional status of children

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 2006-07

Background characteristic	Height-for-age			Weight-for-height				Weight-for-age				Number of children
	Percent-age below -3 SD	Percent-age below -2 SD[1]	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[1]	Percent-age above +2 SD	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[1]	Percent-age above +2 SD	Mean Z-score (SD)	
Age in months												
<6	0.7	4.2	(0.1)	0.9	6.7	1.7	(0.3)	0.3	3.0	0.8	(0.3)	529
6-8	0.4	5.5	(0.5)	1.1	4.2	1.2	(0.5)	0.1	8.9	0.7	(0.8)	307
9-11	3.6	11.9	(0.8)	0.4	8.6	0.6	(0.8)	4.5	22.5	0.0	(1.3)	394
12-17	3.7	16.6	(1.0)	1.0	15.9	1.0	(1.1)	4.0	29.6	0.6	(1.5)	685
18-23	3.9	19.2	(1.1)	3.0	25.1	1.2	(1.2)	4.8	31.8	0.8	(1.5)	671
24-35	1.8	12.2	(0.7)	0.7	14.8	0.9	(1.2)	4.4	32.9	0.4	(1.5)	1,326
36-47	1.9	13.7	(0.8)	1.1	14.0	1.7	(1.1)	3.4	29.7	2.0	(1.4)	1,341
48-59	3.2	13.1	(0.9)	0.9	14.2	1.5	(1.1)	3.9	29.3	0.7	(1.4)	1,304
Sex												
Male	2.7	12.9	(0.8)	1.2	14.4	1.3	(1.0)	3.4	26.5	1.0	(1.3)	3,389
Female	2.2	12.9	(0.8)	1.0	13.8	1.3	(1.0)	3.7	27.4	0.7	(1.3)	3,167
Birth interval in months[2]												
First birth[3]	2.0	10.6	(0.7)	0.9	14.2	1.4	(1.0)	3.3	24.9	1.2	(1.2)	2,610
<24	5.4	19.7	(1.0)	1.2	10.8	0.9	(1.0)	6.9	27.9	0.1	(1.4)	361
24-47	3.2	16.3	(0.9)	1.4	13.6	1.4	(1.0)	4.0	29.5	0.9	(1.4)	1,244
48+	2.0	12.2	(0.8)	1.0	14.9	1.2	(1.0)	3.1	27.4	0.7	(1.3)	2,076
Mother's interview status												
Interviewed	2.4	12.7	(0.8)	1.1	14.1	1.3	(1.0)	3.5	26.8	0.9	(1.3)	6,291
Not interviewed but in household	1.5	13.9	(0.3)	1.7	24.1	0.0	(1.2)	4.1	23.7	0.0	(1.2)	54
Not interviewed, and not in the household[4]	3.5	17.0	(1.0)	1.7	12.4	1.4	(0.9)	4.0	31.3	0.0	(1.3)	209
Mother's nutritional status[5]												
Thin (BMI<18.5)	4.0	18.0	(1.1)	2.3	21.3	0.5	(1.3)	7.3	38.9	0.5	(1.7)	1,043
Normal (BMI 18.5-24.9)	2.3	12.9	(0.8)	1.0	14.9	1.1	(1.0)	3.2	27.3	0.7	(1.3)	3,301
Overweight/obese (BMI ≥25)	2.0	10.1	(0.7)	0.7	8.7	2.3	(0.8)	2.4	19.8	1.6	(1.1)	1,605
Missing	1.3	8.6	(0.5)	0.1	12.3	1.0	(0.9)	1.5	18.7	1.3	(1.0)	396
Residence												
Urban	1.5	9.5	(0.6)	0.6	13.6	1.8	(0.9)	2.5	21.8	1.3	(1.1)	832
Rural	2.1	11.9	(0.8)	1.2	14.4	1.2	(1.0)	3.4	27.1	0.8	(1.3)	5,344
Estate	9.4	33.8	(1.5)	1.0	12.0	1.3	(0.9)	8.3	36.3	0.7	(1.6)	380
Region												
Colombo	1.0	6.2	(0.4)	0.5	13.1	1.5	(0.9)	1.6	18.9	1.5	(1.0)	783
Gampaha	0.9	5.9	(0.4)	0.8	8.3	1.8	(0.9)	2.1	16.9	1.7	(1.0)	808
Kalutara	1.9	11.0	(0.7)	0.7	11.9	0.9	(1.0)	3.6	22.6	0.9	(1.2)	354
Kandy	1.2	13.2	(0.9)	1.0	15.8	0.9	(1.0)	3.8	28.8	0.8	(1.4)	459
Matale	4.9	16.7	(0.8)	0.0	11.0	0.0	(1.0)	4.0	28.3	0.0	(1.3)	132
Nuwara Eliya	8.9	32.2	(1.5)	0.3	11.2	1.4	(0.7)	5.4	30.4	0.5	(1.5)	238
Galle	1.3	10.7	(0.9)	0.7	12.6	0.8	(1.1)	2.0	30.2	0.1	(1.4)	370
Matara	1.7	9.9	(0.8)	2.4	18.2	1.5	(1.0)	2.5	28.6	1.0	(1.3)	289
Hambantota	4.1	17.2	(1.0)	1.2	19.6	1.4	(1.2)	4.5	31.5	0.0	(1.6)	212
Batticaloa	4.4	21.4	(0.8)	3.4	19.5	3.3	(1.0)	4.9	32.9	1.8	(1.3)	244
Ampara	2.4	10.3	(0.8)	1.0	17.8	0.9	(1.1)	2.5	29.1	0.0	(1.4)	258
Trincomalee	7.3	25.7	(0.9)	3.3	28.2	1.9	(1.3)	5.4	35.4	0.5	(1.6)	145
Kurunegala	2.0	12.4	(0.9)	1.1	13.8	1.4	(1.0)	4.4	27.8	0.6	(1.4)	524
Puttalam	0.8	11.2	(0.8)	0.9	11.4	0.7	(1.0)	1.6	26.1	0.7	(1.3)	242
Anuradhapura	1.1	10.4	(0.9)	0.8	15.1	0.0	(1.1)	3.0	29.9	0.0	(1.4)	279
Polonnaruwa	0.6	7.1	(0.8)	2.2	18.0	0.0	(1.2)	5.8	31.3	0.0	(1.5)	136
Badulla	4.8	27.5	(1.3)	1.3	15.9	0.3	(1.1)	6.4	41.1	0.0	(1.6)	277
Moneragala	5.8	17.9	(0.9)	1.4	16.8	0.9	(1.1)	8.2	32.1	0.9	(1.4)	185
Ratnapura	4.3	16.5	(1.0)	1.2	13.0	2.7	(0.9)	5.1	30.0	1.5	(1.4)	364
Kegalle	2.3	12.1	(0.9)	0.4	14.7	0.9	(1.1)	4.1	28.7	1.0	(1.4)	255
Mother's education[6]												
No education	7.6	34.3	(1.6)	0.3	14.9	0.3	(1.1)	7.7	43.0	0.5	(1.8)	146
Primary	5.2	24.2	(1.2)	1.3	16.5	1.2	(1.1)	5.9	40.5	0.3	(1.6)	600
Secondary	2.5	13.1	(0.9)	1.6	15.4	1.0	(1.1)	4.0	28.7	0.6	(1.4)	3,303
Passed G.C.E (O/L)	0.9	9.9	(0.6)	0.3	11.9	2.4	(0.9)	2.3	22.1	2.0	(1.1)	721
Higher	1.4	7.1	(0.5)	0.4	11.7	1.6	(0.9)	1.9	18.2	1.2	(1.0)	1,573
Wealth quintile												
Lowest	5.3	23.0	(1.2)	1.7	16.4	1.0	(1.1)	6.1	36.4	0.5	(1.6)	1,374
Second	2.5	15.3	(0.9)	1.0	14.7	0.9	(1.1)	4.2	32.0	0.4	(1.4)	1,358
Middle	1.6	10.4	(0.8)	1.0	15.8	1.4	(1.0)	3.4	27.3	0.9	(1.3)	1,220
Fourth	1.8	9.6	(0.7)	1.1	13.6	1.2	(1.0)	2.5	23.0	0.4	(1.2)	1,335
Highest	1.0	5.3	(0.4)	0.7	10.2	2.2	(0.8)	1.3	15.0	2.2	(0.9)	1,268
Total	2.5	12.9	(0.8)	1.1	14.1	1.3	(1.0)	3.6	26.9	0.9	(1.3)	6,555

Note: Table is based on children who slept in the household the night before the interview and with valid dates of birth (month and year) and valid measurement of both height and weight. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO Child Growth Standards.

[1] Includes children who are below -3 standard deviations (SD) from the International Reference Population median

[2] Excludes children whose mothers were not interviewed

[3] First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

[4] Includes children whose mothers are deceased

[5] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10

[6] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

PERSONS INVOLVED IN THE 2006-07 SRI LANKA DEMOGRAPHIC AND HEALTH SURVEY

Appendix D

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QUESTIONNAIRES

Appendix E

All information collected at this survey will be treated as strictly confidential. Individual information will not be released.

Demographic And Health Survey
Sri Lanka
2006

Conducted by the Department of Census and Statistics
for the Ministry of Healthcare and Nutrition
with assistance from the World Bank

Introduction and Consent

Hello. My name is _____ and I am working with the Department of Census and Statistics. We are conducting a national survey about various health issues. We would very much appreciate your participation in this survey. The survey usually takes between _____ hours to complete.

As part of the survey we would first like to ask some questions about your household. All of the answers you give will be confidential. Participation in the survey is completely voluntary. If we should come to any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time. However, we hope you will participate in the survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____

Date: _____

RESPONDENT AGREES TO BE INTERVIEWED	1	
RESPONDENT DOES NOT AGREE TO BE INTERVIEWED →	2	COMPLETE THE RELEVANT INFORMATION IN THE PAGE 1 AND CIRCLE THE CODE 5 OF RESULT CODES IN THE SAME PAGE. **END THE INTERVIEW .**

DEMOGRAPHIC AND HEALTH SURVEY 2006/7
HOUSEHOLD QUESTIONNAIRE

Name of Country : **Sri Lanka** Name of Organization : **Department Of Census & Statistics.**

IDENTIFICATION

Cluster No :	
Unique Household Number within the Cluster:	*
Province & District :	
D.S. Division :	
Sector (Urban/ Rural/ Estate) :	
G.N. Division :	
Ward/Village/Estate :	
Census Block Number (PSU) :	
Housing Unit Number (SSU):	
Listing was done using (F1=1, RF1=2, Camps=3):	
Tsunami affected housing unit or not (Affected = 1, Not affected = 2)	
Household Number Within the Housing Unit :	
Name of Household Head :	

(* For office use only)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				FINAL RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

***RESULT CODES:**

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN IN HOUSEHOLD

LINE NO. OF RESPONDENT TO QUESTIONNAIRE

COUNTRY-SPECIFIC INFORMATION:

Language of Questionnaire :
Native language of Respondent :
Language of Interview :

Sinhala =1 Tamil =2 English =3

Translator used : Yes 1 No 2

NOW RECORD THE TIME IN 24 HOURS TIME.

HOURS
MINUTES

GIS Information

GIS 1 Operator name and number : ..... No.

GIS 2 Day/Month/Year of measurement : D D M M Y Y Y Y

GIS 3 Waypoint name :

		Degrees	Decimals
GIS 4 Latitude	: ..... (N)		
GIS 5 Longitude	: ..... (E)		

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME	NAME		
DATE	DATE		

SECTION A - HOUSEHOLD SCHEDULE

	DEMOGRAPHIC CHARACTERISTICS							IF AGE 10 OR OLDER	ALL PERSONS		ELIGIBILITY	
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		DATE OF BIRTH & AGE		MARITAL STATUS	NON COMMUNICABLE DISEASES			
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES RECORD COL. 3, 4, 5, 6 FOR EACH PERSON. ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-28 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	Record the year and month of birth (If does not know estimate only the year and put '00' for the month)	Age as at last birthday If less than 1 year record '00'	What is (NAME'S) current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER 5 = MARRIED BUT NOT IN UNION	Currently is (Name) taking regular drugs for any of the following diseases ? A = Heart diseases B = Hypentension/Blood Pressure C = Asthma/ Wheezing D = Stroke E = Diabetes F = Cancer	What is the desease (name) suffering from ? CIRCLE RELEVANT CODE/CODES ACCORDING TO THE CODES IN COLUMN 10A	Circle line number of all eligible women (Code 1 in col. 5 or 6 & code 1,2,3 in col. 9 & age 15-49)	Circle line number of all children born after January 2001
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10A)	(10B)	(11)	(12)
01			M F 1 2	Y N 1 2	Y N 1 2	YEAR MONTH	YEARS		Y N DK 1 2 — 8 GO TO 11	A B C D E F	01	01
02			1 2	1 2	1 2				1 2 — 8 GO TO 11	A B C D E F	02	02
03			1 2	1 2	1 2				1 2 — 8 GO TO 11	A B C D E F	03	03
04			1 2	1 2	1 2				1 2 — 8 GO TO 11	A B C D E F	04	04
05			1 2	1 2	1 2				1 2 — 8 GO TO 11	A B C D E F	05	05
06			1 2	1 2	1 2				1 2 — 8 GO TO 11	A B C D E F	06	06

07			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	07	07
08			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	08	08
09			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	09	09
10			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	10	10
11			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	11	11
12			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	12	12
13			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	13	13
14			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	14	14
15			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	15	15
16			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	16	16
17			1 2	1 2	1 2				1 2 → 8 GO TO 11	A B C D E F	17	17

TICK HERE IF CONTINUATION SHEET USED ☐

(2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed ?

YES ☐ → ADD TO TABLE NO ☐

(2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here ?

YES ☐ → ADD TO TABLE NO ☐

(2C) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed ?

YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = NIECE/NEPHEW BY BLOOD
10 = NIECE/NEPHEW BY MARRIAGE
11 = OTHER RELATIVE
12 = ADOPTED/FOSTER/ STEPCHILD
13 = VISITOR
14 = BOADER
15 = DOMENSTIC SERVANT
98 = DON'T KNOW

LINE NO.	EDUCATION							IF AGE 0-17 YEARS				ALL FEMALES IN THE AGE GROUP 11-44	IF AGE 5-17 YEARS			FOR CHILDREN BORN AFTER JANUARY 2001
	IF AGE 5 YEARS OR OLDER		IF AGE 5-22 YEARS													
	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL /PRE SCHOOL ATTENDANCE					SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				RUBELLA VACCINE (GERMAN MEASLES)	BASIC MATERIAL NEEDS			BIRTH REGISTRATION
	Has (NAME) ever attended school/ pre school?	What is the highest level of education of (NAME) (COMPLETED) SEE CODES BELOW.	Did (NAME) attend school/ pre school at any time during the school year of 2006	Since last (day of the week), how many days did (name) attend school / pre school ? IF DON'T KNOW INSERT 8 & IF SCHOOL VACATION INSERT 9	During this school year,what grade [is/was] (NAME) attending? SEE CODES BELOW.	Did (NAME) attend school/ pre school at any time during the previous school year, that is, 2005	During that school year, what grade did (NAME) attend? SEE CODES BELOW.	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (name) ever received an injection to protect to from rubella or German measles 1 = RECEIVED 2 = NOT RECEIVED 3 = DON'T KNOW WHETHER RECEIVED	Does (NAME) have enough books? 1 = ENOUGH 2 = NOT ENOUGH 3 = NO 4 = DON'T KNOW	Does (NAME) have a pair of shoes or pair of slipers ?	Does (NAME) have at least two sets of uniforme	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the birth registrar 1 = YES, SEEN 2 = YES, NOT SEEN 3 = REGISTERED BUT NOT RECEIVED 4 = NOT REGISTERED 5 = BIRTH CERTIFICATE LOST 9 = DON'T KNOW
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
01	Y N DK 1 2 8 GO TO 20		Y N DK 1 2 8 GO TO 18		GRADE	Y N DK 1 2 8 GO TO 20	GRADE	Y N DK 1 2 8 GO TO 22		Y N DK 1 2 8 GO TO 24				Y N DK 1 2 8	Y N DK 1 2 8	
02	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
03	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
04	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
05	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
06	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	

07	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
08	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
09	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
10	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
11	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
12	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
13	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
14	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
15	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
16	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	
17	1 2 8 GO TO 20		1 2 8 GO TO 18			1 2 8 GO TO 20		1 2 8 GO TO 22		1 2 8 GO TO 24				1 2 8	1 2 8	

CODES FOR Q. 14

LEVEL OF EDUCATION

88 = PRE SCHOOL
00 = STUDING IN GRADE 1
01 = PASSED GRADE 1
02 = PASSED GRADE 2
03 = PASSED GRADE 3
04 = PASSED GRADE 4
05 = PASSED GRADE 5
07 = PASSED GRADE 7
08 = PASSED GRADE 8
09 = PASSED GRADE 9
10 = PASSED GRADE 10
11 = PASSED G.C.E. (O/L)
12 = PASSED GREADE 12
13 = PASSED G.C.E. (A/L)

CODES FOR Q. 17 AND 19

LEVEL OF EDUCATION

88 = PRE SCHOOL
01 = GRADE 1
02 = GRADE 2
03 = GRADE 3
04 = GRADE 4
05 = GRADE 5
06 = GRADE 6
07 = GRADE 7
08 = GRADE 8
09 = GRADE 9
10 = GRADE 10
11 = GRADE 11
12 = GRADE 12
13 = GRADE 13

SECTION B - HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATAGORIES	SKIP
B1	What is the main source of drinking water for members of your household? CIRCLE THE RELEVANT CODE	PIPED WATER PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP . . . . . 13 TUBE WELL . . . . . 21 DUG WELL PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 WATER FROM SPRING PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 BOWSER . . . . . 61 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	
B2	What is the main source of water used by your household for other purposes such as cooking and handwashing? CIRCLE THE RELEVANT CODE	PIPED WATER PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP/STANDPIPE . . . . . 13 TUBE WELL OR BOREHOLE . . . . . 21 DUG WELL PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 WATER FROM SPRING PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 BOWSER . . . . . 61 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	
B3	Where is that source of drinking water located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	→ B6
B4	How long does it take to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
B5	Who usually goes to this source to fetch the water for your household? CIRCLE THE RELEVANT CODE	FEMALE CHILD /ADULT WOMEN 15 YEARS OR OVER 15 YEARS . . . . . 1 MALE CHILD /ADULT MAN 15 YEARS OR OVER 15 YEARS . . . . . 2 FEMALE CHILD UNDER 15 YEARS . . . . . 3 MALE CHILD UNDER 15 YEARS 4	
B6	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ B8

NO.	QUESTIONS AND FILTERS	CODING CATAGORIES	SKIP
B7	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER . . . . . D SOLAR DISINFECTION (SODIS) . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
B8	What kind of toilet facility do members of your household usually use? CIRCLE THE RELEVANT CODE	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ B9 → B11
B9	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ B11
B10	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [ ][ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
B11	Does your household have: A Watch ? Electricity? Solar Power A radio? A television? A mobile telephone? A non-mobile telephone? A refrigerator?	YES NO WATCH 1 2 ELECTRICITY . . . . . 1 2 SOLAR POWER . . . . . 1 2 RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 MOBILE TELEPHONE . . . . . 1 2 NON-MOBILE TELEPHONE . 1 2 REFRIGERATOR 1 2	
B12	What type of fuel does your household mainly use for cooking? CIRCLE THE RELEVANT CODE	ELECTRICITY . . . . . 01 LPG . . . . . 02 KEROSENE . . . . . 03 WOOD . . . . . 04 NO FOOD COOKED IN HOUSEHOLD . . . . . 05 OTHER _____ 96 (SPECIFY)	→ B17
B14	For your cooker/stove is there are chimney or cooker hood to allow smoke to be eliminated out side ?	CHIMNEY MADE OF BRICKS . . . . . 1 MODERN CHIMNEY . . . . . 2 NO CHIMNEY 3	

NO.	QUESTIONS AND FILTERS	CODING CATAGORIES	SKIP
B15	Is the cooking usually done in the home, in the separate building, temporary hut or out doors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING ..... 2 TEMPORARILY HUT ..... 3 OUT DOORS ..... 4 OTHER _____ 6 (SPECIFY)	→ B17
B16	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
B17	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION. CIRCLE THE RELEVANT CODE.	NATURAL FLOOR SAND . . . . . 11 DUNG/EARTH . . . . . 12 RUDIMENTARY FLOOR WOOD PLANKS . . . . . 21 BAMBOO . . . . . 22 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC TILES/TERASO . . . . . 33 CEMENT/CONCRETE . . . . . 34 OTHER _____ 96 (SPECIFY)	
B18	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION. CIRCLE THE RELEVANT CODE.	NATURAL ROOFING STRAW/PALM LEAF/CADJAN/ILUCK ... 12 RUDIMENTARY ROOFING CARDBOARD/CARTON . . . . . 24 FINISHED ROOFING METAL/TINSHEET/TAR SHEETS 31 TILES . . . . . 34 CEMENT/CONCRETE . . . . . 35 ASBESTOS . . . . . 37 OTHER _____ 96 (SPECIFY)	
B19	MAIN MATERIAL OF THE EXTERIOR WALLS. CIRCLE THE RELEVANT CODE.	NATURAL WALLS CADJAN/PALM/TRUNKS . . . . . 12 RUDIMENTARY WALLS BAMBOO WITH MUD . . . . . 21 UNCOVERED ADOBE . . . . . 23 PLYWOOD . . . . . 24 CARDBOARD . . . . . 25 FINISHED WALLS BRICKS WITH LIME/CEMENT BRICKS 32 CEMENT BLOCKS . . . . . 34 COVERED ADOBE . . . . . 35 OTHER _____ 96 (SPECIFY)	
B20	How many rooms in this household are used for sleeping?	ROOMS . . . . . [ ][ ]	
B21	Does any member of this household own: (For the member who have permanent residence in this house hold) A bicycle? A motorcycle or motor scooter? A trishow ? A tractor or land master ? A motor car/Van/Bus/Lorry ? A boat with a motor?	YES NO BICYCLE . . . . 1 2 MOTORCYCLE/SCOOTER . . . ... 1 2 TRISHOW .... 1 2 TRACTOR/LAND MASTER .... 1 2 MOTOR CAR/VAN/BUS/LORRY ... 1 2 BOAT WITH MOTOR 1 2	
B22	Does any member of this household own any agricultural land? (For the member who have permanent residence in this house hold)	YES . . . . . 1 NO 2	→ B24

NO.	QUESTIONS AND FILTERS	CODING CATAGORIES	SKIP
B23	How many hectares of agricultural land do members of this household own?	ACRES ☐☐ RUDE ☐ PURCHES ☐☐ 95 OR MORE ACRES . . . . . 95 DON'T KNOW 98	
B24	Does this household own any livestock, herds, other farm animals, or poultry? (For the member who have permanent residence in this house hold)	YES . . . . . 1 NO 2	→ B26
B25	How many of the following animals does this household own? IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.	NEAT CATTLE/BUFFALOE . . . . . ☐☐ COWS/BUFFALOE COWS . . . . . ☐☐ GOATS . . . . . ☐☐ CHICKENS . . . . . ☐☐ PIGS . . . . . ☐☐	
B26	Dose any member of this household have a bank account ? (For the member who have permanent residence in this house hold)	YES . . . . . 1 NO 2	
B27	Does this household own this property, lease this property, rent this property or live rent free in this property ? If the information about the ownership of the property given by the respondent is not clear, writedown the description briefly. _____ _____ _____ _____	**OWN** SOLE . . . . . 1 FAMILY/NOT DIVIDED . . . . . 2 LEASE . . . . . 3 RENT . . . . . 4 LIVE RENT FREE . . . . . 5 → B29 QUARTERS . . . . . 6 → B33	
B28	What kind to documents can you show for the ownership or lease of this property ? Anything else ? Record all items mentioned. If circle more than one code follow the skip instruction for highest method on list.	LAND REGISTRATION CERTIFICATE . . . . . A → B33 TITLE DEED TO DWELLING . . . . . B PURCHASE AGREEMENT FOR LAND . . . C LAEASE AGREEMENT FOR LAND . . . . . D CERTIFICATE OF OCCUPATION (OR ADJUDICATION CERTIFICATE) . . . . . E PROPERTY TAX CERTIFICATION . . . . . F → B30 UTILITY BILLS . . . . . G OTHER _____ X (SPECIFY) NONE . . . . . Z	
B29	What kind of documents can you show for the rental of this property ? Anything else ? Record all items mentioned.	REGISTERED LEASE AGREEMENT . . . . . A → B33 UNREGISTERED LEASE AGREEMENT . . . B INFORMAL AGREEMENT (WRITTEN) . . . . C VERBAL AGREEMENT (NO DOCUMENT) . . . D **OCCUPIED RENT FREE** WITH KNOWLEDGE OF OWNER . . . E WITHOUT KNOWLEDGE OF OWNER . . . . . F OTHER _____ X (SPECIFY) NONE . . . . . Z	
B30	Do you feel secure from eviction in this property ?	YES . . . . . 1 NO . . . . . 2 DK . . . . . 8 → B33	
B31	Now I would like to ask you how secure you feel about your occupancy of your home. Do you feel : CIRCLE THE MOST APPROPRIATE CODES	VERY SECURE, WON'T BE EVICTED . . . 1 SOMEWHAT SECURE, EVICTION UNLIKELY 2 NEITHER SECURE NOR INSECURE . . . . . 3 SOMEWHAT INSECURE, CHANCE OF EVICTION . . . . . 4 NOT AT ALL SECURE, EVICTION LIKELY . . . 5	

NO.	QUESTIONS AND FILTERS	CODING CATAGORIES	SKIP
B32	In the past 5 years, have you ever been evicted ?	YES . . . . . 1 NO 2	
B33	Household located in a hazardous location. Record all that apply. After observation or probing, circle the code.	LANDSLIDE ZONE . . . . . A FLOOD-PRONE AREA . . . . . B RIVER BANK . . . . . C STEEP HILL . . . . . D GARBAGE MOUNTAIN/PILE . . . . . E INDUSTRIAL POLLUTION AREA . . . . . F RAILROAD . . . . . G INSECURE AREA DUE TO OTHER ENVIRONMENTAL FACTORS _____ X (SPECIFY) NONE ..... Z	
B34	Bad maintenance Record all that apply. After observation or probing, circle the code.	CRACKS/OPENINGS IN WALLS . . . . . A NO WINDOWS . . . . . B WINDOWS WITH BROKEN/NO GLASS . . . C VISIBLE HOLES IN THE ROOF . . . . . D DAMAGED FLOOR . . . . . E OTHER _____ X (SPECIFY) NONE . . . . . Z	
B35	Vulnerability to accidents and manmade disasters Record all that apply. After observation or probing, circle the code.	VERY NARROW PASSAGE BETWEEN HOUSE INSTEAD OF ROAD . . . . . A ROOFS TOUCHING EACH OTHER . . . . . B PHONE AND POWER CABLE EASILY ACCESSIBLE BY INHABITANT . . . . . C TRANSFORMERS . . . . . D TRANSMISSION POST . . . . . E OTHER _____ X (SPECIFY) NONE . . . . . Z	
B36	What are the methods of disposing the usual garbage in your house. Record all that apply.	JUST DUMPING EVERYTHING ON GROUND ON THE PREMISES ..... A BURNING EVERYTHING ..... B BURYING EVERYTHING ..... C JUST DUMPING EVERYTHING BY THE SIDE OF ROAD ..... D HANDING OVER TO THE MC/UC PRADESHIYASABA ..... E SEGREGATING AND RECYCLING OF PAPER, BOTTLES AND POLYTHENE ETC F COMPOSTING OF ORGANIC REFUSE ..... G OTHER _____ X (SPECIFY)	
B37(A)	Have you been using any method to protect you and your family from mosquitoes ?	YES . . . . . 1 NO . . . . . 2 →	**B50(A)**
B37(B)	If "Yes" , state 3 main methods you adopt to protect yourself. Can circle upto 3 methods	BED NETS . . . . . A LIGHTING COILS . . . . . B USE MOSQUITO REPELENT CREAM .... C WINDOW NET ..... D OTHER (SPECIFY) X	
B37(C)	Household has mosquitoe nets ☐ House hold does not have mosquitoe nets ☐ → B50(A)		
B38	How many mosquito nets does your household have? IF 6 OR MORE NETS, RECORD '6'.	NUMBER OF NETS . . . . . ☐	

		NET #1	NET #2	NET #3	NET #4	NET #5	NET #6
B39	ASK THE RESPONDENT TO SHOW YOU THE NETS IN THE HOUSEHOLD. IF MORE THAN 6 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED ..... 1 NOT OBSERVED . 2	OBSERVED ..... 1 NOT OBSERVED . 2	OBSERVED ..... 1 NOT OBSERVED . 2	OBSERVED ..... 1 NOT OBSERVED . 2	OBSERVED ..... 1 NOT OBSERVED . 2	OBSERVED ..... 1 NOT OBSERVED . 2
B40	How did you get the mosquito net ?	DONATION 1 BOUGHT 2 HOME MADE 3 OTHER ____ 4 SPECIFY	DONATION 1 BOUGHT 2 HOME MADE 3 OTHER ____ 4 SPECIFY	DONATION 1 BOUGHT 2 HOME MADE 3 OTHER ____ 4 SPECIFY	DONATION 1 BOUGHT 2 HOME MADE 3 OTHER ____ 4 SPECIFY	DONATION 1 BOUGHT 2 HOME MADE 3 OTHER ____ 4 SPECIFY	DONATION 1 BOUGHT 2 HOME MADE 3 OTHER ____ 4 SPECIFY
B41	How many months ago did you receive/bought the net ? IF LESS THAN ONE MONTH, RECORD '00'.	MONTHS AGO ..... ☐☐ 37 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 37 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 37 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 37 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 37 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 37 OR MORE MONTHS AGO ... 95 NOT SURE 98
B42	What is the size of the net ?	SINGLE 1 DOUBLE 2 FAMILY SIZE 3 RECTANGLE SMALL 4 RECTANGLE LARGE 5	SINGLE 1 DOUBLE 2 FAMILY SIZE 3 RECTANGLE SMALL 4 RECTANGLE LARGE 5	SINGLE 1 DOUBLE 2 FAMILY SIZE 3 RECTANGLE SMALL 4 RECTANGLE LARGE 5	SINGLE 1 DOUBLE 2 FAMILY SIZE 3 RECTANGLE SMALL 4 RECTANGLE LARGE 5	SINGLE 1 DOUBLE 2 FAMILY SIZE 3 RECTANGLE SMALL 4 RECTANGLE LARGE 5	SINGLE 1 DOUBLE 2 FAMILY SIZE 3 RECTANGLE SMALL 4 RECTANGLE LARGE 5
B43	What is the type of the net ? (ASK THIS QUESTION TO CHECK WHETHER THE NET IS TREATED OR NOT)	PERMANENTLY TREATED WITH MOSQUITO INSECTICIDES 1 (skip to B47) TEMPORARY TREATED WITH MOSQUITO INSECTICIDES 2 (skip to B45) NORMAL NETS 3	PERMANENTLY TREATED WITH MOSQUITO INSECTICIDES 1 (skip to 47) TEMPORARY TREATED WITH MOSQUITO INSECTICIDES 2 (skip to 45) NORMAL NETS 3	PERMANENTLY TREATED WITH MOSQUITO INSECTICIDES 1 (skip to 47) TEMPORARY TREATED WITH MOSQUITO INSECTICIDES 2 (skip to 45) NORMAL NETS 3	PERMANENTLY TREATED WITH MOSQUITO INSECTICIDES 1 (skip to 47) TEMPORARY TREATED WITH MOSQUITO INSECTICIDES 2 (skip to 45) NORMAL NETS 3	PERMANENTLY TREATED WITH MOSQUITO INSECTICIDES 1 (skip to 47) TEMPORARY TREATED WITH MOSQUITO INSECTICIDES 2 (skip to 45) NORMAL NETS 3	PERMANENTLY TREATED WITH MOSQUITO INSECTICIDES 1 (skip to 47) TEMPORARY TREATED WITH MOSQUITO INSECTICIDES 2 (skip to 45) NORMAL NETS 3
B44	When you received/bought the net was it treated with mosquito insecticides ?	YES .... 1 (SKIP TO B47) NO .... 2 NOT SURE 8	YES .... 1 (SKIP TO B47) NO .... 2 NOT SURE 8	YES .... 1 (SKIP TO B47) NO .... 2 NOT SURE 8	YES .... 1 (SKIP TO B47) NO .... 2 NOT SURE 8	YES .... 1 (SKIP TO B47) NO .... 2 NOT SURE 8	YES .... 1 (SKIP TO B47) NO .... 2 NOT SURE 8
B45	Since you got the mosquito net, was i ever soaked or dipped in a liquid to kill or repel mosquitos?	YES .... 1 NO .... 2 (SKIP TO B47) NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B47) NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B47) NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B47) NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B47) NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B47) NOT SURE 8

		NET #1	NET #2	NET #3	NET #4	NET #5	NET #6
B46	How many months ago was the net last soaked or dipped? IF LESS THAN ONE MONTH, RECORD '00'.	MONTHS AGO ..... ☐☐ 25 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 25 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 25 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 25 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 25 OR MORE MONTHS AGO ... 95 NOT SURE 98	MONTHS AGO ..... ☐☐ 25 OR MORE MONTHS AGO ... 95 NOT SURE 98
B47	Did anyone sleep under this mosquito net last night?	YES .... 1 NO .... 2 (SKIP TO B50A) ← NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B50A) ← NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B50A) ← NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B50A) ← NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B50A) ← NOT SURE 8	YES .... 1 NO .... 2 (SKIP TO B50A) ← NOT SURE 8
B48	Who slept under this mosquito net last night? RECORD THE RESPECTIVE LINE NUMBER FROM THE HOUSEHOLD SCHEDULE.	NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐	NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐	NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐	NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐	NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐	NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐ NAME____________ LINE NO. ..... ☐☐
B49		GO BACK TO B39 FOR NEXT NET; OR, IF NO MORE NETS, GO TO B50(A)	GO BACK TO B39 FOR NEXT NET; OR, IF NO MORE NETS, GO TO B50(A)	GO BACK TO B39 FOR NEXT NET; OR, IF NO MORE NETS, GO TO B50(A)	GO BACK TO B39 FOR NEXT NET; OR, IF NO MORE NETS, GO TO B50(A)	GO BACK TO B39 FOR NEXT NET; OR, IF NO MORE NETS, GO TO B50(A)	GO TO B39 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO B50(A)

NO.	QUESTIONS AND FILTERS	CODING CATAGORIES
B50(A)	Is iodized salt available to buy in your area ?	YES 1 NO 2 NOT KNOWN 9
B50(B)	Do you use idozed salt for cooking purposes ?	YES . . . . . 1 NO . . . . . 2 NO FOOD COOKED IN THE HOUSEHOLD . . . . 3 → **B60** NO KNOWN 9
B50(C)	What type of salt do you use for cooking purposes ?	CRYSTALS ..... 1 POWDERED ..... 2 NOT KNOWN ..... 9 → **B51**
B50(D)	Do you wash salt before applying foods ?	YES 1 NO 2 NOT KNOWN 9
B51	Do the experiment by using the salt bought from the boutique for cooking purposes but not by salt taken from the salt pot that using day to day cooking. When the salt was tested for iodine, did the colour of the tested salt turn to blue / violet colour ? CIRCLE THE RELEVANT CODE.	COLOUR OF SALT CHANGED FROM THE SOLUTION . . . . . 1 COLOUR OF SALT DID NOT CHANGE FROM THE SOLUTION 2

Go back to the identification section of the household schedule and complete any remaining questions of it.

Next complete the individual schedule for the eligible respondent from page 18 onwards

SECTION BI - WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

B60	CHECK QUESTION 12 OF SECTION A. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE LIVING CHILDREN BORN SINCE JANUARY 2001 IN QUESTION B61. IF MORE THAN FOUR CHILDREN, USE ADDITIONAL **FORM (FORM 01)**				
		LAST BIRTH	NEXT TO LAST BIRTH	SECOND FROM LAST BIRTH	THIRD FROM LAST BIRTH
B61	LINE NUMBER (FROM COLUMN 12 OF SECTION A) NAME (FROM COLUMN 2 OF SECTION A)	LINE NUMBER . . . ☐☐ NAME _____	LINE NUMBER . . . ☐☐ NAME _____	LINE NUMBER ☐☐ NAME _____	LINE NUMBER ☐☐ NAME _____
B62	What is (NAME'S) birth date? IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK DAY, MONTH AND YEAR.	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐
B63	CHECK B62 CHILD BORN IN JANUARY 2001 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO B74) ←	YES . . . . . 1 NO . . . . . 2 (GO TO B74) ←	YES . . . . . 1 NO . . . . . 2 (GO TO B74) ←	YES . . . . . 1 NO . . . . . 2 (GO TO B74) ←
B64	HEIGHT IN CENTIMETERS	CM. ☐☐☐.☐	CM. ☐☐☐.☐	CM. ☐☐☐.☐	CM. ☐☐☐.☐
B65	WEIGHT IN KILOGRAMS	KG. ☐☐.☐	KG. ☐☐.☐	KG. ☐☐.☐	KG. ☐☐.☐
B66	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
B67	RESULT OF WEIGHT AND HEIGHT MEASUREMENT MEASURED . . . . . 1 NOT PRESENT . . . 2 REFUSED . . . . . 3 OTHER 6	Height: 1 2 3 6 Weight: 1 2 3 6	Height: 1 2 3 6 Weight: 1 2 3 6	Height: 1 2 3 6 Weight: 1 2 3 6	Height: 1 2 3 6 Weight: 1 2 3 6
B68	CHECK B62 IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO B61 FOR NEXT CHILD OR, IF NO MORE, GO TO B74) ← OLDER 2	0-5 MONTHS . . . . . 1 (GO TO B61 FOR NEXT CHILD OR, IF NO MORE, GO TO B74) ← OLDER 2	0-5 MONTHS . . . . . 1 (GO TO B61 FOR NEXT CHILD OR, IF NO MORE, GO TO B74) ← OLDER 2	0-5 MONTHS . . . . . 1 (GO TO B61 FOR NEXT CHILD OR, IF NO MORE, GO TO B74) ← OLDER 2
B69	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD (COLUMN 1 OF SECTION A) RECORD '00' IF NOT LISTED.	LINE NUMBER . . . ☐☐	LINE NUMBER . . . ☐☐	LINE NUMBER . . . ☐☐	LINE NUMBER . . . ☐☐
B70	READ CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED . . . . . 1 (NAME) (SIGN) REFUSED . . . . . 2 (IF REFUSED, GO TO B72)	GRANTED . . . . . 1 (NAME) (SIGN) REFUSED . . . . . 2 (IF REFUSED, GO TO B72)	GRANTED . . . . . 1 (NAME) (SIGN) REFUSED . . . . . 2 (IF REFUSED, GO TO B72)	GRANTED . . . . . 1 (NAME) (SIGN) REFUSED . . . . . 2 (IF REFUSED, GO TO B72)
B71	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL . ☐☐.☐	G/DL . ☐☐.☐	G/DL . ☐☐.☐	G/DL . ☐☐.☐
B72	RECORD RESULT CODE OF HEMOGLOBIN MEASUREMENT	MEASURED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	MEASURED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	MEASURED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	MEASURED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6
B73		GO BACK TO B61 IN NEXT COLUMN IN THIS QUESTIONNAIRE. IF NO MORE CHILDREN FOR THE RESPONDENT GO TO B74. USE THE **FORM 02** FOR THE CHILDREN LISTED IN **SECTION A** IN THE SAME AGE GROUP BUT WHO ARE NOT THE CHILDREN OF RESPONDENT.			

IF ADDITIONAL FORMS WERE USED RECORD THE NO. OF FORMS HERE. **FORM 01** ☐ **FORM 02** ☐
IF NOT USED RECORD '0' IN THE BOX.

CONSENT STATEMENT FOR ANEMIA FOR CHILDREN

Read consent statement to each respondent.

Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. The government need to develop programmes to prevent and treat Anemia and want to gather information needed for the purpose, through this survey. This survey will assist the government for the purpose. Therefore we take a blood sample for testing Anemia as a part of this survey. This survey will assist the government to develop programs to prevent and treat anemia.

We request that all children born in 2001 or later participate in the anemia testing part of this survey and give a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe. It has never been used before and will be thrown away after each test.

The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept confidential.

Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you allow (NAME(S) OF CHILD(REN) to participate in the anemia test?
Record the response in Q. No B70

SECTION BII - WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR WOMEN 15-49

B74	CHECK QUESTION 11 OF SECTION A.. RECORD THE LINE NUMBER AND NAME OF ELIGIBLE WOMEN IN QUESTION B75. A FINAL OUTCOME FOR THE ANEMIA TEST PROCEDURE MUST BE RECORDED IN QUESTION B83 FOR EACH ELIGIBLE WOMAN.	
		MOTHER OF THE CHILD/REN-ELIGIBLE WOMAN
B75	LINE NUMBER (FROM COLUMN 11 OF SECTION A) NAME (FROM COLUMN 2 OF SECTION A)	LINE NUMBER ☐☐ NAME _____
B76	AGE AS AT LAST BIRTHDAY (FROM COLUMN 8 OF SECTION A)	AGE (IN YEARS) ☐☐
B77	HEIGHT IN CENTIMETERS	CM. ☐☐☐.☐
B78	WEIGHT IN KILOGRAMS	KG. ☐☐☐.☐
B79	RESULT OF WEIGHT AND HEIGHT MEASUREMENT MEASURED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6	Height / Weight 1 / 1 2 / 2 3 / 3 6 / 6
B80	READ ANEMIA TEST CONSENT STATEMENT TO THE RESPONDENT.	GRANTED 1 _____ (NAME) _____ (SIGN) RESPONDENT REFUSED 2 (IF REFUSED, GO TO B84).
B81	PREGNANCY STATUS: CHECK Q.226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DK 8
B82	CHECK QUESTION B80 AND PREPARE EQUIPMENT AND SUPPLIES FOR THE ANEMIA TEST FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST.	
B83	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL ☐☐.☐
B84	RECORD RESULT CODE OF HEMOGLOBIN MEASUREMENT	MEASURED . . . . . 1 NOT PRESENT . . . . . 2 REFUSED . . . . . 3 OTHER 6
B85	BAR CODE LABEL	PUT THE 1ST BAR CODE LABEL HERE. PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.

CONSENT STATEMENT FOR ANEMIA TEST

Read consent statement to each respondent.

Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. The government need to develop programmes to prevent and treat Anemia and want to gather information needed for the purpose, through this survey. This survey will assist the government for the purpose. Therefore we take a blood sample for testing Anemia as a part of this survey. This survey will assist the government to develop programs to prevent and treat anemia.

For the anemia testing, we will need a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe. It has never been used before and will be thrown

away after each test. The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept confidential.

Do you have any questions?

You can say yes to the test, or you can say no. It is up to you to decide.
Will you (allow NAME OF ADOLESCENT to) take the anemia test?
Record the response in Q. No B80

DEMOGRAPHIC AND HEALTH SURVEY - 2006/7
EVER-MARRIED WOMAN QUESIONNAIRE

Name of Country : **Sri Lanka** Name of Organization : **Department of Census & Statistics.**

IDENTIFICATION

Cluster No :	
Unique Household Number within the Cluster:	
Province & District :	
D.S. Division :	
Sector (Urban/ Rural/ Estate) :	
G.N. Division :	
Ward/Village/Estate :	
Census Block Number (PSU) :	
Housing Unit Number (SSU) :	
Listing was done using (F1=1,RF1=2,Camps=3) :	
Tsunami affected housing unit or not (Affected = 1, Not affected = 2)	
Household Number within the Housing Unit :	
Name and Line Number of the Eligible Woman	

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				FINAL RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

***RESULT CODES:**

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

COUNTRY-SPECIFIC INFORMATION:

Language of Questionnaire :
Native language of Respondent :
Language of Interview :

Sinhala =1 Tamil =2 English =3

Translator used : Yes 1 No 2

NOW RECORD THE TIME IN 24 HOURS TIME.
HOURS
MINUTES

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME	NAME		
DATE	DATE		

SECTION 1 - RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am working with the Department of Census and Statistics . We are conducting a national survey that asks women (and men) about various health issues. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The survey usually takes between 30 and 60 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary, and if we should come to any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time. However, we hope that you will participate in this survey since your views are important.
At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED	1	
RESPONDENT DOES NOT AGREE TO BE INTERVIEWED	2 →	COMPLETE THE RELEVANT INFORMATION IN THE PAGE 20 AND CIRCLE THE CODE 4 OF RESULT CODES IN THE SAME PAGE. END THE INTERVIEW.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
102	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . [ ][ ] SINCE BIRTH . . . . . 95 VISITOR 96	→ 104
103	Just before you moved here, did you live in a urban, rural or estate ?	URBAN . . . . . 1 RURAL . . . . . 2 ESTATE . . . . . 3 OTHER COUNTRIES 4	→ 104
103A	What was the district you have lived just before you moved here ?	IN SAME DISTRICT 99 DISTRICT _____ [ ][ ] SPECIFY	
104	How old were you at your last birthday? (CHECK WITH AGE DETERMINATION TABLE)	AGE IN COMPLETED YEARS [ ][ ]	
105	CHECK CODES FOR COLUMN 13 AND 14. PROBE AGAIN IF NO/DON'T KNOW IN COLUMN 13 AND 14. DON'T KNOW (COLUMN 13) = 8 DON'T KNOW (COLUMN 14) = 19 NEVER ATTENDED SCHOOL (COLUMN 13) = 2 PRE-SCHOOL (COLUMN 14) = 88 PRIMARY (COLUMN 14) = 00 -05	SECONDARY OR HIGHER (COLUMN 14) [ ]	→ 108
106	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE. . 3 BLIND/VISUALLY IMPAIRED 4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	CHECK 106: CODE '2' OR '3' CIRCLED CODE '1' OR '4' CIRCLED → 109		
108	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 SELDOM . . . . . 3 NOT AT ALL 4	
109	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 SELDOM . . . . . 3 NOT AT ALL . . . . . 4 NOT APPLICABLE 5	
110	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 SELDOM . . . . . 3 NOT AT ALL . . . . . 4 NOT APPLICABLE 5	
111	Do you have the habit of washing your hands with soap in following occasions ? After using toilet Before eating Before the preparation of meals	 YES ..... 1 NO ..... 2 YES ..... 1 NO ..... 2 YES ..... 1 NO 2	
112	What is your religion ?	BUDDHIST ..... 1 HINDU ..... 2 ISLAM ..... 3 ROMAN CATHOLIC ..... 4 OTHER CRISTIAN ..... 5 OTHER (SPECIFY) 6	
113	What is your ethnicity ?	SINHALESE ..... 1 SRI LANKAN TAMIL ..... 2 INDIAN TAMIL ..... 3 SRI LANKA MOOR ..... 4 BURGHER ..... 5 MALAY ..... 6 OTHER (SPECIFY) 7	
114	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION/HUSBAND DEAD 3	→ 117
115	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN 2	
116	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 119
117	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
118	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
119	Have you ever been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
120	CHECK 119: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your husband/partner? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about when you started living with your first husband/partner. In what month and year was that?	MONTH . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . DON'T KNOW YEAR 9998	→ **122**
121	How old were you when you first started living with him?	AGE	
122	DETERMINE MONTHS MARRIED OR LIVING WITH A MAN SINCE JANUARY 2001. ENTER 'X' IN COLUMN 4 OF CALENDAR FOR EACH MONTH MARRIED OR LIVING WITH A MAN, AND ENTER '0' FOR EACH MONTH NOT MARRIED/NOT LIVING WITH A MAN, SINCE JANUARY 2001. FOR WOMEN WITH MORE THAN ONE UNION: PROBE FOR DATE WHEN CURRENT UNION STARTED AND, IF APPROPRIATE, FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS. FOR WOMEN NOT CURRENTLY IN UNION: PROBE FOR DATE WHEN LAST UNION STARTED AND FOR TERMINATION DATE AND, IF APPROPRIATE, FOR THE STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS.		

SECTION 2 - REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ **206**
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ **204**
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME ..... DAUGHTERS AT HOME	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ **206**
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE DAUGHTERS ELSEWHERE	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ **208**
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . . GIRLS DEAD	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00' AND SKIP TO 209B	TOTAL	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ ↓ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY.		
209A	Could you please tell us whether all your children from the same marriage ?	YES . . . . . 1 NO 2	
209B	How many marriage unions ?	☐	
210	CHECK 208: ONE OR MORE BIRTHS ☐ ↓ NO BIRTHS ☐ →		**226**

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.
(IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE).

212 What name was given to your (first/next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what date, month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS. IF LESS THAN 1 YR RECORD '00'	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (NEXT BIRTH)	DAYS . . . 1 MONTHS 2 YEARS . . 3	
02	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
03	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
04	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
05	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
06	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
07	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

212 What name was given to your next baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS. IF LESS THAN 1 YR RECORD '00'	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
08	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
09	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
10	SING 1 MULT 2	BOY 1 GIRL 2	DATE MON. YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

222	Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.	YES . . . . . 1 NO 2

223 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME → NUMBERS ARE DIFFERENT → (PROBE AND RECONCILE)

CHECK:
- FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED. (Q.215) ☐
- FOR EACH BIRTH SINCE JANUARY 2001: MONTH AND YEAR OF BIRTH ARE RECORDED.(Q.215) ☐
- FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED. (Q. 217) ☐
- FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED. (Q. 220) ☐
- FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS. (Q. 215) ☐

224 CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 2001 OR LATER.
IF NONE, RECORD '0' AND SKIP TO 226. ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH BIRTH SINCE JANUARY 2001, ENTER 'B' IN THE MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN COLUMN 1 OF CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS	
227A	Where do you plan to deliver ?	**GOVT. HOSPITAL & SPECIALIST SERVICES** GENARAL HOSPITAL ..... 1 BASE HOSPITAL ..... 2 TEACHING HOSPITAL ..... 3 **OTHER GOVT. HOSPITAL** DISTRICT HOSPITAL ..... 4 PERIPHERAL UNIT ..... 5 RURAL HOSPITAL ..... 6 METARNITY HOME ..... 7 PRIVATE HOSPITAL ..... 8 STATE LINE ROOM ..... 9 HOME ..... 10 OTHER ..... 11 (SPECIFY)	→ 227C
227B	Why do you plan to deliver in this institute ? CIRCLE THE MOST RELEVANT CODE	NO COST ..... 1 CLOSER TO THE HOUSE ..... 2 FIRST DELIVERY ..... 3 FOR SAFE DELIVERY AND BETTER MEDICAL CARE ..... 4 OTHER 5	
227C	Have you had a tetanues injection since you became pregnant ?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
228	At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?	THEN . . . . . 1 LATER . . . . . 2 NOT AT ALL 3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 237
229A	In Q: 229 If 'Yes' = 1 is circled How many miscarriages, abortions, still births have you had ? If none write '0'	NO. OF MISCARRIAGES ..... NO. OF ABORTIONS ..... NO. OF STILL BIRTHS	
230	When did the last such pregnancy end? IF MONTH IS UNKNOWN RECORD 98	MONTH . . . . . YEAR	
231	CHECK 230: LAST PREGNANCY ENDED IN JAN. 2001 OR LATER ↓ LAST PREGNANCY ENDED BEFORE JAN. 2001 →		→ 237

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
232	How many months pregnant were you when the last such pregnancy ended? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS	
233	Since January 2001, have you had any other pregnancies that did not result in a live birth? (Excluding Q.No.230)	YES . . . . . 1 NO 2	→ 235
234	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2001. ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
235	Did you have any miscarriages, abortions or stillbirths that ended before 2001 ?	YES . . . . . 1 NO 2	→ 237
236	When did the last such pregnancy that terminated before 2001 end?	MONTH . . . . . YEAR	
237	When did your last menstrual period start? IT TO DAY CIRCLE '1' AND RECORD '00' IF LESS THAN 7 DAYS CIRCLE '1' AND RECORD NO. OF DAYS IF MORE THAN OR EQUAL 7 DAYS (UP TO 27 DAYS) CIRCLE 2 AND RECORD NO. OF WEEKS IF MORE THAN OR EQUAL 4 WEEKS CIRCLE 3 AND RECORD NO. OF MONTHS. IF MORE THAN ONE MONTH RECORD NO. OF COMPLETED MONTHS. _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO . . . . . 4 IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
238	What are the days during the month when a women has to be careful to avoid becoming pregnant ? INTERVIEWER HERE A MONTH IS REFFERED TO AS THE PERIOD BETWEEN THE DATE OF HER LAST MENSTRUATION TO THE DATE OF BEGINNING THE NEXT MENSTRUATION. PLEASE EXPLAIN THIS.	DURING HER PERIOD ..... 1 WITHIN ONE WEEK FROM THE DATE OF HER PERIOD STARTED ..... 2 BETWEEN 9TH AND 21ST DAY FROM THE DATE WHEN HER PERIOD STARTED ..... 3 ONE WEEK BEFORE HER PERIOD BEGINS ..... 4 AT ANY DATE ..... 5 OTHER _____ 6 SPECIFY DON'T KNOW 9	

SECTION 3 - CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)? CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.		302 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	Have you ever had an operation to avoid having any more children? YES . . . . . 1 NO 2
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	Have you ever had a partner who had an operation to avoid having any more children? YES . . . . . 1 NO 2
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
04	IUD Women can have a loop or coil placed inside the womb by a doctor or a nurse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
05	INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
06	NORPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
09	LACTATIONAL AMENORRHEA METHOD (LAM)	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
10	RHYTHM METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
11	WITHDRAWAL Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
12	EMERGENCY CONTRACEPTION Women can take pills up to five days after sexual intercourse to avoid becoming pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 NO . . . . . 2 (SPECIFY)	YES . . . . . 1 NO 2
303	CHECK 302: NOT A SINGLE "YES" (NEVER USED) → AT LEAST ONE "YES" (EVER USED) →		307

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ **306**
305	ENTER '0' IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH. →		**331**
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN	
307A	Who took the decision in using the method at that time ?	MY DECISION . . . . . 1 MY HUSBAND'S DECISION . . . . . 2 HUSBAND AND WIFE BOTH . . . . . 3 PUBLIC HEALTH MIDWIFE . . . . . 4 OTHER (SPECIFY) 5	
307B	CHECK Q. 114 and Q.116 CURRENTLY MARRIED/IN UNION ↓ WIDOWED/DIVORCED/ SEPARATED →		**322**
308	CHECK 302 (01): WOMAN NOT STERILIZED ↓ WOMAN STERILIZED →		**311A**
309	CHECK 226: NOT PREGNANT OR UNSURE ↓ PREGNANT →		**322**
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ **310B**
310A	Who took that decision ?	MY DECISION . . . . . 1 MY HUSBAND'S DECISION . . . . . 2 HUSBAND AND WIFE BOTH . . . . . 3 PUBLIC HEALTH MIDWIFE . . . . . 4 OTHER (SPECIFY) 5	→ **311**
310B	What is the main reason that you are not using a method to avoid pregnancy ?	WANT TO BECOME PREGNANT . . . 01 LACK OF KNOWLEDGE OR LACK OF SOURCE . . . . . 02 OPPOSED TO FP . . . . . 03 HUSBAND DISAPPROVES . . . . . 04 OTHER PEOPLE DISAPPROVES . . . 05 INFREQUENT SEX . . . . . 06 POSTPARTUM / BF . . . . . 07 MENOPAUSAL/SUBFECUND . . . . . 08 HEALTH CONCERNS . . . . . 09 PROBLEMS OF ACCESS / AVAILABILITY 10 COSTS TOO MUCH . . . . . 11 RELIGION . . . . . 12 INCONVENIENT TO USE . . . . . 13 RUMOURS OF SIDE EFFECTS . . . . . 14 OTHER (SPECIFY) . . . . . 15 DON'T KNOW 99	→ **322**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311 311A	Which method are you using? CIRCLE 'A' FOR FEMALE STERILIZATION. CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B PILL . . . . . C IUD . . . . . D INJECTABLES . . . . . E NORPLANTS . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H LACTATIONAL AMEN. METHOD . . . . . I RHYTHM METHOD . . . . . J WITHDRAWAL . . . . . K OTHER _____ X (SPECIFY)	→ 316 → 315 → 315 → 319A
312	RECORD IF PILL OR CONDOM IS HIGHEST METHOD ON LIST IN 311. PILL ☐ ↓ May I see the package of pills you are using? CONDOM ☐ ↓ May I see the package of condoms you are using? RECORD NAME OF BRAND IF PACKAGE SEEN. IF NAME BRAND CAN'T BE IDENTIFIED, MENTION IT.	PACKAGE SEEN . . . . . 1 BRAND NAME _____ ☐☐ (SPECIFY) PACKAGE NOT SEEN 2	→ 314
313	Do you know the brand name of the (pills/condoms) you are using? RECORD NAME OF BRAND.	BRAND NAME _____ ☐☐ (SPECIFY) DON'T KNOW 98	
314	How many (pill cycles/condoms) did you get/purchase last time? In case of pills state the number of cards (each card containing 21 white pills + 7 brown pills) and if number of condoms.	NUMBER OF PILL CYCLES/CONDOMS . . ☐☐☐ DON'T KNOW 998	
315	The last time you obtained (HIGHEST METHOD ON LIST IN 311) how much did you pay in total, including the cost of the method and any consultation you may have had? IF MORE THAN 10,000 RECORD 9999.99	RS CTS. COST (Rs.) ☐☐☐☐☐☐ FREE . . . . . 9995 DON'T KNOW 9998	→ 319A
316	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF HOSPITAL, OR PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 FAMILY HEALTH BUREAU . . . . . 12 MOBILE CLINIC . . . . . 13 OTHER PUBLIC _____ 16 (SPECIFY) **PRIVATE SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PRIVATE DOCTOR'S CLINIC . . . . . 22 NGO . . . . . 23 ESTATE HOSPITAL . . . . . 24 OTHER PRIVATE . . . . . 26 _____ (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
317	CHECK 311/311A: CODE 'A' CIRCLED → Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? CODE 'B' CIRCLED → Before the sterilization operation was your husband/partner told that he would not be able to have any (more) children because of the operation?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
318	How much did you (your husband/partner) pay in total for the sterilization, including any consultation you (he) may have had? IF MORE THAN 10,000 RECORD 9999	COST (Rs.) ☐☐☐☐ DON'T KNOW . . . . . 9998 FREE 9995	→ 319
318A	Did you receive an incentive payment (Rs.500) after the operation ?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
319	In what month and year was the sterilization performed?		
319A	In what month and year did you start using (CURRENT METHOD) continuously? If year and month not known probe : PROBE: For how long have you been using (CURRENT METHOD) now without stopping ?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐ PERIOD (MONTHS) ☐☐	
320	CHECK 319/319A, 215 AND 230: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 319/319A → YES / NO GO BACK TO 319/319A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).		
321	CHECK 319/319A: YEAR IS 2001 OR LATER → ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. ENTER CODE FOR SOURCE WHERE USER OBTAINED METHOD AT BEGINNING OF PERIOD OF CURRENT USE IN COLUMN 2 OF CALENDAR IN MONTH THAT USE STARTED. THEN CONTINUE WITH 322. YEAR IS 2000 OR EARLIER → ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO JANUARY 2001 THEN SKIP TO → 329		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
322	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2001. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: COLUMN 1: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then? **IN COLUMN 2**, ENTER METHOD SOURCE CODE IN FIRST MONTH OF EACH USE. ILLUSTRATIVE QUESTIONS: COLUMN 2: * Where did you obtain the method when you started using it? * Where did you get advice on how to use the method [for LAM or rhythm]? **IN COLUMN 3**, ENTER CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 3 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: COLUMN 3: * Why did you stop using the (METHOD)? * Did you become pregnant while using (METHOD), did you stop using to get pregnant, or did you stop for some other reason? IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: * How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.		
323	CHECK 311/311A: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 PILL . . . . . 03 IUD . . . . . 04 INJECTABLES . . . . . 05 NORPLANTS . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 LACTATIONAL AMEN. METHOD . . . 09 RHYTHM METHOD . . . . . 10 WITHDRAWAL . . . . . 11 OTHER METHOD 96	→ **331** → **333** → **330** → **327** → **333**
324	You obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ **326**
325	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ **327**
326	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
327	CHECK 324: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 329
328	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
329	CHECK 311/311A: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 PILL . . . . . 03 IUD . . . . . 04 INJECTABLES . . . . . 05 NORPLANTS . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 LACTATIONAL AMEN. METHOD . . . 09 RHYTHM METHOD . . . . . 10 WITHDRAWAL . . . . . 11 OTHER METHOD 96	01, 02 → 333 09, 10, 11, 96 → 333
330	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. CLINIC (FIELD) . . . . . 12 FAMILY HEALTH BUREAU . . . . . 13 MOBILE CLINIC . . . . . 14 PUBLIC HEALTH MIDWIFE . . . . . 15 HEALTH VOLUNTEER . . . . . 16 OTHER PUBLIC _____ 17 (SPECIFY) **PRIVATE SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE DOCTOR . . . . . 22 PHARMACY . . . . . 23 OTHER PRIVATE _____ 24 (SPECIFY) **OTHER SOURCE** GROCERY . . . . . 31 FRIEND/RELATIVE . . . . . 32 OTHER _____ 96 (SPECIFY)	→ 333
331	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 333

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
332	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S)) CIRCLE ALL MENTIONED	**PUBLIC SECTOR** GOVT. HOSPITAL ..... A GOVT. CLINIC (FIELD) ..... B FAMILY HEALTH BUREAU ..... C MOBILE CLINIC ..... D PUBLIC HEALTH MIDWIFE ..... E HEALTH VOLUNTEER ..... F OTHER PUBLIC _____ G (SPECIFY) **PRIVATE SECTOR** PRIVATE HOSPITAL ..... H PRIVATE DOCTOR ..... I PHARMACY ..... J OTHER PRIVATE_____ K (SPECIFY) **OTHER SOURCE** GROCERY ..... L FRIEND/RELATIVE ..... M OTHER _____ N (SPECIFY)	
333	In the last 12 months, were you visited by a fieldworker who talked to you about family planning?	YES ..... 1 NO 2	
334	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES ..... 1 NO 2	→ **336A**
335	Did any staff member at the health facility speak to you about family planning methods?	YES ..... 1 NO 2	
336A	Some women abstain from sexual relations completely for more than one or two months. Have you ever abstained ?	YES ..... 1 NO 2	→ **401**
336B	What was the main reason ? CIRCLE RELEVENT CODE	AVOID PREGNANCY ..... 1 CHILD OF MARRIAGABLE AGE ..... 2 HUSBAND AWAY ..... 3 POSTPARTUM / BREASTFEEDING ..... 4 BECAUSE OF THE PREGNANCY ..... 5 HEALTH CONCERNS ..... 6 RELIGIOUS REASONS ..... 7 OTHER (SPECIFY) 8	

SECTION 4 - PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2001 OR LATER ☐ ↓ NO BIRTHS IN 2001 OR LATER ☐ → **549**			
402	CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2001 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). **IF MULTIPLE BIRTHS, USE FORM 03 FOR THEM.** Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)			
403	LINE NUMBER FROM 212	LAST BIRTH LINE NO. ☐☐	NEXT-TO-LAST BIRTH LINE NO. ☐☐	SECOND-FROM-LAST BIRTH LINE NO. ☐☐
404	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?	THEN . . . . . 1 (SKIP TO 407) LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 407)	THEN . . . . . 1 (SKIP TO 434) LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 434)	THEN . . . . . 1 (SKIP TO 434) LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 434)
406	How much longer would you have liked to wait?	MONTHS . .1 ☐☐ YEARS . .2 ☐☐ DON'T KNOW 998	MONTHS . .1 ☐☐ YEARS . .2 ☐☐ DON'T KNOW 998	MONTHS . .1 ☐☐ YEARS . .2 ☐☐ DON'T KNOW . . . 998

		LAST BIRTH			
			PLACE	NO. OF TIMES	HEALTH PERSONAL
407	Did you see anyone for antenatal care for this pregnancy? IF YES: Where did you receive and whom did you see? Any where else Anyone else? PROBE TO IDENTIFY PLACE AND EACH TYPE OF PERSON. RECORD ALL MENTIONED.	**PLACE** MOH OFFICE CLINIC 11 GOVERNMENT HOSPITAL 12 MUNICIPAL CLINIC 13 PRIVATE HOSPITAL/ DISPENSARY 14 OTHER _____ 15 (SPECIFY) **HEALTH PERSONAL** DOCTOR SPECIALISTS 21 DOCTOR 22 PUBLIC HEALTH MIDWIFE 23 OTHER _____ 24 (SPECIFY)	☐☐ ☐☐ ☐☐ ☐☐ ☐☐	☐☐ ☐☐ ☐☐ ☐☐ ☐☐ IF DON'T KNOW/ CAN'T REMEMBER RECORD '99'	☐☐ ☐☐ ☐☐ ☐☐ ☐☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
408	How many weeks pregnant were you when you first received antenatal care for this pregnancy?	WEEKS . . . ☐☐ DON'T KNOW 98		
410	Ask to see pregnancy record	SEEN ..... 1 NOT SEEN 2		
411	As part of your antenatal care during this pregnancy, were any of the following done at least once?	YES NO DK		
	Were you weighed?	WEIGHT ... 1 2 9		
	Was your Height measured?	HEIGHT ... 1 2 9		
	Was your blood pressure measured?	BP 1 2 9		
	Did you give a urine sample?	URINE . . . 1 2 9		
	Did you give a blood sample?	BLOOD . 1 2 9		
	Was your blood tested for VDRL (Sexualy transmitted diseases)	VDRL 1 2 9		
412	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications? Such as Excessive vomitting Severe headache Swelling Bleeding Abdominal pain	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413A) DON'T KNOW 8		
413	Were you told where to go if you had any of these complications?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
413A	During this pregnancy did public health midwife visit you at home ?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414)		
413B	How many times did she visit during the period of pregnancy ?	☐☐		
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 417) DON'T KNOW 8		
415	During this pregnancy, how many times did you get this tetanus injection?	TIMES . . . . . ☐ DON'T KNOW 8		
416	CHECK 415:	2 OR MORE TIMES ☐ (SKIP TO 421) OTHER (1 OR DON'T KNOW) ☐		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
417	At any time before this pregnancy, did you receive any tetanus injections ?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) DON'T KNOW 8		
417A	What is the reason for receiving last enjection ?	PROTECT MY SELF ... 1 PROTECT ANOTHER BABY 2		
418	Before this pregnancy, how many other times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . [ ] DON'T KNOW 8		
419	In what month and year did you receive the last tetanus injection before this pregnancy?	MONTH . . . [ ][ ] DK MONTH . . . . . 98 YEAR [ ][ ][ ][ ] DK YEAR . . . . . 9998 (SKIP TO 421)		
420	How many years ago did you receive that tetanus injection?	YEARS AGO . . . . . [ ][ ]		
421	During this pregnancy, were you given or did you buy any iron tablets ? SHOW TABLETS.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423) DON'T KNOW 8		
421A	From where did you get these tablets ? RECORD ALL MENTIONED	GOVT. HOSPITAL ..... A FROM THE CLINIC ..... B PRIVATE HOSPITAL ..... C PRIVATE DOCTOR ..... D PHARMACY ..... E ANY OTHER_____ X (SPECIFY)		
421B	What reasons were you given for taking iron tablets ? RECODE ALL RELEVANT REASONS	GOOD FOR THE BABY ..... A FOR MOTHER'S HEALTH/STREGNTH ..... B HELPS BLOOD FORMATION ..... C OTHER (SPECIFY) ..... X _____ DON'T KNOW ..... Z		
422	How you ever use these tablets during the pregnancy ?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 422B) DON'T KNOW . . . . . 8 (SKIP TO 423)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
422A	How often did you take these iron tablets	DAILLY ..... 1 OFTEN ..... 2 SELDOM ..... 3 (SKIP TO 423)		
422B	Why didn't you take these iron tablets? Record all mentioned.	NO CAMPLAINTS ..... A DIARRHOEA ..... B CONSTIPATION ..... C NAUSEA ..... D BAD TASTED/ ..... E HEARD TO SWALLOW OTHER (SPECIFY) ..... X _____		
423	During this pregnancy, did you take any drug for intestinal worms? (worm treatments)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
424	During this pregnancy, did you have difficulty with your vision during daylight?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
425	During this pregnancy, did you suffer from night blindness	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
426	During this pregnancy, were you given any drugs prevent you from getting malaria?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434) DON'T KNOW 8		
427	Did you take them as instructed ?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434) CAN'T REMEMBER ... 8		
428	How did you take ? CIRCLE THE RELEVANT CODE	TWO TABLETS ONCE A WEEK ..... 1 ONE TABLETS ONCE A WEEK ..... 2 ONE TABLETS DAILY ..... 3 DON'T KNOW ..... 4 OTHER 5		
434	Who assisted at delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PERSONNEL** DOCTOR ..... A NURSE/MIDWIFE ..... B ASSISTANT MIDWIFE C **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT ..... D RELATIVE/FRIEND . .... E OTHER ..... X _____ (SPECIFY) NO ONE ..... Z	**HEALTH PERSONNEL** DOCTOR ..... A NURSE/MIDWIFE ..... B ASSISTANT MIDWIFE C **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT ..... D RELATIVE/FRIEND ..... E OTHER ..... X _____ (SPECIFY) NO ONE ..... Z	**HEALTH PERSONNEL** DOCTOR ..... A NURSE/MIDWIFE ... B ASSISTANT MIDWIFE C **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT ..... D RELATIVE/FRIEND . .... E OTHER ..... X _____ (SPECIFY) NO ONE ..... Z

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
435	How did the person who assisted at your delivery, treat you during your delivery ? CIRCLE THE RELEVANT CODE	TREATED WELL ..... 1 DID NOT CARE VERY MUCH ..... 2 DID NOT INTERFERE ANY BODY ..... 3 SHOUTED AT ME ... 4 DON'T KNOW ANY THING ..... 5 OTHER (SPECIFY) ... 6	TREATED WELL ..... 1 DID NOT CARE VERY MUCH ..... 2 DID NOT INTERFERE ANY BODY ..... 3 SHOUTED AT ME ..... 4 DON'T KNOW ANY THING ..... 5 OTHER (SPECIFY) ... 6	TREATED WELL ..... 1 DID NOT CARE VERY MUCH ..... 2 DID NOT INTERFERE ANY BODY ..... 3 SHOUTED AT ME ... 4 DON'T KNOW ANY THING ..... 5 OTHER (SPECIFY) ... 6
436	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	YOUR HOME ..... 11 (SKIP TO 443) ← OTHET HOME ..... 12 **GOVT. HOSPITAL & SPECIALIST SERVICES** GENARAL HOSPITAL 21 BASE HOSPITAL ... 22 TEACHING HOSPITAL 23 **OTHER GOVT. HOSPITAL** DISTRICT HOSPITAL 31 PERIPHERAL UNIT ..... 32 RURAL HOSPITAL . . 33 METERNITY HOME ..... 34 PRIVATE HOSPITAL ..... 41 ESTATE LINE ROOM ..... 42 DURING TRANSPORT 51 OTHER_____ 99 (SPECIFY)	YOUR HOME ..... 11 (SKIP TO 443) ← OTHET HOME ..... 12 **GOVT. HOSPITAL & SPECIALIST SERVICES** GENARAL HOSPITAL 21 BASE HOSPITAL ... 22 TEACHING HOSPITAL ..... 23 **OTHER GOVT. HOSPITAL** DISTRICT HOSPITAL .... 31 PERIPHERAL UNIT ..... 32 RURAL HOSPITAL . . 33 METERNITY HOME ..... 34 PRIVATE HOSPITAL ..... 41 ESTATE LINE ROOM ..... 42 DURING TRANSPORT 51 OTHER_____ 99 (SPECIFY)	YOUR HOME 11 (SKIP TO 443) ← OTHET HOME 12 **GOVT. HOSPITAL & SPECIALIST SERVICES** GENARAL HOSPITAL 21 BASE HOSPITAL ..... 22 TEACHING HOSPITAL 23 **OTHER GOVT. HOSPITAL** DISTRICT HOSPITAL 31 PERIPHERAL UNIT ..... 32 RURAL HOSPITAI . . 33 METERNITY HOME ..... 34 PRIVATE HOSPITAL .... 41 ESTATE LINE ROOM 42 DURING TRANSPORT 51 OTHER_____ 99 (SPECIFY)
437	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW . 998	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW 998	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW ... 998
438	Was (NAME) delivered by caesarean section?	YES ..... 1 (SKIP TO 442) ← NO 2	YES ..... 1 (SKIP TO 442) ← NO 2	YES ..... 1 (SKIP TO 442) ← NO 2
439	Before you were discharged after (NAME) was born, did any health care provider check on your health?	YES ..... 1 NO ..... 2 (SKIP TO 442)←	YES ..... 1 (SKIP TO 442) ← NO 2	YES ..... 1 (SKIP TO 442) ← NO 2
440	How many hours or days after delivery did the first check take place? IF LESS THAN ONE HOUR CIRCLE 1 AND RECORD '00'. IF LESS THAN ONE DAY, RECORD HOURS.	HOURS 1 ☐☐ DAYS 2 ☐☐ DON'T KNOW 998		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
441	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . 12 ASSISTANT MIDWIFE 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 OTHER _____ 96 (SPECIFY) DK/CAN'T REMEMBER 98 (SKIP TO 444)		
442	After you were discharged, did a public health midwife check on your health?	YES . . . . . 1 (SKIP TO 445) NO . . . . . 2 (SKIP TO 449)	YES . . . . . 1 (SKIP TO 444) NO 2	YES . . . . . 1 (SKIP TO 444) NO 2
443	Why didn't you deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED.	COST TOO MUCH . . . A FACILITY NOT OPEN . B TOO FAR/ NO TRANS-PORTATION . . . . . C DON'T TRUST FACILITY/POOR QUALITY SERVICE D NO FEMALE PROVIDER AT FACILITY . . . E HUSBAND/FAMILY DID NOT ALLOW . . . F NOT NECESSARY . . . G NOT CUSTOMARY . . H OTHER _____ X (SPECIFY)		
444	After (NAME) was born, did a public health midwife visit your home within one month from delivery ?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 449)	YES . . . . . 1 (SKIP TO 455) NO 2	YES . . . . . 1 (SKIP TO 455) NO 2
445	How many hours, days or weeks after delivery did she visit first ? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW 998		
446	Within one month from delivery how many times did Public Health Midwife visit you at home ?	☐☐ DON'T KNOW 98		
449	In the two months after (NAME) was born, did any health care provider or a public health midwife check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453) DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
450	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE HOUR CIRCLE 1 AND RECORD '00'. IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . 1 ☐☐ DAYS AFTER BIRTH . . 2 ☐☐ WKS AFTER BIRTH 3 ☐☐ DON'T KNOW 998		
451	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR ..... 11 NURSE/MIDWIFE ..... 12 PUBLIC HEALTH MIDWIFE ..... 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT .... 21 OTHER_____ 96 (SPECIFY)		
452	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	YOUR HOME ..... 11 OTHER HOME ..... 12 **PUBLIC SECTOR** MOH OFFICE/CLINIC 21 GOVT. HOSPITAL/ CLINIC ..... 22 MUNICIPAL CLINIC .... 23 MOBILE CLINIC ..... 24 OTHER GOVT._____ 25 SPECIFY **PRIVATE SECTOR** PRIVATE HOSPITAL .... 31 PRIVATE CLINIC ..... 32 OTHER PRIVATE ..... 33 _____ SPECIFY		
453	After delivery, did you receive a vitamin A dose (like this/any of these)? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 RECEIVED BUT NOT USED . . . . . 3 DON'T KNOW 8		
454	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 456) NO . . . . . 2 (SKIP TO 457)		
455	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 459)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 459)
456	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
457	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ☐ PREGNANT OR UNSURE ☐ (SKIP TO 459)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
458	Have you resumed sexual relations since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460)		
459	How long after the birth of (NAME) have you first had the sexual relations? IF LESS THAN 01 MONTH RECORD '00'	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
460	Did you ever breastfeed (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 467)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 467)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 467)
461A	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . . 000 HOURS 1 ☐☐ DAYS 2 ☐☐		
461B	Was the first milk discarded when you started brestfeeding ?	YES ..... 1 NO ..... 2 (SKIP TO 462) DON'T KNOW 8		
461C	Why did you throw away the first milk ? CIRCLE THE RELEVANT CODE	MILK BAD FOR BABY . . . . . 1 MILK YELLOW . ..... 2 BABY REFUSED ..... 3 HABIT . . . . . 4 ADVISED TO DO SO ... 5 OTHER _____ 6 (SPECIFY)		
461D	Who advised you to throw away the first milk ? Interviewer : Encircle all relevant codes	MOTHER . . . . . A MOTHER IN LAW ..... B FAMILY HEALTH MIDWIFE ..... C HOSPITAL STAFF ... D OTHER _____ X (SPECIFY)		
462	In the **04** months after delivery, or so far was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 464)		
462A	Reasons for giving other drinks other than breast Milk CIRCLE THE RELEVANT CODE	NOT ENOUGH MILK ..... 1 BABY CRIED TOO MUCH 2 TROAT AND LIPS WERE DRIED . . . . . 3 ADVISED BY FAMILY ..... 4 MEMBERS ADVISED BY ..... 5 HEALTH STAFF AS A MEDICINES ..... 6 MOTHER HAS TO REPORT TO THE JOB ..... 7 ANY OTHER 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
463	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) ..... A PLAIN WATER ..... B GLUCOSE WATER ..... C SUGAR-SALT-WATER SOLUTION ..... D FRUIT JUICE ..... E CORRIANDER WATER ..... F OTHER _____ X (SPECIFY)		
464	CHECK 404: IS CHILD LIVING?	LIVING DEAD (SKIP TO 466)	LIVING DEAD (SKIP TO 466)	LIVING DEAD (SKIP TO 466)
465A	Howlong did you practice **exclusive** breast feeding of (name)? IF LESS THAN 01 MONTH RECORD '00'	MONTHS . . . STILL ONLY BREAST FEEDING . . . . 77 (SKIP TO 468)	MONTHS . . .	MONTHS . . .
465B	Are you still breastfeeding (NAME)?	YES . . . . . 1 (SKIP TO 468) NO 2	YES . . . . . 1 (SKIP TO 468) NO 2	YES . . . . . 1 (SKIP TO 468) NO 2
466	For how many months did you breastfeed (NAME)? IF LESS THAN MONTH RECORD '00'	MONTHS . . . DON'T KNOW 98	MONTHS . . . DON'T KNOW 98	MONTHS . . . DON'T KNOW . . . 98
467	CHECK 404: IS CHILD LIVING?	LIVING DEAD (SKIP TO 468) (SKIP TO 470)	LIVING DEAD (SKIP TO 468) (SKIP TO 470)	LIVING DEAD (SKIP TO 468) (SKIP TO 470)
468	Check 465A OR 465B	Still breast feeding (SKIP TO 470) Not breast feeding (SKIP TO 469)	Still breast feeding (SKIP TO 470) Not breast feeding (SKIP TO 469)	Still breast feeding (SKIP TO 470) Not breast feeding (SKIP TO 469)
469	What is the main reason you never breastfed/stopped breastfeeding (NAME)? CIRCLE THE RELEVANT CODE	BECAME PREGNANT . . . . 01 NO MILK . . . . . 02 INSUFFICIENT MILK ... 03 NIPPLE INJURED ... 04 MOTHER ILL . . . . . 05 MOTHER BUSY . . . . 06 OTHER MILK/FOOD BETTER FOR BABY .. 07 BABY ILL . . . . . 08 BABY REFUSED 09 OTHER _____ 10 (SPECIFY)	BECAME PREGNANT . . . . . 01 NO MILK . . . . . 02 INSUFFICIENT MILK ... 03 NIPPLE INJURED .... . 04 MOTHER ILL . . . . . 05 MOTHER BUSY . . . . 06 OTHER MILK/FOOD BETTER FOR BABY .. 07 BABY ILL . . . . . 08 BABY REFUSED . . . . 09 OTHER _____ 10 (SPECIFY)	BECAME PREGNANT . . . . . 01 NO MILK . . . . . 02 INSUFFICIENT MILK ... 03 NIPPLE INJURED .... . 04 MOTHER ILL . . . . . 05 MOTHER BUSY . . . 06 OTHER MILK/FOOD BETTER FOR BABY .. 07 BABY ILL . . . . . 08 BABY REFUSED . . . 09 OTHER _____ 10 (SPECIFY)
470	At what age did you give solid/ semi solid foods other than milk to (name) ?	MONTHS STILL NOT GIVEN ... 77 (Skip to 471)	MONTHS STILL NOT GIVEN ... 77 (Skip to 471)	MONTHS STILL NOT GIVEN ... 77 (Skip to 471)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
470A	What was the 1st food introduced ? CIRCLE THE RELEVANT CODE	GRUEL WATER .... 1 RICE PASTE .... 2 BOILED VEGETABLE ..... 3 FRUIT JUICES .... 4 FRUITS (SMASHED) .... 5 BISCUITS .... 6 CEREALS (COMMERCIAL PREPARATION) 7 ANY OTHER .... 8 DON'T KNOW 9	GRUEL WATER .... 1 RICE PASTE .... 2 BOILED VEGETABLE ..... 3 FRUIT JUICES .... 4 FRUITS (SMASHED) .... 5 BISCUITS .... 6 CEREALS (COMMERCIAL PREPARATION) 7 ANY OTHER .... 8 DON'T KNOW 9	GRUEL WATER .... 1 RICE PASTE .... 2 BOILED VEGETABLE .... 3 FRUIT JUICES .... 4 FRUITS (SMASHED) .... 5 BISCUITS .... 6 CEREALS (COMMERCIAL PREPARATION) 7 ANY OTHER .... 8 DON'T KNOW 9
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

SECTION 5 - CHILD IMMUNIZATION AND HEALTH AND CHILD AND WOMAN'S NUTRITION

501 ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2001 OR LATER.
ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH.
(IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
502	LINE NUMBER FROM 212	LINE NUMBER	LINE NUMBER	LINE NUMBER . . . . .
503	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 549)	NAME _____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 549)	NAME _____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 549)
504	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 506) ← YES, NOT SEEN . . . . . 2 (SKIP TO 508) ← NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) ← YES, NOT SEEN . . . . . 2 (SKIP TO 508) ← NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) ← YES, NOT SEEN . . . . . 2 (SKIP TO 508) ← NO CARD 3
505	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 508) ← NO 2	YES . . . . . 1 (SKIP TO 508) ← NO 2	YES . . . . . 1 (SKIP TO 508) ← NO 2

506 Interviewer : Record the dates of immunizations from the card. Circle '2' if not given.
Write 44 in day column if card shows that a vaccination was given but not date is recorded.
If more than 2 vitamin A doses given record dates for most resent and second most resent doses.

	LAST BIRTH				NEXT-TO-LAST BIRTH				SECOND-FROM-LAST BIRTH			
	YEAR	MONTH	DAY	NOT		YEAR	MONTH	DAY	NOT		YEAR	MONTH	DAY	NOT
BCG → AT BIRTH				2	BCG				2	BCG				2
TRIPLE 1				2	TR1				2	TR1				2
POLIO 1 (AT 2 MONTHS)				2	P01				2	P01				2
HEPATITIS B1				2	HEB1				2	HEB1				2
TRIPLE 2				2	TR2				2	TR2				2
POLIO 2 (AT 4 MONTHS)				2	P02				2	P02				2
HEPATITIS B2				2	HEB2				2	HEB2				2
TRIPLE 3				2	TR3				2	TR3				2
POLIO 3 (AT 6 MONTHS)				2	P03				2	P03				2
HEPATITIS B3				2	HEB3				2	HEB3				2
MEASLES				2	MEA				2	MEA				2
VITAMIN A (DOSE 1) (AT 9 MONTHS)				2	VITA1				2	VITA1				2
JE 1 → AGE AT 1 YEAR				2	JE 1				2	JE 1				2
JE 2 → 1 - 4 WEEKS AFTER JE1				2	JE 2				2	JE 2				2
TRIPLE 4				2	TR4				2	TR4				2
POLIO 4 (AT 18 MONTHS)				2	P04				2	P04				2
VITAMIN A (DOSE 2) (AT 18 MONTHS)				2	VITA2				2	VITA2				2
JE 3 → 1 YEAR AFTER JE2				2	JE 3				2	JE 3				2
MEASLES RUBELLA (MR) → AT YEAR 3				2	MR				2	MR				2
OTHER (SPECIFY)				2	OTH				2	OTH				2
N.I.P.V.				2	N.I.P.V.				2	N.I.P.V.				2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
507	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign?	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO . . . . 2 (SKIP TO 510) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO . . . . 2 (SKIP TO 510) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO . . . . 2 (SKIP TO 510) DON'T KNOW 8
508	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases ?	YES . . . . 1 NO . . . . 2 (SKIP TO 516) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 516) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 516) DON'T KNOW 8

509 Has (name) had any of the following injections/vaccines

		LAST BIRTH			NEXT-TO-LAST BIRTH				SECOND-FROM-LAST BIRTH			
		YES	NO	DK		YES	NO	DK		YES	NO	DK
BCG	→ AT BIRTH	1	2	3	BCG	1	2	3	BCG	1	2	3
TRIPLE 1	AT 2 MONTHS	1	2	3	TR1	1	2	3	TR1	1	2	3
POLIO 1		1	2	3	P01	1	2	3	P01	1	2	3
HEPATITIS B1		1	2	3	HEB1	1	2	3	HEB1	1	2	3
TRIPLE 2	AT 4 MONTHS	1	2	3	TR2	1	2	3	TR2	1	2	3
POLIO 2		1	2	3	P02	1	2	3	P02	1	2	3
HEPATITIS B2		1	2	3	HEB2	1	2	3	HEB2	1	2	3
TRIPLE 3	AT 6 MONTHS	1	2	3	TR3	1	2	3	TR3	1	2	3
POLIO 3		1	2	3	P03	1	2	3	P03	1	2	3
HEPATITIS B3		1	2	3	HEB3	1	2	3	HEB3	1	2	3
MEASLES	AT 9 MONTHS	1	2	3	MEA	1	2	3	MEA	1	2	3
VITAMIN A (DOSE 1)		1	2	3	VITA1	1	2	3	VITA1	1	2	3
JE 1	→ AGE AT 1 YEAR	1	2	3	JE 1	1	2	3	JE 1	1	2	3
JE 2	→ 1 - 4 WEEKS AFTER JE1	1	2	3	JE 2	1	2	3	JE 2	1	2	3
TRIPLE 4	AT 18 MONTHS	1	2	3	TR4	1	2	3	TR4	1	2	3
POLIO 4		1	2	3	P04	1	2	3	P04	1	2	3
VITAMIN A (DOSE 2)		1	2	3	VITA2	1	2	3	VITA2	1	2	3
JE 3	→ 1 YEAR AFTER JE2	1	2	3	JE 3	1	2	3	JE 3	1	2	3
MEASLES RUBELLA (MR) AT YEAR 3		1	2	3	MR	1	2	3	MR	1	2	3
OTHER (SPECIFY)		1	2	3	OTH	1	2	3	OTH	1	2	3
N.I.P.V.		1	2	3	N. I. P. V	1	2	3	N. I. P. V	1	2	3

N.I.P.V. - National Immunization Programme Vaccination

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
510	At which national immunization day campaigns did (NAME) receive vaccinations during the last 5 years? If not received from campaigns record **6** (NO) RECORD ALL CAMPAIGNS MENTIONED	2005 ……………….. 1 2004 ……………….. 2 2003 ……………….. 3 2002 ……………….. 4 2001 ……………….. 5 NO ……………….. 6 DON'T KNOW ………… 8	2005 ……………….. 1 2004 ……………….. 2 2003 ……………….. 3 2002 ……………….. 4 2001 ……………….. 5 NO ……………….. 6 DON'T KNOW ………… 8	2005 ……………….. 1 2004 ……………….. 2 2003 ……………….. 3 2002 ……………….. 4 2001 ……………….. 5 NO ……………….. 6 DON'T KNOW ………… 8
511	RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF VACCINATION CARD NOT AVAILBLE SKIP TO 516	KG ☐ ☐☐☐ NOT RECORD IN THE CARD 9.998	KG ☐ ☐☐☐ NOT RECORD IN THE CARD 9.998	KG ☐.☐☐☐ NOT RECORD IN THE CARD 9.998
516	In the last seven days, did (NAME) take syrup with iron ?	YES . . . . 1 NO . . . . 2 DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
517	Has (NAME) taken any drug for intestinal worms in the past six months?	YES . . . . 1 NO . . . . 2 DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
518	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . 1 NO . . . . 2 (SKIP TO 533) ←┤ DON'T KNOW . . . 8	YES . . . . 1 NO . . . . 2 (SKIP TO 533) ←┤ DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 533) ←┤ DON'T KNOW 8
519	Was she/he had watery diarrhea or blood and muscus in stools ?	WATERY DIARRHEA 1 BLOOD AND MUSCUS IN TOOLS ………. 2 BOTH ………………. 3 DON'T KNOW ……. 8	WATERY DIARRHEA 1 BLOOD AND MUSCUS IN TOOLS ………. 2 BOTH ………………… 3 DON'T KNOW ………. 8	WATERY DIARRHEA 1 BLOOD AND MUSCUS IN TOOLS ………. 2 BOTH ………………… 3 DON'T KNOW ………. 8
520	When (name) had diareihoea was he/she breast feed less them usual, about the same amount or more than usual ? IF CHILD STOP BREAST FEEDING LONG AGO CIRCLE '1'	STOP BREAST FEEDING LONG AGC ………. 1 NOT GIVEN ………… 2 MUCH LESS ………. 3 SOME WHAT LESS 4 ABOUT THE SAME … 5 MORE ………………. 6 DON'T KNOW ………. 8	STOP BREAST FEEDING LONG AGO ………. 1 NOT GIVEN ………….. 2 MUCH LESS ………. 3 SOME WHAT LESS … 4 ABOUT THE SAME … 5 MORE ………………… 6 DON'T KNOW ………. 8	STOP BREAST FEEDING LONG AGO ………. 1 NOT GIVEN ………….. 2 MUCH LESS ………. 3 SOME WHAT LESS … 4 ABOUT THE SAME … 5 MORE ………………… 6 DON'T KNOW ………. 8
520A	Now I would like to know how much (NAME) was given to drink during the diarrhea. Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	NEVER GIVE LIQUID …. 1 NOTHING TO DRINK …. 2 MUCH LESS …………… 3 SOMEWHAT LESS …. 4 ABOUT THE SAME …….. 5 MORE …………………. 6 DON'T KNOW …………… 8	NEVER GIVE LIQUID …….. 1 NOTHING TO DRINK …….. 2 MUCH LESS ………………. 3 SOMEWHAT LESS ………… 4 ABOUT THE SAME ………… 5 MORE ……………………… 6 DON'T KNOW ………………. 8	NEVER GIVE LIQUID …… 1 NOTHING TO DRINK …… 2 MUCH LESS …………. 3 SOMEWHAT LESS …… 4 ABOUT THE SAME …… 5 MORE ………………….. 6 DON'T KNOW ………….. 8
521	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	NEVER GAVE FOOD ….. 1 STOPPED FOOD …….. 2 MUCH LESS ………….. 3 SOMEWHAT LESS …….. 4 ABOUT THE SAME …….. 5 MORE ………………….. 6 DON'T KNOW …………… 8	NEVER GAVE FOOD ….. 1 STOPPED FOOD ………… 2 MUCH LESS …………… 3 SOMEWHAT LESS …….. 4 ABOUT THE SAME …….. 5 MORE …………………… 6 DON'T KNOW …………… 8	NEVER GAVE FOOD ….. 1 STOPPED FOOD ………… 2 MUCH LESS …………… 3 SOMEWHAT LESS …….. 4 ABOUT THE SAME …….. 5 MORE …………………… 6 DON'T KNOW …………… 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
522	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 527) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 527) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 527) ←
523	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** MOH CLINIC ..... A GOVT. HOSPITAL/ CLINIC ..... B MOBILE CLINIC ... C PUBLIC HEALTH MIDWIFE ..... D OTHER GOVT ..... E _____ (SPECIFY) **PRIVATE SECTOR** PVT. HOSPITAL/ CLINIC . . . . . F PHARMACY ..... G PVT DOCTOR ..... H MOBILE CLINIC ... I OTHER PRIVATE J _____ (SPECIFY) **OTHER SOURCE** GROCERY ..... K	**PUBLIC SECTOR** MOH CLINIC ..... A GOVT. HOSPITAL/ CLINIC ..... B MOBILE CLINIC ... C PUBLIC HEALTH MIDWIFE ..... D OTHER GOVT. ..... E _____ (SPECIFY) **PRIVATE SECTOR** PVT. HOSPITAL/ CLINIC . . . . . F PHARMACY ..... G PVT DOCTOR . . . H MOBILE CLINIC ... I OTHER PRIVATE ... J _____ (SPECIFY) **OTHER SOURCE** GROCERY ..... K	**PUBLIC SECTOR** MOH CLINIC ..... A GOVT. HOSPITAL/ CLINIC ..... B MOBILE CLINIC ... C PUBLIC HEALTH MIDWIFE ..... D OTHER GOVT. ..... E _____ (SPECIFY) **PRIVATE SECTOR** PVT. HOSPITAL/ CLINIC . . . . . F PHARMACY ..... G PVT DOCTOR ..... H MOBILE CLINIC ... I OTHER PRIVATE ... J _____ (SPECIFY) **OTHER SOURCE** GROCERY ..... K
524	CHECK 523:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 526) ←	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 526) ←	TWO OR s CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 526) ←
525	Where did you first seek advice or treatment? USE LETTER CODE FROM 523.	PLACE / PERSON . . . . . ☐	PLACE / PERSON . . . . . ☐	PLACE / PERSON . . . . . ☐
526	How many days after the diarrhea began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐
527	Does (NAME) still have diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
528	Was he/she given any of the following to drink at any time since he/she started having the diarrhea:	YES NO DK	YES NO DK	YES NO DK
	a A fluid made from a special packet called [JEEWANI)	1 2 8	1 2 8	1 2 8
	b A Health officers-recommended homemade fluid?	1 2 8	1 2 8	1 2 8
529	Was anything (else) given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 533) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 533) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 533) ← DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
530	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	CAPSULES/PILL OR SYRUP .... A INJECTION .... B MEDICINE WITH SALINE .... C HOME REMEDY/ ... D HERBAL MEDICINE OTHER __________ X (SPECIFY)	CAPSULES/PILL OR SYRUP .... A INJECTION .... B MEDICINE WITH SALINE .... C HOME REMEDY ...... D HERBAL MEDICINE OTHER __________ X (SPECIFY)	CAPSULES/PILL OR SYRUP .... A INJECTION .... B MEDICINE WITH SALINE .... C HOME REMEDY .... D HERBAL MEDICINE OTHER __________ X (SPECIFY)
533	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
534	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . 1 NO . . . . 2 (SKIP TO 537) ←┘ DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 537) ←┘ DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 537) ←┘ DON'T KNOW 8
535	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . 1 NO . . . . 2 (SKIP TO 537) ←┘ DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 537) ←┘ DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 537) ←┘ DON'T KNOW 8
536	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . 3 OTHER __________ 6 (SPECIFY) DON'T KNOW 8	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . 3 OTHER __________ 6 (SPECIFY) DON'T KNOW 8	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . 3 OTHER __________ 6 (SPECIFY) DON'T KNOW 8
537	CHECK 533: (NAME) HAD FEVER?	YES ☐ ↓ NO OR DK ☐ ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 549)	YES ☐ ↓ NO OR DK ☐ ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 549)	YES ☐ ↓ NO OR DK ☐ ↓ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 549)
537A	When (name) had fiver was he/she breast feed less them usual, about the same amount or more than usual ? IF CHILD STOP BREAST FEEDING LONG AGO CIRCLE '1'	STOP BREAST FEEDING LONG AGC .... 1 NOT GIVEN .... 2 MUCH LESS .... 3 SOME WHAT LESS 4 ABOUT THE SAME ... 5 MORE .... 6 DON'T KNOW 7	STOP BREAST FEEDING LONG AGO .... 1 NOT GIVEN .... 2 MUCH LESS .... 3 SOME WHAT LESS ... 4 ABOUT THE SAME ... 5 MORE .... 6 DON'T KNOW 7	STOP BREAST FEEDING LONG AGO .... 1 NOT GIVEN .... 2 MUCH LESS .... 3 SOME WHAT LESS ... 4 ABOUT THE SAME ... 5 MORE .... 6 DON'T KNOW 7
538	Now I would like to know how much (NAME) was given to drink during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	NEVER GIVE LIQUID ..... 1 NOTHING TO DRINK ..... 2 MUCH LESS .... 3 SOMEWHAT LESS .... 4 ABOUT THE SAME .... 5 MORE .... 6 DON'T KNOW 7	NEVER GIVE LIQUID .... 1 NOTHING TO DRINK .... 2 MUCH LESS .... 3 SOMEWHAT LESS .... 4 ABOUT THE SAME .... 5 MORE .... 6 DON'T KNOW 7	NEVER GIVE LIQUID .... 1 NOTHING TO DRINK .... 2 MUCH LESS .... 3 SOMEWHAT LESS .... 4 ABOUT THE SAME .... 5 MORE .... 6 DON'T KNOW 7

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________________	NEXT-TO-LAST BIRTH NAME ________________	SECOND-FROM-LAST BIRTH NAME ________________
539	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	NEVER GAVE FOOD ..... 1 STOPPED FOOD .... 2 MUCH LESS .... 3 SOMEWHAT LESS .... 4 ABOUT THE SAME .... 5 MORE .... 6 DON'T KNOW 7	NEVER GAVE FOOD ..... 1 STOPPED FOOD .... 2 MUCH LESS .... 3 SOMEWHAT LESS .... 4 ABOUT THE SAME .... 5 MORE .... 6 DON'T KNOW 7	NEVER GAVE FOOD ..... 1 STOPPED FOOD .... 2 MUCH LESS .... 3 SOMEWHAT LESS .... 4 ABOUT THE SAME .... 5 MORE .... 6 DON'T KNOW 7
540	Did you seek advice or treatment for the illness from any source?	YES . . . . 1 NO . . . . 2 (SKIP TO 547A) ←	YES . . . . 1 NO . . . . 2 (SKIP TO 547A) ←	YES . . . . 1 NO . . . . 2 (SKIP TO 547A) ←
541	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. ____________________ (NAME OF PLACE(S))	**PUBLIC SECTOR** MOH CLINIC .... A GOVT. HOSPITAL/ CLINIC .... B MOBILE CLINIC ... C PUBLIC HEALTH MIDWIFE .... D OTHER GOVT....... E ____________ **PRIVATE SECTOR** PVT. HOSPITAL/ CLINIC .... F PHARMACY .... G PVT DOCTOR .... H MOBILE CLINIC ... I OTHER PRIVATE J ____________ (SPECIFY) **OTHER SOURCE** GROCERY .... K	**PUBLIC SECTOR** MOH CLINIC A GOVT. HOSPITAL/ CLINIC B MOBILE CLINIC C PUBLIC HEALTH MIDWIFE D OTHER GOVT. E ____________ **PRIVATE SECTOR** PVT. HOSPITAL/ CLINIC .... F PHARMACY ... . . . G PVT DOCTOR ...... H MOBILE CLINIC ... I OTHER PRIVATE ... J ____________ (SPECIFY) **OTHER SOURCE** GROCERY .... K	**PUBLIC SECTOR** MOH CLINIC A GOVT. HOSPITAL/ CLINIC B MOBILE CLINIC C PUBLIC HEALTH MIDWIFE D OTHER GOVT. E ____________ **PRIVATE SECTOR** PVT. HOSPITAL/ CLINIC . . . . F PHARMACY ... . . . G PVT DOCTOR .... H MOBILE CLINIC ... I OTHER PRIVATE ... J ____________ (SPECIFY) **OTHER SOURCE** GROCERY .... K
542	CHECK 541:	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 544) ←	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 544) ←	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 544) ←
543	Where did you first seek advice or treatment? USE LETTER CODE FROM 541.	FIRST PLACE / PERSON . . . . ☐	FIRST PLACE / PERSON . . . . ☐	FIRST PLACE / PERSON . . . . ☐
544	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
545	During the illness was (name)'s blood sample taken for malaria ?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
546	At any time during the illness, did name take any during for the illness?	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547A) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547A) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547A) DON'T KNOW 8
547	What drug did (name) take ? RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS ..... A ANTIBIOTIC DRUGS ... B OTHER DRUGS ..... X DON'T KNOW ..... Z	ANTIMALARIAL DRUGS ..... A ANTIBIOTIC DRUGS ... B OTHER DRUGS ..... X DON'T KNOW ..... Z	ANTIMALARIAL DRUGS ..... A ANTIBIOTIC DRUGS ... B OTHER DRUGS ..... X DON'T KNOW ..... Z
547A	Is (NAME) still sick with a (fever/ cough)? RECORD ALL MENTIONED.	FEVER ONLY . . . . . 1 COUGH ONLY . . . 2 BOTH FEVER AND COUGH . . . . . 3 NO, NEITHER . . . . . 4 DON'T KNOW . . . 8	FEVER ONLY . . . . . 1 COUGH ONLY . . . 2 BOTH FEVER AND COUGH . . . . . 3 NO, NEITHER . . . . . 4 DON'T KNOW . . . 8	FEVER ONLY . . . . . 1 COUGH ONLY . . . 2 BOTH FEVER AND COUGH . . . . . 3 NO, NEITHER . . . . . 4 DON'T KNOW . . . 8
548		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 549.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 549.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 549.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
549	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2001 OR LATER LIVING WITH THE RESPONDENT		
	ONE OR MORE ☐ NONE ☐ → **552**		
550	The last time (NAME OF YOUNGEST CHILD) passed stools, what was done to dispose of the stools? CIRCLE THE RELEVANT CODE	CHILD USED TOILET OR LATRINE . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	
551	CHECK 528(a). IF NO CIRCLE, OR CIRCLE '2' OR '8' ☐ IF CIRCLE '1' ☐ → **553**		
552	Have you ever heard of a special product called jeewani a pre-packaged ORS liquid you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
553	CHECK 215 AND 218, ALL ROWS: HAS AT LEAST ONE CHILD BORN IN 2003 OR LATER AND LIVING WITH HER ☐ RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 554) _____ (NAME) DOES NOT HAVE ANY CHILDREN BORN IN 2003 OR LATER AND LIVING WITH HER ☐ → **611**		
554	Now I would like to ask you about liquids or foods (NAME FROM 553) had yesterday during the day or at night. Did (NAME FROM 553) (drink/eat): Plain water? Commercially produced infant formula? Infusion Sugar salt water solution ORS Liquid Any baby cereal Any (other) porridge or gruel?	YES NO DK PLAIN WATER ..... 1 2 8 FORMULA ..... 1 2 8 INFUSION ..... 1 2 8 SUGAR SALT WATER ..... 1 2 8 ORS LIGUID ..... 1 2 8 BABY CEREAL ..... 1 2 8 OTHER PORRIDGE/GRUEL. . 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

555 Now I would like to ask you about (other) liquids or foods that (NAME FROM 553) or you may have had yesterday during the day or at night. I am interested in whether your child or you had the item even if it was combined with other foods.

Did (NAME FROM 553)/you drink (eat):		CHILD YES NO DK	MOTHER YES NO DK
a. Milk such as tinned, powdered, or fresh animal milk?	**a**	1 2 8	1 2 8
b Tea or coffee?	**b**	1 2 8	1 2 8
c. Sugary drinks such as sodas or fruit juices?	**c**	1 2 8	1 2 8
d. Any other liquids?	**d**	1 2 8	1 2 8
e. Bread, rice, noodles, or other foods made from grains?	**e**	1 2 8	1 2 8
f. Pumpkin, carrots, squash or that are yellow or orange inside?	**f**	1 2 8	1 2 8
g. White potatoes, sweet potatoes, white yams, manioc, cassava, or any other foods made from roots?	**g**	1 2 8	1 2 8
h. Any dark green, leafy vegetables?	**h**	1 2 8	1 2 8
i. Ripe mangoes, papayas or Manderin	**i**	1 2 8	1 2 8
j. Any other fruits or vegetables?	**j**	1 2 8	1 2 8
k. Liver	**k**	1 2 8	1 2 8
l. Beef, pork, goat.	**l**	1 2 8	1 2 8
m Chicken.	**m**	1 2 8	1 2 8
n. Eggs?	**n**	1 2 8	1 2 8
oi. Fresh fish, prawns,lobster, cuttle fish	**oi**	1 2 8	1 2 8
oii. Dried fish, sprats etc.	**oii**	1 2 8	1 2 8
p. Beans, peas, green beans, gram,dhall, lentils or any foods made from these? (like soya meat)	**p**	1 2 8	1 2 8
q. Any nuts?	**q**	1 2 8	1 2 8
r. Cheese, yogurt or other milk products?	**r**	1 2 8	1 2 8
s. Any oil, fats, or butter, or foods made with any of these?	**s**	1 2 8	1 2 8
t. Any sugary foods such as chocolates, sweets, toffies cakes, or biscuits?	**t**	1 2 8	1 2 8
u. Any other solid or semi-solid food?	**u**	1 2 8	

556 CHECK 554 (LAST 2 CATEGORIES) AND 555 (CATEGORIES e THROUGH u FOR CHILD):

AT LEAST ONE "YES' ☐ ↓

NOT A SINGLE "YES" ☐ → 611

557 How many times did (NAME FROM 553) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night?
IF 7 OR MORE TIMES, RECORD '7'.

NUMBER OF TIMES . . . . . ☐☐

DON'T KNOW 8

SECTION 6 - SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
612	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. Did you have first sexual intercourse for the very first time with your first husband/partner ? If so circle '95' If no How old were you when you had sexual intercourse for the very first time with another person ?	FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER . . . . . 95 AGE IN YEARS ☐☐	
615	The first time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER . . . 8	
616	How old was the person you first had sexual intercourse with?	AGE IN YEARS . . . . . ☐☐ DON'T KNOW 98	→ **619**
617	Was this person older than you, younger than you, or about the same age as you?	OLDER . . . . . 1 YOUNGER . . . . . 2 ABOUT THE SAME AGE . . . . . 3 DON'T KNOW/DON'T REMEMBER . . . 8	→ **619**
618	Would you say this person was ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER . . . . . 1 LESS THAN TEN YEARS OLDER . . . 2 OLDER, UNSURE HOW MUCH 3	
619	When was the last time you had sexual intercourse? IT TO DAY CIRCLE '1' AND RECORD '00' IF LESS THAN 7 DAYS CIRCLE '1' AND RECORD NO. OF DAYS IF MORE THAN OR EQUAL 7 DAYS (UP TO 27 DAYS) CIRCLE 2 AND RECORD NO. OF WEEKS IF MORE THAN OR EQUAL 4 WEEKS CIRCLE 3 AND RECORD NO. OF MONTHS. IF MORE THAN ONE MONTH RECORD NO. OF COMPLETED MONTHS. _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	
620	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
621	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ **701**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
622	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVT. HOSPITAL ..... A GOVT. CLINIC (FIELD) ..... B FAMILY HEALTH BUREAU ..... C MOBILE CLINIC ..... D PUBLIC HEALTH MIDWIFE ..... E HEALTH VOLUNTEER ..... F OTHER PUBLIC _____ G (SPECIFY) **PRIVATE SECTOR** PRIVATE HOSPITAl ..... H PRIVATE DOCTOR ..... I PHARMACY ..... J OTHER PRIVATE_____ K (SPECIFY) **OTHER SOURCE** GROCERY ..... L FRIEND/RELATIVE ..... M OTHER PRIVATE_____ N (SPECIFY)	
623	If you wanted to, could you yourself get a condom?	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE 8	

SECTION 7 - FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 311/311A: NEITHER STERILIZED HE OR SHE STERILIZED		→ 712
702	CHECK 226: NOT PREGNANT OR UNSURE: Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? PREGNANT: Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . . . . 3 UNDECIDED/DON'T KNOW: AND PREGNANT . . . . . 4 AND NOT PREGNANT OR UNSURE 5	→704 →712 →709 →708
703	CHECK 226: NOT PREGNANT OR UNSURE: How long would you like to wait from now before the birth of (a/another) child? Would you like to have a child now. PREGNANT: After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→708
704	CHECK 226: NOT PREGNANT OR UNSURE PREGNANT		→ 709
705	CHECK 310: USING A CONTRACEPTIVE METHOD? NOT ASKED NOT CURRENTLY USING CURRENTLY USING		→ 712
706	CHECK 703: NOT ASKED 24 OR MORE MONTHS OR 02 OR MORE YEARS 00-23 MONTHS OR 00-01 YEAR		→ 709

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
707	CHECK 702: WANTS TO HAVE A/ANOTHER CHILD You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? WANTS NO MORE/ NONE You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? RECORD ALL REASONS MENTIONED.	FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . A INFREQUENT SEX . . . . . B MENOPAUSAL/HYSTERECTOMY . C SUBFECUND/INFECUND . . . . . D POSTPARTUM AMENORRHEIC . . . E BREASTFEEDING . . . . . F FATALISTIC . . . . . G OPPOSITION TO USE RESPONDENT OPPOSED . . . . . H HUSBAND/PARTNER OPPOSED . I OTHERS OPPOSED . . . . . J RELIGIOUS PROHIBITION . . . . . K LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . L KNOWS NO SOURCE . . . . . M METHOD-RELATED REASONS HEALTH CONCERNS . . . . . N FEAR OF SIDE EFFECTS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q INCONVENIENT TO USE . . . . . R INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . S OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
708	CHECK 310: USING A CONTRACEPTIVE METHOD? NOT ASKED NO, NOT CURRENTLY USING YES, CURRENTLY USING → 712		
709	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 711
710	Which contraceptive method would you prefer to use? CIRCLE THE RELEVANT CODE	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 PILL . . . . . 03 IUD . . . . . 04 INJECTABLES . . . . . 05 IMPLANTS . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 LACTATIONAL AMEN. METHOD . . . . . 09 RHYTHM METHOD . . . . . 10 WITHDRAWAL . . . . . 11 OTHER _____ 96 (SPECIFY) UNSURE 98	→ 712

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	What is the main reason that you think you will not use a contraceptive method at any time in the future? CIRCLE THE MAIN RELEVANT CODE	FERTILITY-RELATED REASONS INFREQUENT SEX/NO SEX ..... 21 MENOPAUSAL/HYSTERECTOMY ... 22 SUBFECUND/INFECUND ..... 23 WANTS AS MANY CHILDREN AS POSSIBLE ..... 24 OPPOSITION TO USE RESPONDENT OPPOSED ..... 31 HUSBAND/PARTNER OPPOSED ... 32 OTHERS OPPOSED ..... 33 RELIGIOUS PROHIBITION ..... 34 LACK OF KNOWLEDGE KNOWS NO METHOD ..... 41 KNOWS NO SOURCE ..... 42 METHOD-RELATED REASONS HEALTH CONCERNS ..... 51 FEAR OF SIDE EFFECTS ..... 52 LACK OF ACCESS/TOO FAR ... 53 COSTS TOO MUCH ..... 54 INCONVENIENT TO USE ..... 55 INTERFERES WITH BODY'S NORMAL PROCESSES ..... 56 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→712
712	CHECK 216: HAS LIVING CHILDREN ☐ NO LIVING CHILDREN ☐ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE ..... 00 NUMBER ..... ☐☐ OTHER _____ 96 (SPECIFY)	→714 →714
713	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
714	In the last few months have you heard about family planning: On the radio? On the television? In a newspaper or magazine?	YES NO RADIO ..... 1 2 TELEVISION ..... 1 2 NEWSPAPER OR MAGAZINE ... 1 2	
715	CHECK 114: YES, CURRENTLY MARRIED ☐ YES, LIVING WITH A MAN ☐ NO, NOT IN UNION/ HUSBAND DEAD ☐		→ 801

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
716	CHECK 311/311A: NEITHER CODE B, G, NOR K CIRCLED, BUT SOME OTHER CODE(S) CIRCLED CODE B, G, OR K CIRCLED → **718** NO CODE CIRCLED → **719**		
717	Does your husband/partner know that you are using a method of family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
718	CHECK 311/311A: NEITHER STERILIZED HE OR SHE STERILIZED → **801**		
719	Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8 - HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 114 AND 115: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN ☐ →		**803**
802	How old was your husband/partner on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) husband/partner ever attend school?	YES . . . . . 1 NO 2	→ **806**
804	What was the highest level of school he attended: primary, secondary, higher or degree CIRCLE RELEVANT CODE CHECK COLUMN 14 IN SECTION A IF 'DON'T KNOW' FOR THE COLUMN 13 OR 14 IN SECTION A PROBE AGAIN & CIRCLE THE RELEVANT CODE.	PRIMARY(GRADE 1-5) . . . . . 1 SECONDARY (GRADE 6-10) . . . . . 2 HIGHER . . . . . 3 PASSED G.C.E. (O/L) PASSED GRADE 12 PASSED G.C.E. (A/L) DEGREE AND ABOVE . . . . . 4 DON'T KNOW (19) OR PRE-SCHOOL (88) 8	→ **806** → **806**
805	What was the highest (grade/form/year) he completed at that level? CHECK COLUMN 14 IN SECTION A & RECORD RELEVANT GRADE	GRADE . . . . . ☐☐ DON'T KNOW 98	
806	CHECK 801: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ What is your husband's/ partner's occupation? That is, what kind of work does he mainly do? FORMERLY MARRIED/ LIVED WITH A MAN ☐ ↓ What was your (last) husband's/ partner's occupation? That is, what kind of work did he mainly do?	_____ ☐☐ _____ _____	
807	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ **811**
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ **811**
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave or any other such reason?	YES . . . . . 1 NO 2	→ **811**
810	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ **818**
811	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
812	CHECK 811: WORKS IN AGRICULTURE ☐ ↓ DOES NOT WORK IN AGRICULTURE ☐ →		**814**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND . . . . . 1 FAMILY LAND . . . . . 2 RENTED LAND . . . . . 3 SOMEONE ELSE'S LAND 4	→ 815
814	Do you do this work for a member of your family, for someone else(private sector), government or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 PRIVET SECTOR/GOVERNMENT ..... 2 SELF-EMPLOYED 3	
815	Do you usually work at home or away from home?	HOME . . . . . 1 AWAY 2	
816	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR ... 2 ONCE IN A WHILE 3	
817	Are you paid or receive income in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
818	CHECK 114: CURRENTLY MARRIED/LIVING WITH A MAN ↓ NOT IN UNION →		827
819	CHECK 817: CODE 1 OR 2 CIRCLED ↓ CODE 3 OR 4 IN 817 OR CODE 2 IN 810 →		822
820	Who decides how the money you earn will be used: mainly you, mainly your husband/partner, or you and your husband/partner jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER 6	
821	Would you say that the money that you earn is more than what your husband/partner earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 DON'T KNOW 8	
822	Who decides how your husband's/partner's earnings will be used: mainly you, mainly your husband/partner, or you and your husband/partner jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER 6	
823	Who usually makes decisions about health care for yourself: mainly you, mainly your husband/partner, you and your husband/partner jointly, or someone else?	RESPONDENT = 1 HUSBAND/PARTNER = 2 RESPONDENT & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 1 2 3 4	
824	Who usually makes decisions about making major household purchases?	1 2 3 4	
825	Who usually makes decisions about making purchases for daily household needs?	1 2 3 4	
826	Who usually makes decisions about visits to your family or relatives?	1 2 3 4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
827	Presence of others at this point (present and listening, present but not listening, or not present)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES . . . 1 2 3	
828	Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 9 - HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 942
902	Can people reduce their chance of getting the HIV virus by abstaining from sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people reduce their chances of getting the HIV virus by having just one sex partner who is not infected and who has no other partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chances of getting the HIV virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the HIV virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
906	Can people get the HIV virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Can people get the HIV virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Do you think whether person can get HIV virus from an infected blood transfusion ?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
909	Do you think whether person can get HIV virus by getting injections with a needle without sterilized that has been already used by someone else who is infected with the HIV ?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
910	Is it possible for a healthy-looking person to have the HIV virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
911	Can the virus that causes HIV be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREGNANCY 1 2 8 DURING DELIVERY 1 2 8 BREASTFEEDING 1 2 8	
912	CHECK 911: AT LEAST ONE 'YES' ↓	OTHER →	→ **914**
913	Is there any special drug that a doctor can give to a woman infected with the HIV virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
914	Have you heard about special antiretroviral drugs that people infected with the HIV virus can get from a doctor to help them live longer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
929	Do you know any blood test that can get tested for HIV virus ?	YES . . . . . 1 NO 2	
929A	Do you know of a place where people can go to get tested for the HIV virus?	YES 1 NO 2	→ **931**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
930	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVERNMENT HOSPITAL/CLINIC A MOH CLINIC . . . . . B FAMILY PLANNING CLINIC . . . . . C STD CLINIC . . . . . D MOBILE CLINIC . . . . . E OTHER PUBLIC _____ F (SPECIFY) **PRIVATE SECTOR** SPECIALIST . . . . . G PRIVATE DOCTOR (DISPENSARY) H PRIVATE HOSPITAL/CLINIC . . . . . I PHARMACY/GROCERY . . . . . J MOBILE CLINIC . . . . . K OTHER PRIVATE . . . . . L _____ (SPECIFY)	
931	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the HIV virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
932	If a member of your family got infected with the HIV virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE 8	
933	If a member of your family became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE 8	
934	In your opinion, if a teacher has the HIV virus but is not sick, should he/she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DON'T KNOW/NOT SURE 8	
942	CHECK 901: HEARD ABOUT AIDS ☐ → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS ☐ → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
944	CHECK 942: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ NO ☐ → **946**		
945	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
946	Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
947	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
948	CHECK 945, 946, AND 947: HAS HAD AN INFECTION (ANY 'YES') ☐ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ → **951**		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
949	The last time you had (PROBLEM FROM 945/946/947), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ **951**
950	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVERNMENT HOSPITAL/CLINIC A MOH CLINIC . . . . . B FAMILY PLANNING CLINIC ..... C STD CLINIC . . . . . D MOBILE CLINIC . . . . . E OTHER PUBLIC _____ F (SPECIFY) **PRIVATE SECTOR** SPECIALIST ..... G PRIVATE DOCTOR (DISPENSARY) H PRIVATE HOSPITAL/CLINIC . . . . . I PHARMACY/GROCERY ..... J MOBILE CLINIC ..... K OTHER PRIVATE ..... L _____ (SPECIFY)	

SECTION 10 - OTHER HEALTH ISSUES

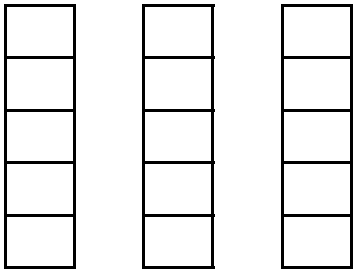
1001 DOES ANY MEMBER USUALLY LIVE IN THE HOUSEHOLD INCLUDING FAMILY MEMBERS SMOKE, CONSUME ALCOHOL, TAKE DRUGS REGULARLY ?

YES ☐ → COMPLETE QUES. NO. 1001

NO ☐ → GO TO QUES. NO. 1002

Please tell me whether there is any person among people who usually live including family members, consumes alcohol, takes drugs or smokes ? (In every possible time, try to get information from the relevant person) Record the number which is relevant to name mentioned in the section A, under the serial number here.		ANSWERED BY	Smoking C				
		Relevant person 1 Other .. 2 RECORD RELEVANT CODE	Smokes .. 1 Does not smokes .. 2 go to D ↲	Smokes Daily ..... 1 One day per week ..... 2 Few days per weeks ..... 3 Few days per month ..... 4 Occasionally .. 5 Not known .. 9	How old were you when started smorking ? IF DOES NOT KNOW RECORD '99'	What type of tobacco products mostly smokes ? Cigars ..... 1 Suruttu ..... 2 Beedi ..... 3 Tobacco pipes ..... 4 Ganja suruttu ..... 5 Other ..... 6 Not known .. 9 RECORD RELEVANT CODE	If code 1 circled in C4, how many cigeretts did you smoke in the last 24 hours ? IF DOES NOT KNOW RECORD '99'
Serial No	Name		C1	C2	C3	C4	C5
					☐☐		
					☐☐		
					☐☐		
					☐☐		
					☐☐		
					☐☐		
					☐☐		
					☐☐		
					☐☐		

Taking drugs D				Consuming Alcohol E			
Takes .. 1 drugs Does .. 2 not take drugs go to E ← RECORD RELEVANT CODE	Takes Daily ..... 1 One day per week ..... 2 Few days per weeks ..... 3 Few days per month ..... 4 Occasionally .. 5 Not known .. 9 RECORD RELEVANT CODE	How old were you when started taking drugs ? IF DOES NOT KNOW RECORD '99'	What type of drugs mostly takes ? Heroin ..... 1 Cocane ..... 2 Marjuwana .. 3 Drug toffee ..... 4 Other ..... 5 .. 9 RECORD RELEVANT CODE	Consumes 1 Alcohol Does ..... 2 not consumes alcohol go to next person ← IF NO MORE PERSONS GO TO 1002	Consumes Alcohol Daily ..... 1 One day per week ..... 2 Few days per weeks ..... 3 Few days per month ..... 4 Occasionally .. 5 Not known ... 9 RECORD RELEVANT CODE	How old were you when started consuming alcohol ? If does not know record ... 99	What type of alcohol mostly consumes ? Wisky/ Brandy .. 1 Arack ..... 2 (standard) Beer ..... 3 Toddy (coconut/ kithul) ..... 4 Kasippu ..... 5 Pradeepa/ wine sprit 6 Other ..... 7 Not known .. 9 RECORD RELEVANT CODE
D1	D2	D3	D4	E1	E2	E3	E4

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1002	What is your most preferred source of information on health ? RECORD ALL MENTIONED IN THE BOXES **Health Personnel** DOCTOR (WESTERN) ..... A SPECIALIST (WESTERN) ..... B DOCTOR (AYURVEDIC) ..... C PUBLIC HEALTH MIDWIFE ..... D OTHER _____ X (SPECIFY) **Place** MOH CLINIC ..... A GOVT. HOSPITAL/CLINIC ..... B PRIVATE HOSPITAL/DISPENSARY ..... C PRIVATE HOSPITAL ..... D AYURVEDIC HOSPITAL/DISPENSARY ..... E OTHER _____ X (SPECIFY) **Mass Media** NEWS PAPER ..... A MAGAZINE ..... B REDIO ..... C TELEVISION ..... D OTHER (SPECIFY) _____ X	HEALTH PERSONAL / PLACE / MASS MEDIA 	
1003	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE . . . . . 00 → **1007**	
1004	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE . . . . . 00 → **1007**	
1005	The last time you had an injection given to you by a health worker, where did you go to get the injection? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** MOH CLINIC . . . . . 11 GOVT. HOSPITAL/CLINIC . . . . . 12 OTHER PUBLIC _____ 13 (SPECIFY) **PRIVATE SECTOR** PRIVATE HOSPITAL/CLINIC 21 PRIVATE DOCTOR . . . . . 22 DENTAL SURGORY . . . . . 23 PHARMACY . . . . . 24 OTHER PRIVATE 25 _____ (SPECIFY)	
1006	Did the person who gave you that injection take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1007	Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO . . . . . 2 → **1011**	
1008	How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A THROUGH SHARING UTENSILS . . . . . B THROUGH TOUCHING A PERSON WITH TB . . . . . C THROUGH FOOD . . . . . D THROUGH SEXUAL CONTACT . . . . . E THROUGH MOSQUITO BITES . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1009	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1010	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/ DEPENDS 8	
1011	Do you know about common cancers that can occur among females ? If yes,	YES ..... 1 NO ..... 2 → **1013**	
1012	What are the common cancers you have heard of ? PROBE TO IDENTIFY ALL ANSWERS. CIRCLE ALL MENTIONED.	BREAST CANCER ..... A CERVICAL CANCER ..... B CANSER OF WOMB ..... C ORAL CANCER ..... D ANY OTHER _____ X (SPECIFY) DON'T' KNOW ..... Z → **1016**	
1013	Do you know about a test that can detect cervical cancer before if occurs ?	YES ..... 1 NO ..... 2 → **1016**	
1014	What is the name of the test ?	PAP SMEAR (CERVICAL SMEAR) ..... 1 DON'T' KNOW ..... 2 → **1016**	
1015	Have you ever undergone pap smear test ?	YES ..... 1 NO 2	
1016	Now I would like to ask you some questions about medical care for you yourself. Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?	BIG PROB-LEM / NOT A BIG PROB-LEM	
	Getting permission to go?	PERMISSION TO GO 1 2	
	Getting money needed for treatment?	GETTING MONEY 1 2	
	The distance to the health facility?	DISTANCE 1 2	
	Having to take transport?	TAKING TRANSPORT 1 2	
	Not wanting to go alone?	GO ALONE 1 2	
	Concern that there may not be a female health provider?	NO FEMALE PROVIDER 1 2	
	Concern that there may not be any health provider?	NO HEALTH PROVIDER 1 2	
	Concern that there may be no drugs available?	NO DRUGS 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1017	Are you covered by any health insurance?	YES . . . . . 1 NO . . . . . 2 → **1019**	
1018	What type of health insurance? RECORD ALL MENTIONED.	PERSONAL HEALTH INSURANCE .....A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER _____ X (SPECIFY) DON'T' KNOW .....Z	
1019	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐	

Thank to the respondent and end the interview.

CLUSTER NUMBER : | | | | | HOUSING UNIT NUMBER (SSU) | | |

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
FOR COLUMNS 1 AND 4, ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN.

COL. 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 PILL
- 4 IUD
- 5 INJECTABLES
- 6 NORPLANTS
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 LACTATIONAL AMENORRHEA METHOD (LAM)
- J RHYTHM METHOD
- K WITHDRAWAL
- X OTHER _____ (SPECIFY)

COL. 2: SOURCE OF CONTRACEPTION

- 1 GOVT. HOSPITAL
- 2 GOVT. CLINIC (FIELD)
- 3 FAMILY HEALTH BUREAU
- 4 MOBILE CLINIC
- 5 PUBLIC HEALTH MIDWIFE
- 6 HEALTH VOLUNTEER
- 7 OTHER PUBLIC
- 8 PRIVATE HOSPITAL
- 9 PRIVATE DOCTOR
- J PHARMACY
- K OTHER PRIVATE
- L GROCERY
- M FRIEND/RELATIVE
- X OTHER _____ (SPECIFY)

COL. 3: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 HEALTH CONCERNS
- 6 SIDE EFFECTS
- 7 LACK OF ACCESS/TOO FAR
- 8 COSTS TOO MUCH
- 9 INCONVENIENT TO USE

- F FATALISTIC
- D DIFFICULT TO GET PREGNANT/MENOPAUSAL
- M MARITAL DISSOLUTION/SEPARATION
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

COL. 4: MARRIAGE/UNION

- X IN UNION (MARRIED OR LIVING TOGETHER)
- O NOT IN UNION

				NAME	1	2	3	4			
	10	OCT	01						01	OCT	
	09	SEP	02						02	SEP	
	08	AUG	03						03	AUG	
2	07	JUL	04						04	JUL	2
0	06	JUN	05						05	JUN	0
0	05	MAY	06						06	MAY	0
7	04	APR	07						07	APR	7
	03	MAR	08						08	MAR	
	02	FEB	09						09	FEB	
	01	JAN	10						10	JAN	
	12	DEC	11						11	DEC	
	11	NOV	12						12	NOV	
	10	OCT	13						13	OCT	
	09	SEP	14						14	SEP	
2	08	AUG	15						15	AUG	2
0	07	JUL	16						16	JUL	0
0	06	JUN	17						17	JUN	0
6	05	MAY	18						18	MAY	6
	04	APR	19						19	APR	
	03	MAR	20						20	MAR	
	02	FEB	21						21	FEB	
	01	JAN	22						22	JAN	
	12	DEC	23						23	DEC	
	11	NOV	24						24	NOV	
	10	OCT	25						25	OCT	
	09	SEP	26						26	SEP	
2	08	AUG	27						27	AUG	2
0	07	JUL	28						28	JUL	0
0	06	JUN	29						29	JUN	0
5	05	MAY	30						30	MAY	5
	04	APR	31						31	APR	
	03	MAR	32						32	MAR	
	02	FEB	33						33	FEB	
	01	JAN	34						34	JAN	
	12	DEC	35						35	DEC	
	11	NOV	36						36	NOV	
	10	OCT	37						37	OCT	
	09	SEP	38						38	SEP	
2	08	AUG	39						39	AUG	2
0	07	JUL	40						40	JUL	0
0	06	JUN	41						41	JUN	0
4	05	MAY	42						42	MAY	4
	04	APR	43						43	APR	
	03	MAR	44						44	MAR	
	02	FEB	45						45	FEB	
	01	JAN	46						46	JAN	
	12	DEC	47						47	DEC	
	11	NOV	48						48	NOV	
	10	OCT	49						49	OCT	
	09	SEP	50						50	SEP	
2	08	AUG	51						51	AUG	2
0	07	JUL	52						52	JUL	0
0	06	JUN	53						53	JUN	0
3	05	MAY	54						54	MAY	3
	04	APR	55						55	APR	
	03	MAR	56						56	MAR	
	02	FEB	57						57	FEB	
	01	JAN	58						58	JAN	
	12	DEC	59						59	DEC	
	11	NOV	60						60	NOV	
	10	OCT	61						61	OCT	
	09	SEP	62						62	SEP	
2	08	AUG	63						63	AUG	2
0	07	JUL	64						64	JUL	0
0	06	JUN	65						65	JUN	0
2	05	MAY	66						66	MAY	2
	04	APR	67						67	APR	
	03	MAR	68						68	MAR	
	02	FEB	69						69	FEB	
	01	JAN	70						70	JAN	
	12	DEC	71						71	DEC	
	11	NOV	72						72	NOV	
	10	OCT	73						73	OCT	
	09	SEP	74						74	SEP	
2	08	AUG	75						75	AUG	2
0	07	JUL	76						76	JUL	0
0	06	JUN	77						77	JUN	0
1	05	MAY	78						78	MAY	1
	04	APR	79						79	APR	
	03	MAR	80						80	MAR	
	02	FEB	81						81	FEB	
	01	JAN	82						82	JAN	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____