Sri Lanka Demographic and Health Survey

2000

Department of Census and Statistics
In collaboration with
Ministry of Health, Nutrition and Welfare

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Preface

The Department of Census and Statistics (DCS) undertook the Demographic and Health Survey 2000, at a crucial time when the DCS was preparing for the Census of Population and Housing after a lapse of 20 years. DCS has successfully completed the survey although the final report is a little delayed, due to the fact that it was necessary to deploy the full strength of the Department for the Census operation. Anyhow, a preliminary report containing basic tabulations related to maternal and child health was released after six months of data collection.

The present survey follows the Demographic and Health surveys conducted in 1993 and 1987, in Sri Lanka. It was conducted by the Department of Census and Statistics, in collaboration with the Ministry of Health. The World Bank provided the necessary funds for the project.

A sample of 8,800 households and 6,600 eligible women of childbearing age was used for the survey. The major objective of this exercise is to provide national estimates of fertility, contraceptive use, and some important variables on maternal and child health. Additional indicators needed to portray demographic trends are also provided. They include infant and child mortality, breastfeeding practices, fertility preferences and utilization of health services provided to mothers as well as children.

In order to facilitate comparability of data with the previous demographic surveys, the same sample design was used for the present survey too. However, the questionnaire was modified slightly by introducing a number of new questions to meet current data needs of the country.

For the first time, awareness of HIV/AIDS and other sexually transmitted diseases, prevention methods and knowledge about mother to child transmission of HIV virus, was included in the questionnaire, in order to get an idea about the knowledge of women in different social groups, about this deadly disease which has posed a threat to human life, even in Sri Lanka.

Allocation of a separate chapter to present interesting characteristics related to ever married women in the reproductive age group, is another introduction in this survey report. Usage of mass media, women's autonomy and Body Mass Index are a few of the important features included in it.

The DCS is pleased to present the final report of the survey, which contains a wealth of information on demographic changes that has taken place in the country. 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 people.

A.G.W. Nanayakkara
Director General

Department of Census and Statistics
15/12, Maitland Crescent
Colombo 07.
22nd July, 2002

Acknowledgements

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 Health particularly Dr. A.T.P.L Abeykoon, Director of the Population Division of the Ministry, for his able guidance and support throughout the exercise.

We would like to mention our appreciation to the World Bank for providing the necessary funds for the survey, under the policy development component of the Health Services Project of the Ministry of Health.

The Director General of Census and Statistics, Mr. A.G.W. Nanayakkara was the Project Director of the survey. Mr. S. Madurapperuma functioned as the Project Manager and Mr. S. Sangarapillai as the Project Coordinator. Their contributions are acknowledged with gratitude.

The steering committee provided overall guidance for the successful completion of the survey activities. The sampling committee was responsible for implementing the sample design and calculation of sampling errors for selected variables.

The field work was carried out by the staff of the Department of Census and Statistics, under the direction of Mr. S. Madurapperuma Director, and Mr. R . Balakrishnan Deputy Director. We are thankful to them for their services under trying conditions.

Special thanks are due to Dr. C. Piyasena and her staff of the Nutrition Division of the Medical Research Institute, for training the measurers; Ms. S. Ukwatte of the Department of Demography, University of Colombo, Dr. A. Jayasekera and Dr. H. de Silva of the Ministry of Health for their assistance in the training program for the interviewers.

We are deeply grateful to Ms. Soma de Silva of the UNICEF for providing the measuring equipment, test kit for iodine test, and also for her keen interest and support throughout the survey.

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 supervision of Mr. S. Perera System Analyst / Programmer.

The staff of the Research and Special Studies Division were responsible for questionnaire design, training of interviewers, and manual editing and coding of completed schedules. Mr. R. Balakrishnan and his staff of the Publication Division, covered the Tamil component. Computer type setting of the questionnaire was done by Mr. W.C. Weerawansa, Statistician.

Research and Special Studies division was also responsible for computer tabulations, preparation of the preliminary report and final report of the survey.

Mr. T. Thanapalasingam, Ms. S. Vidyaratne, Ms. A.P. de Silva, Ms. Indu Bandara, Mr. H.R. Gunasekera, Mr. S. Madurapperuma and Dr. Gamini de Silva contributed to the final report by writing chapters. Dr. A.T.P.L. Abeykoon wrote the executive summary while he and Mr. A.G.W. Nanayakkara jointly edited the final report.

Supporting services were provided by the Accounts, Transport and Stores divisions and the Library of the Department.

Last but not least, we are extremely grateful to the survey respondents for rendering their valuable co-operation for this worthy cause.

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	2000	1993	1987
Sample Size			
Number of households surveyed	8,169	8,918	7,672
Number of ever-married women aged (15-49)yrs. interviewed	6,385	6,983	5,865
Characteristics of Households			
Percent with safe drinking water	75.4		
Percent using boiled water for drinking	42.8		
Percent with water seal latrine	72.6		
Percent with no toilet facility	6.1		
Percent using iodized salt for cooking	87.6		
Percent with electricity	68.2		
Percent with radio	79.1		
Percent with TV	61.5		
Percent using fire wood for cooking	78.3		
Percent using gas for cooking	17.0		
Percent using cement/tile/terazzo for floor	81.0		
Percent using tile/asbestos for roof	73.3		
Percent using brick/cement/stone/cabook for walls	77.8		
Household Composition			
Mean household size (No.)	4.5	4.7	
Percent of one member households	3.7	3.3	
Percent of female household heads	20.4	19.2	
Functional Age Groups			
Percent of children below 5 yrs.	7.9	9.0	
Percent of children below 15 yrs.	25.8	30.3	
Percent of women in the reproductive age group (15-49) yrs.	54.6	53.0	
Percent of working age population (15-64) yrs.	67.1	63.5	
Percent of elderly population (>=65) yrs.	7.2	6.1	
Meadian age (yrs.)	28.0	25.0	
Age dependency ratio			
<15 yrs.	38.3	47.8	
>=65 yrs	10.7	9.6	
Characteristics of Ever-married Women (15-49)yrs.			
Percent residing in the urban sector	20.4	19.4	16.1
Percent residing in the rural sector	73.0	75.1	77.6
Percent residing in the estate sector	6.6	5.5	6.2
Percent never attended school	5.3	8.1	11.2
Percent with primary education only	18.0	24.2	29.7
Percent with more than secondary education	31.6	30.4	22.9
Percent currently married	92.6	92.1	92.8
Percent without children	9.5	9.2	8.8
Percent with a single child	24.2	19.6	17.8
Percent with a single child	24.2	19.6	17.8
Percent with four or more children	17.2	26.0	30.8
Percent regularly exposed to mass media	86.3		
Percent currently working	42.7		
Percent of skilled & unskilled workers in the female workforce	70.0		
Nuptiality			
Percent never married among all women aged (15 –19) yrs.	91.4	92.9	92.7
Percent never married among all women aged (15 –49) yrs	37.2	38.2	37.5
Median age at first marriage for ever-married women aged (25-49) yrs (yrs.).	22.9	23.2	22.4
Singulate mean age at marriage for ever-married women aged (15-49) yrs (yrs.).	24.6	25.5	24.8
Fertility and Fertility Preferences			
Total fertility rate[2]	1.9	2.3	2.8
Total wanted fertility rate[2]	1.8	1.8	2.4
Mean number of children ever born to ever-married women aged(45-49) yrs (No.).	3.1	4.0	5.1
Meadian age at first birth among women aged (25-49) yrs (yrs.)	23.2	25.2	24.0
Mean number of children ever born[4] (No.)	2.2	2.6	3.0
Mean number of living children[4] (No.)	2.1	2.5	2.8
Mean ideal number of children[1] (No.)	2.7	2.8	3.1
Percent of women[4] with two living children wanting another child	24.9	26.2	33.6
Knowledge of Contraceptive Methods[4] (%)			
Any method	99.2	99.3	99.1
Any modern method	99.1	99.3	99.1
Any traditional method	76.4	72.6	68.3
Current Contraceptive Use[4] (%)			
Any method	70.0	66.1	61.7
Any modern method	49.5	43.7	40.6
Pill	6.7	5.5	4.1
IUD	5.1	3.0	2.1
Injectable	10.8	4.6	2.7
Condom	3.7	3.3	1.9
Sterilization	23.1	27.2	29.8
Any traditional method	20.5	22.4	21.1

Facts and Figures

From Demographic and Health Surveys 2000,1993,1987

	2000	1993	1987
Childhood Mortality[2]			
Infant mortality rate	13.6	25.3	25.4
Under-five mortality rate	14.6	29.5	34.6
Neonatal mortality rate	8.3	18.2	
Safe Motherhood and Women's Reproductive Health			
Percentage of mothers who have undergone a medical check-up[5]			
Urine test	98.9		
Blood test to check VDRL	48.7		
Blood pressure check	98.6		
Prenatal care received[5] (%)			
Family health worker visited home	84.0		
Mother visited clinic	94.5		
Vaccination for Tetanus[6] (%)	96.8	93.9	82.6
Vaccination for Malaria[6] (%)	23.1		
Percent of births[3] whose mothers were assisted at delivery by			
Doctor	41.8	23.7	13.6
Govt. Nurse / Family health worker	54.2	70.4	74.1
Traditional birth attendant	1.9	3.6	6.1
Awareness of Sexually Transmitted Diseases			
Percent of women[1] who are aware of AIDS	90.3		
Percent of women[1] who are aware of other STD	59.8		
Percent of women[7] who know one or more prevention methods of AIDS	80.0		
Percent of women[8] who are aware of symptoms of STD in			
Men	14.6		
Women	16.8		
Both parties	12.4		
Percent of women[1] who are aware of mother to child transmission of HIV	67.1		
Percent of women[9] who are aware of transmission of HIV			
During pregnancy	55.6		
At delivery	22.6		
During breastfeeding	23.0		
Child Health			
Percent of children[10] ever breastfed	98.0	98.0	
Percent of children[10] received colostrum	76.8	54.9	
Percent of children who are exclusively breastfed[11]			
Age (0-1) months	83.9	34.5	
Age (2-3) months	65.0	17.4	
Age (0-4) months	57.6		
Mean duration of exclusive breastfeeding[12] (Months)	3.7	1.2	
Percent of children[13] who received vaccinations			
BCG	99.9	100.0	98.3
DPT(3/4)	87.9	86.6	79.9
Polio(3/4)	87.7	86.3	79.6
Measles	81.2	79.9	48.0
Full coverage	80.7	79.0	46.9
Percent of under 5 children with diarrhoea in the past 2 weeks (prior to interview)	6.7	5.0	6.0
Percent of under 5 children with diarrhoea who received ORS packets	36.1	34.4	29.2
Percent of under 5 children with diarrhoea who consulted a medical facility	71.6	71.0	73.2
Women's Health Status and Autonomy			
Mean body mass index among ever-married women[14] aged (15-49) yrs (Kg/m^2)	22.1		
Percent of women undernourished (BMI below 18.5)	21.8		
Percent of women overweight (BMI 25.0 or more)	24.0		
Percent of women who are involved in decision making about contraceptive use	91.2		
Percent of women who are involved in decision making about female sterilization	93.3		
Percent of women who face difficulties in finding money for medical treatment for self	32.5		
Percent of women who see household duties as a problem in getting medical treatment for self	22.4		
Nutritional Status of Children			
Mean birth weight[13] (Kg)	2.9	2.8	
Percent low birth weight[13](<2.5Kg)	16.7	18.7	
Percent of children (below 5yrs.) chronically undernourished (Stunted)	13.5	23.8	
Percent of children (below 5yrs.) acutely undernourished (Wasted)	14.0	15.5	
Percent of children (below 5yrs.) underweight	29.4	37.7	

1- Ever-married women aged (15-49)yrs.
2- Five-year period preceding the survey
3- Births in the 5 years preceding the survey
4- Currently married women aged (15-49)yrs.
5- Last pregnancy within the past 5 years
6- Births in the 12 months preceding the survey
7- Ever-married women who are aware of AIDS
8- Ever-married women who are aware of STD
9 - Ever-married women who are aware of mother to child transmission of HIV
10 - All children below 5 yrs. of age
11 - Youngest living children below 3 yrs. of age
12 - Children below 3 yrs. of age
13 - Children under 5 yrs. of age with a health card
14 - Excludes pregnant women and women with a birth in the preceding two months

SUMMARY OF FINDINGS

The Sri Lanka Demographic and Health Survey 2000 is the sixth in the series of surveys conducted by the Department of Census and Statistics since 1975 to collect data on fertility, family planning and other reproductive health information.

The primary objective of the survey is to provide up-to-date and reliable information on fertility, mortality, family planning, child nutrition, health status of children and HIV/AIDS. The survey data also provide a useful basis for comparison with data from previous surveys.

The survey sample comprised 6,601 eligible women in 8,765 households from a representative multistage stratified probability sample excluding the northern and eastern provinces. The population was stratified into seven zones on the basis of socio-economic and ecological criteria. Each zone was further stratified into urban, rural and estate sectors. The completed number of households and eligible women interviewed were 8,169 and 6,385 respectively. The household response rate was 96.3 percent and the eligible women response rate was 96.6 percent.

Two types of questionnaires were used in the survey. The household questionnaire and individual questionnaire. The household questionnaire listed all usual residents and any visitors who slept in the household the night before the interview. An eligible respondent is defined as an ever married woman aged 15 to 49 years who slept in the household the previous night before the interview.

The household population comprised 37,248 persons with 19,017 females. The percentage of females in the reproductive age group is 54.6 percent. The mean household size is 4.5 with the urban sector having slightly higher mean of 4.8. One out of every five households are headed by women. About 64 percent of households comprise nuclear families. The household data also indicate that 75.4 percent of households have access to safe drinking water. It is also interesting to note that 42.8 percent of households in Sri Lanka drink boiled water irrespective of the source. As regards sanitary facilities, almost 94 percent of the households have access to toilet facilities while 12 percent share the toilet with another household or use public toilets. The need to use iodized salt in cooking has been emphasized in the recent past. The survey data revealed that 87.6 percent of households use iodized salt for cooking.

Recently a nation-wide campaign was launched by the health authorities to give Rubella vaccination to all females aged 11 to 44 years. The survey data revealed that 53.2 percent of the women in the target age group have reported to havc had Rubella vaccination.

As regard the standard of living of the household, data were collected with regard to household goods and facilities. It is seen that 68.2 percent of households use electricity for lighting purposes. This percentage is lowest in the estate sector (31.0%). Almost 80 percent of households have a radio. However, a much lower

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percentage (61.5%) have a television in their home. About 78 percent of the households in the country use firewood for cooking purposes.

The background characteristics of the respondents show that 73.0 percent reside in the rural sector while 6.6 in estates and the balance in urban areas. More than three fourths of the respondents have had education beyond the primary level. Overall, 41 percent of ever married women are in the habit of reading newspapers at least once a week. The proportion of women exposed to electronic media is much higher with two out of every three women listen to radio or watch television at least one a week. More than half of the respondents (57%) were not employed at the time of the survey, while 38 percent have never worked for pay or profit. As regards decision making, 80 percent of current users of contraception indicated that the use of contraceptives is the decision of both herself and the spouse. With regard to personal hygiene it is revealed that the habit of washing hands before preparation of meals for the family is widespread across the country. Similarly a high proportion (94.7) of mothers wash their hands before feeding their babies.

The level of fertility measured by the total fertility rate (TFR) is estimated at 1.9 for the period 1995-2000. The examination of trends reveal that over the past four decades there has been a substantial decline in fertility with the total fertility rate dropping from a level 5.0 in 1963. This decline is mainly attributed to the decline of age specific fertility rates of women aged over 30 years. The rural sector has the lowest level of fertility with a total fertility rate of 1.8 while the estate sector has the highest level with 2.4. By geographic area, the lowest TFR is seen in zone 6 which is irrigated dry zone with major or minor irrigation schemes. Surprisingly, this zone recorded the highest fertility level in the 1993 survey.

The largest differentials are observed for women's education and husband's occupation. Women with GCE (AL) and higher education have 1.5 children less than women with primary education. These differentials widen as the age of woman advances. Compared to the 1993 Demographic Health Survey the median age at first birth has decreased in all age groups except for 45-49 group. The median age at first birth for women age 25-49 years show a decrease of 2.0 years during 1993 to 2000 period.

Contraceptive knowledge level is very high with 99 percent of all ever married and currently married women knowing any method of family planning. Of the modern methods that are offered by the family planing programme, condoms show relatively low knowledge level of 77 percent and a decrease of nearly two percentage points from 1993. More than 90 percent of ever married women know the source of supply of modern methods such as the pill, IUD, injectables, and sterilization. About 88 percent knew the source for condoms. The principal source for pill, IUD, injectables and sterilization is government facilities.

The ever use of contraception among ever married women for any method is 83.0 percent compared to 76.2 percent in 1993. The ever use for any modern method and any traditional method are 67.0 and 47.4 percent respectively. Among currently

married women, 84.7 percent have ever used a method, 68.7 percent had used any modern method and 48.5 percent have used any traditional method.

Contraceptive prevalence among currently married women has increased to 70.0 percent in 2000 from 66.1 percent in 1993. The percentage of currently married women using modern methods has increased from 43.7 percent in 1993 to 49.5 percent in 2000. While the permanent method use has dropped from 27.2 percent to 23 percent, the use of modern spacing methods has increased from 16.5 percent to 26.4 percent. The prevalence of traditional methods has shown a slight decrease from 22.4 percent to 20.5 percent during the same period.

The current use of contraception by age show that the highest level of prevalence is in the age group 35-39 years with 77.5 percent using a method of contraception. As expected, the lowest prevalence is in the age group 15-19 with 52.8 percent. It is interesting to note that in 1993 the corresponding rate was 30.3 percent. Of the modern methods, women with no schooling and primary education have the highest level of use of permanent methods while the more educated women tend to use modern spacing methods. It is also observed that traditional methods are more likely to be used by educated women.

The main source of supply of contraceptive services for clinical methods is Government source. For supply methods such as the pill and injectables too government is the main source of supply. However, condom is more likely to be supplied by the NGOs and the private sector. The main reasons for non use of contraception are infrequent sex, menopausal/subfecund and health concerns. The preferred methods for use in the near future among non users are injectables, female sterilization and the pill.

On the question of willingness of current users of the pill to pay indicates that about 35 percent are willing to pay a price up to Rs.10 for a cycle while another 35 percent prefer a price between Rs.10 and Rs.15. As regards injectables, about 40 percent are willing to pay a price in the range of Rs.26 to Rs.50. About 35 percent of condom users have expressed willingness to pay a price between Rs.2.50 and Rs.5.00 for a condom.

The singulate mean age at marriage of females show a slight drop from 25.5 years in 1993 to 24.6 in 2000. This is further confirmed by the decline in the age at first birth where 2.0 years decline was observed during the same period. It was found that on average 76.4 percent of children below 36 months were breastfed during the survey period. It is seen that about 23 percent of currently married women were insusceptible to conception because of postpartum amoneorrhea or abstinence

The number of induced abortions reported is low with 76 cases compared to 152 in 1993. Although the absolute number may be under-reported, there may be a trend towards an overall reduction of cases. Reported data show that 67 percent of cases are from rural areas. About 84 percent of abortion seekers are over 30 years of age and majority (88%) have had secondary or higher level of education. About

43 percent are parity two women. In terms of area of residence, majority are from zones 1 and 4.

With regard to fertility preferences, it is seen that the desire for additional children decreases sharply for women with two or more children. The desire for more children decline from 64 percent for women with one living child to 5 percent for women with three living children. A similar pattern is observed with regard to age where the desire for more children decreases with age. The percentage of currently married women who want no more children is 60.6 percent. This percentage increases to 70.3 percent in the estate sector and interestingly, to 81.5 percent to women with no schooling. Son preference is not widespread with 55 percent of women with living children reporting that they have equal preference for sons and daughters. Nearly 18 percent of currently married women are in need of family planning services, out of which 12 percent do not want any more children while about 6 percent want to postpone or are undecided to have any more children. The mean ideal number of children women would like to have is 2.7. It is seen that women with zero, one and two parity would like to have slightly more than two children. Women with three or more living children appear to be satisfied with their current family size. Of the births that have taken place during the five years prior to the survey, it is seen that 81 percent were wanted, 13 percent were mistimed and 6 percent were unwanted.

It is interesting to note that 12 percent of women had become pregnant while using a method of contraception. Of these, 59 percent were using modern methods (pill and injectables) and 41 percent were using traditional methods. Another measure of unmet need of family planning is the total wanted fertility rate. It is observed that the potential for further reduction in fertility is greater in Colombo metro and other urban areas and in zones 4 and 7 in particular.

Mortality levels measured indirectly by survey data show an infant mortality rate of 13.6, child mortality rate of 1.0 and under five mortality rate of 14.6 during the five years proceeding the survey. Mortality by socio-economic zones show that it is relatively high in the estate sector and in zones 4,5,6 and 7. It is seen that higher the mothers educational level, lower is infant and child mortality. Similarly, higher parity and young age (20 years) of the mother also show higher level of mortality with regard to infants and children.

As regards prenatal care, it is evident that 94 percent of children are born to mothers who have visited maternity clinics during pregnancy, while 84 percent cases were visited by the family health worker. A high proportion pregnant women across sectors, educational levels, age, birth order and place of residence have received antenatal check-ups from a health provider. Government health facilities have served 92 percent of deliveries that had occurred during the five year period preceding the survey. As in the case of institutional deliveries the proportion of births attended by a professional health provider is very high and exceeds 95 percent.

As regards immunization of children, it is found that BCG coverage is universal. In the case of DPT, complete immunization cover has risen up to 88 percent. Full

immunization coverage from Polio and Measles are 88 percent and 81 percent respectively. Overall situation of vaccination received by under age five children having a Child Health Record Card is noteworthy with nearly 81 percent being fully immunized.

The survey data indicate that 3 percent of children under 5 years of age had suffered from diarrhoeal diseases during the 24 hour period to the interview and 6.7 percent in the past 2 weeks. These proportions are much higher than the corresponding figures reported in the 1993 survey. It is to be noted that questions were modified in the present survey in order to capture all cases of diarrhea.

With regard to breast-feeding patterns and nutrition of children, it is seen that 76.8 percent of mothers give colostrum to their babies compared to about 55 percent in 1993. A significant increase is seen in the estate sector where the corresponding proportion has risen to about 66 percent from about 20 percent in 1993. The mean duration of breast feed has increased to 27.5 months from 22.7 in 1987. Data on exclusive breast-feeding indicate that 84 percent of mothers exclusively breast feed their children during the first month and 65 percent do so during second and third months. The percentage of low birth weight babies has dropped to 16.7 percent from 18.7 percent in 1993.

The nutritional status of children below five years of age indicate that stunting of children (height-for-age) has declined form 23.8 percent in 1993 to 13.5 percent. There is also a decline to a lesser extent with regard to wasting (weight-for height) from 15.5 percent to 14.0 percent during the same period. The survey data also reveal that the proportion of underweight (weight for age) children has declined from 37.7 percent in 1993 to 29.4 percent in 2000.

As regards knowledge of AIDS and other sexually transmitted diseases, it is evident that over 90 percent of women are aware of AIDS and about 60 percent know of other STDs. Knowledge level of STD/AIDS is relatively low in the estate sector. Fifty eight percent of estate women have not heard of AIDS or other STDs. With regard to knowledge of preventive methods to avoid HIV infection, 40 percent of women knew only one method of prevention. Another 25 percent knew two methods and 15 percent knew three methods. With regard to symptoms of STDs, only 14.6 percent of women were aware of symptoms in men while 16.8 percent reported to be aware of symptoms in women. The knowledge of symptoms of STDs in the estate sector is very low with 2.2 percent.

In conclusion, it can be stated that compared to the previous two Demographic and Health Surveys conducted in 1987 and 1993, there have been overall improvements in demographic and health indicators of the target populations. However, while this report captures the main features of the survey, further indepth analyses would be required to identify the underlining causal factors that contribute to the variations in important variables that have been investigated in the study.

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Chapter 1: Background

T. Thanapalasingam

The island Republic of Sri Lanka, formerly known as Ceylon has a history that stretches back about 2,500 years. Since the 15th century, several foreign invasions of the country have taken place and its maritime areas have been ruled in succession by the foreign colonial powers, the Portuguese from 1505 to 1608, the Dutch from 1608 to 1796 and by the British from 1796 to 1815. After conquering the central Kandyan kingdom in 1815, the British brought the entire country under their control and ruled for 133 years, until the country regained its independence in 1948.

The pear-shaped island of Sri Lanka is situated off the southern coast of India between northern latitudes 5° 55' and 9° 50' and eastern longitudes 79° 42' and 81° 52' and stretches through its greatest length of 435 kilometres (270) miles from Point Pedro in the north to Dondra Head in the south. Its greatest width is 225 kilometres (140) miles from Colombo in the west to Sankamankande in the east. The island is situated in the centre of the Indian Ocean, separated from the southern part of the Indian subcontinent by a narrow strip of shallow water, known as Palk Straight and spans a land area of 65,608 square kilometres.

The country can be divided into three zones on the basis of agro-climatic conditions. They are: 1) the wet zone which covers the mountainous region in the southwest and central parts of the island ranging in elevation from 900 to 2,100 metres and receives an annual rainfall of more than 3,000 millimetres; 2) the dry zone which covers the coastal belt, narrow in the east, south and west, but fans out in the north reaching from the eastern to the western shores of the country and this area receives an annual rainfall of less than 2,000 millimetres where most of the paddy land is cultivated under irrigation schemes; and 3) the intermediate zone which is the upland belt between the wet and dry zone areas surrounding the central hills at an elevation of about 300 to 900 metres. Almost all the tea and rubber plantations are situated in the wet and intermediate zone areas.

Oceanic influence helps to reduce the temperature over the low lands to an average of 28° C. The temperature decreases at a steady rate of about 6.5° C for every 1,000 metres rise. The lowest mean temperature in the country is at Nuwara-Eliya, the principal hill station in the island, at an elevation of 1,980 metres is about 16° C.

1.1 The socio – economic situation

Successive governments that came into power after independence implemented social welfare oriented policies and programmes. As a result of this, the country has made significant improvements in social developments such as developments in public health care system and education. During this period the malaria disease was eradicated and the health service was expanded to cover the entire island. This action reduced the level of the mortality rate substantially. The introduction of free education from the kinder-garden to the university level improved the national literacy rate, particularly among the women. This in turn increase the percentage of female participation in social, economic and political activities as well as in the labour force participation at all levels.

Sri Lanka's economy for over a longer period was predominantly agricultural and was heavily depending on the export oriented plantation sector, Tea, Rubber and Coconut plantation for its major foreign exchange earnings. The open economy policy adopted in 1977 encouraged foreign investments. A number of free trade zones were created in the country, which provided more and more employment opportunities. The country's foreign exchange earnings increased through the export of items produced in these free trade zones. With the growth of the private sector, the prominence of the agricultural sector was declining whereas the Trade and Industries sector was gaining prominence.

Sri Lanka receives the second highest foreign earnings through the export of garments produced in the above mentioned free trade zones, while the first place goes to the foreign employment. The contributions to the Gross Domestic Product by the agricultural sector has dropped to 16.3 percent in 2000, and the contribution by the Trade and Industries sectors

increased to 22.1 percent and 17.4 percent respectively. Even then the agricultural sector generates employment for about 40 percent of the workers in Sri Lanka.

1.2 Population size and distribution

Sri Lanka possesses a high degree of reliable demographic data for a considerable period of time that can be used for research works. The decennial census which started in 1871 and the system of vital registration stared in 1867 are the main sources of population information. Further, a number of sample surveys conducted in the recent past also provide data on demographic and socio-economic characteristics of the population. Out of these, contraceptive prevalence survey of 1982, Demographic and Health Surveys of 1987 and 1993 are the most useful for the purposes of comparison of the present Demographic and Health Survey - 2000.

At the first decennial census, conducted in 1871, 2.4 million people were enumerated. This figure increased to 6.7 million by 1946 and to 14.8 million at the 12th census held in 1981. Available data on population indicates that there was a sudden increase in the size of the population immediately after the World War II. The population growth rate, which was fluctuating between 0.7 and 1.7 percent prior to 1945 suddenly rose up to 2.8 percent largely due to the decline in the mortality rate resulting from the island wide malaria eradication programme launched at that time and the improvement and expansion in the medical and public health services to cover all parts of the country. This increased growth rate raised the population size from 6.7 million in 1946 to 8.1 million by 1953. Thereafter the growth rate continues to decline at a slower rate reaching a level of 2.5 percent by 1971 and 1.7 percent by 1981. This decline has been to a great extent caused by the heavy repatriation of Tamils of Indian origin, the employment oriented migration to Middle East countries and the decline in the fertility levels. The Estimated population of the country in 2001 was 18.7 million. This represents an annual average growth rate of 1.1 percent during the 20-year period from 1981 to 2001.

The distribution of the population is highly uneven. In 1946 two thirds of the Sri Lanka's population (66.3%) was residing in the wet zone in the south-western part of the country occupying less than one fourth of the total land area. This population size declined to 57.3 percent by 1981 due to the internal migration of the people in the wet zone towards the dry zone, caused by the developments in the dry zone agriculture, colonization schemes, the improvements of irrigation facilities and medical and health services, particularly the control of malaria disease in the dry zone.

The population density at the first decennial census in 1871 was 37 persons per square kilometre. This figure increased to 103 by 1946 and to 230 persons per square kilometre by 1981. The population density in 2001 was 299 persons per square kilometre. The density varies considerably among the Districts, ranging from 3305 persons per square kilometre in the mostly dense area, Colombo District in the Western Province, to 50 persons per square kilometre in the least inhabited area, Mullaitivu District in the Northern province.

The population residing in the urban sector in 1871 was 10.8 percent. This figure increased to 15.3 by 1953, to 22.4 percent, at a faster rate by 1971 and to 21.5 percent by 1981. The increase in the urban population during the period 1953 to 1971 was mainly due to the inclusion of Town council areas in the urban sector, which were treated as rural areas up to 1953 and the annexation of adjoining rural areas to many cities. The number of urban areas, during this period increased from 43 to 135. This number has again dropped to 53 as the Town council areas, which were treated as urban at the 1981 census, have been re-categorized as rural areas from 1992. Considering the Municipal Council and Urban Council areas only as urban has reduced the urban population to 14.6 percent at the Census of Population and Housing - 2001. After the removal of Town council areas from the urban category, there is no urban population in Moneragala, Polonnaruwa, Kilinochchi, Mullaitivu and Mannar districts. Action is being taken to identify the areas which should be treated as urban using the Census data.

1.3 Family planning policies and programmes

Since early 1950s, the government and non-government organisations, with the intention of reducing the Crude Birth rate, which was prevailing at a higher level of about 40, provided Family Planning Services. The non-governmental organisations are Family Planning Association of Sri Lanka, established in 1953, Sri Lanka Association of Voluntary Surgical Contraceptives (SLVSC), established in 1974 and Community Development Services (CDS), established in 1978 and the government organisation, Family Planning Bureau, inaugurated in 1965 and later renamed as Family Health Bureau.

The Family Planning Programme was further strengthened in 1973 with the assistance from the United Nations Fund for Population Activities (UNFPA). It was the policy of the governments, that a variety of family planning services should be made available to the couple in every remote part of the country who practicing family planning so that the couple could select a contraceptive method they prefer. The government with a view to control the population growth and to increase the number of users of contraceptive methods provided financial incentives to individuals who practice family planning. The above programmes contributed largely for the achievement of the government's goal of reducing the Birth Rate to the replacement level fertility by 2000.

1.4 Fertility, mortality, education and literacy

The fertility level in Sri Lanka was generally high during the period 1900 to 1950. The Crude Birth Rate (CBR), the most commonly used measure, was fluctuating between 33 (in 1912) and 42 (in 1926). Since early 1950's the Crude Birth Rate started to decline, slowly at the start, from a figure of 39.7 in 1950. In 1960s its declining trend assumed a faster rate, reaching 29.4 by 1970, a drop by 26 percent from the level of 1950 and remained more or less stable around 28 in 1970s. Again in the 1980s the Crude Birth Rate declined sharply by about 25 percent to a figure of 21 by 1991 and 17.5 by 2000. A more refined measure of fertility, the Total Fertility Rate (TFR), which is defined as the total number of births a woman would have during her reproductive years, 15 – 49 years, under the existing fertility pattern. There has been a substantial decrease in the Total Fertility Rate in Sri Lanka since 1950. The Total Fertility Rate

in 1950 was 6.0. This figure (TFR) declined to 5.5 by 1960, 4.2 by 1970, and 3.4 by 1980. Total Fertility Rate was estimated as 2.8 in the first Demographic and Health Survey conducted in 1987, as 2.3 in the second Demographic and Health Survey - 1993 and 1.9 in the Demographic and Health Survey – 2000, which is lower than the replacement level fertility of 2.1. The sharp increase in the female literacy rate during this period, 1950 to 2000, helped the following. 1). Improvement in the percentage of female participation in the labour force, which raised the age at first marriage and 2). Improvement in the understanding and acceptance of contraceptive methods by females. These, together with the provision of family planning services by the voluntary organizations and the government and the incentives given by the government, were the main reasons for the drop in the fertility.

The mortality in Sri Lanka was generally high prior to 1946. The Crude Death Rate, which was almost above the level of 21 deaths per 1000 mid–year population, prior to 1945 showed a drastic downward trend in the immediate post World-War years. During this period (1945 to 1950) the Crude Death Rate dropped from 21.5 to 12.6 (by 41%), the Infant Mortality Rate from 140 to 82 (by 42 percent) and the Maternal Mortality Rate from 16.5 to 5.6 (by 66 percent). The unprecedented advances have been attributed to the island wide malaria eradication campaign launched at the time, expansion of improved health services to all parts of the country and the availability of improved nutritional food. Since 1950 the mortality in Sri Lanka continued to decline but at a slow pace and stabilizes around 6.0 deaths per 1000 population by the 1980s, the levels attained by developed countries. The Crude Death Rate for 2000 was estimated as 5.9 and the Infant Mortality rate as 13.3. With improvement in the mortality rate the average life expectancy at birth has increased from 43 years in 1946 to 70.7 years for males and 75.4 years for females by 1996/2001. As in most of the developed countries, in Sri Lanka too the life expectancy of females is higher than that of males.

Education is one of the measures of social and economic development of the population. With the intention of providing education to every citizen of the country, the government of Sri Lanka introduced free education from grade one to university education in 1946. As a result of this action a notable progress was achieved in the literacy rate of the population. To encourage children from poor families to get them enrolled in schools the government is providing free

textbooks and free school uniforms from 1980s. With above incentives, according to child activity survey of 1999, 92,145 children in the age group 5 – 14 yrs are not attending school or other educational institution. Of this, 14.5 percent are not attending school or other educational institution due to financial difficulties while another 12.4 percent are not attending school due to full time engagement in economic activities. Among the children in the age group (5 – 17 yrs) 339,523 children are not attending school or other educational institution, of which 11.9 percent and 22.1 percent are not attending school because of financial difficulties and full time engagement in economic activities respectively.

In 2000, 4.3 million children including pupil bhikkus attended schools. There are 199,906 teachers and pupil teacher ratio is 22. About 50 percent of the students who sits for the G.C.E (A/L) become eligible to apply for university admission and out of this no more than about 16 percent are admitted to all the 13 Universities in the country. The government spends 2.5 percent of the total expenditure, on education.

The national literacy rate increased steadily within a short period from 57.8 percent in 1946 to 87.2 in 1981. This steady increase is a result of the introduction of free education in 1946, which encouraged the school enrolment of children from poor families. The female literacy rate increased at a greater speed reducing the gap between the rates for males and females from 26.3 in 1946 to 7.9 in 1981. This sharp increase in the female literacy rate brought more and more females into the labour force at all levels. The national literacy rate in 1994 was 90.1. The rates for males and females in 1994 were 92.5 and 87.9 respectively.

1.5 Health policies and programmes

The socio economic indicators are tools of measurement of the health status of a country. The broad aim of the health policy of the Sri Lanka government is to increase the life expectancy and improve quality of life. This is to be achieved by controlling preventable diseases and by health promotion activities. In Sri Lanka, both public and private sectors provide health care. The public sector comprises Western and Ayurvedic systems, while the private sector consists practitioners of Western, Ayurvedic, Siddha, Unani and Homeopathy systems. The

government provides free health care services including specialized and intensive care services through an extensive network of health care institutions.

On the basis of the recommendations by the Presidential Task Force appointed by Her Excellency the President in 1997 thrust areas were identified for immediate implementation. Some of the identified areas are: 1) improvement of one hospital in each district to reduce inequities in the distribution of services and to provide high quality facilities to people living in remote areas 2) expansion of services to areas of special needs (e.g. the elderly, disabled, victims of war and conflict etc.), 3) development of health promotional programmes with special emphasis on revitalizing the School Health Programmes 4) reforms of the organizational structure 5) to improve efficiency and effectiveness, especially in the context of devolution and resource mobilization and management.

In order to provide efficient and cost effective health services throughout the country, accessible to the needy people, the government will take every effort to maximise the financial allocations on health development. The government expenditure on health as a percentage of the total government expenditure was 4.3 in 1995. This percentage has increased to 5.6 by 1999. Every year the Ministry of Health receives foreign aid and in 1999 this aid was 5 percent of the total health expenditure. Per capita health expenditure increased from Rs.582/- in 1995 to Rs.946/- in 1999.

The National Health Policy sets out to achieve certain measurable goals and objectives by the year 2002. Some of them are: 1) reducing the Infant Mortality Rate to 15.0 by 2002; 2). reducing the Neo-natal Mortality Rate to 7.5 by 2002; 3) reducing the Crude Birth Rate to 16.0 by 2002, increasing the use of contraceptive methods to 72 percent by 2002, providing access to safe drinking water at home or immediate vicinity and latrines to every housing unit.

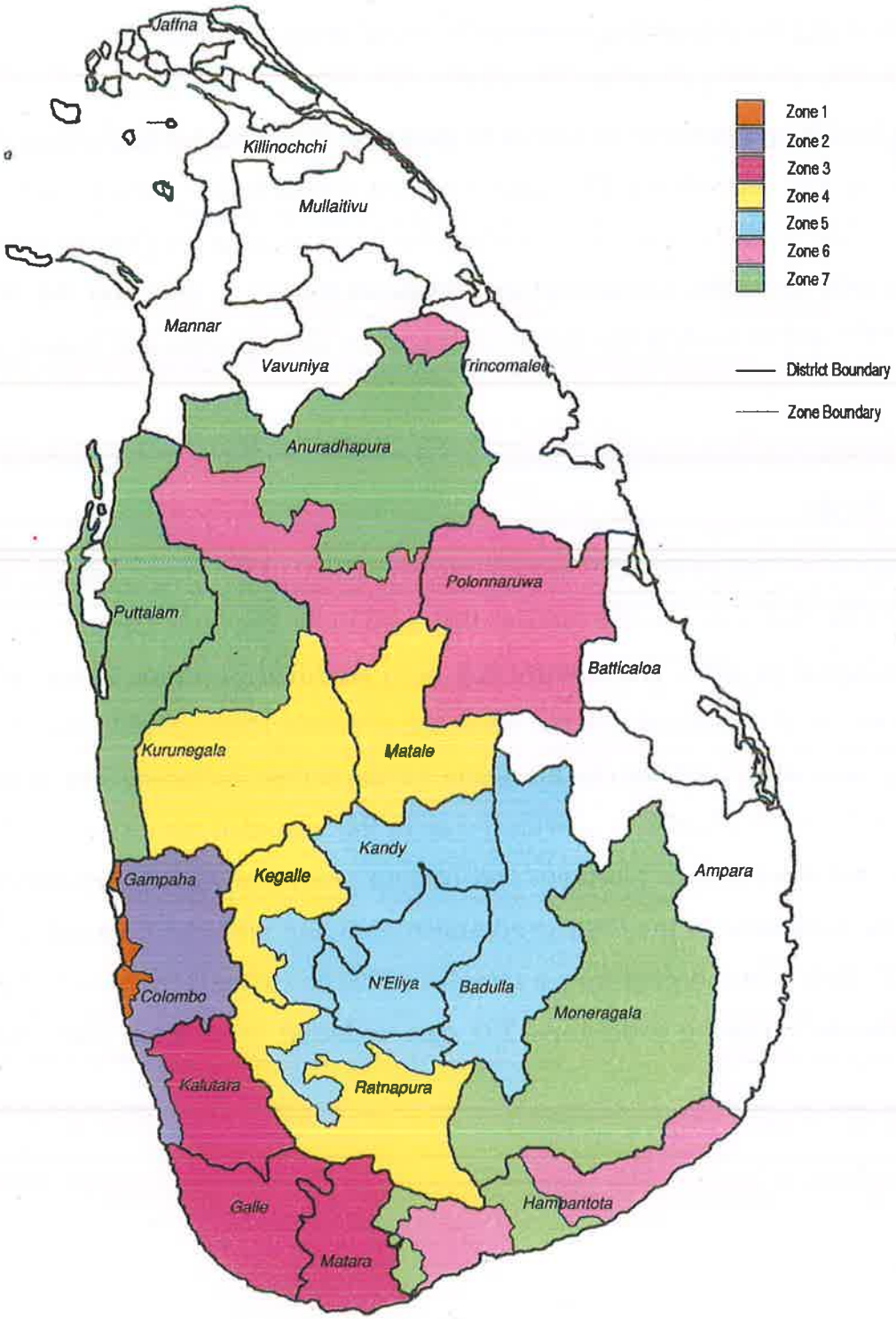
1.6 Objectives of the survey

The major objective of the survey is to provide up to date and accurate data on fertility, mortality, family planning, child nutrition, health status of children and also to asses the awareness about HIV/AIDS and other sexually transmitted diseases, the knowledge of how it is transmitted and the preventive measures to avoid getting infected. This information is very much needed by the policy makers, planners, administrators and researchers in assessing and evaluating health programmes as well as to plan new strategies for improving the health and well being of the population. The data obtained through this survey could be used for comparison with the data from surveys of similar types, such as the Demographic and Health Surveys of 1993 and 1987, Contraceptive Prevalence Survey – 1982 and the World Fertility Survey of 1975 and to analyse the trends of important demographic and health characteristics over time.

1.7 Sample design

A multi-stage stratified probability sample representative of the surveyed area was used. The primary stratification was also the same as that used in the previous Demographic and Health Survey conducted in 1993. The country has been stratified into nine zones on the basis of socio-economic and ecological criteria. As in the previous Demographic and Health Survey, this survey was also confined to the same seven zones, excluding the zone 8 (Eastern province) and zone 9 (Northern province) due to the unsettled condition prevailed in these zones. The field operation in Northern and Eastern provinces was also conducted at a latter date with the assistance of the District administration and with the financial assistance from the UNICEF. Data was collected from a sample of 1000 households from each of the two zones using a different sampling procedure. The data collected from these zones was processed separately.

Figure 1.1: Sample Zones



The seven zones that were included in the survey are:

Zone 1 : Colombo Metropolitan areas consisting some urban areas in Colombo and Gampaha Districts.

Zone 2 : Colombo feeder areas

Zone 3 : South Western coastal low lands

Zone 4 : Lower South Central hill country excluding districts with a concentration of estates

Zone 5 : South central hill country with a concentration of estates

Zone 6 : Irrigated Dry Zone with major or minor irrigation schemes

Zone 7 : Rain fed Dry Zone

The zones that were not included in the survey are:

Zone 8 : Eastern coastal belt (Eastern Province)

Zone 9 : Northern province

Analysis of sampling errors and design effects computed from DHS 87 showed that the degree of clustering of the sample could be significantly increased without much loss in the efficiency of the sample. Analysis of sample outcome showed that there was a serious problem of under coverage. Both these analysis suggested; (1) the use of units larger than the census blocks used earlier as the PSUs and (2) the desirability of reducing the number of areas selected into the sample (greater clustering). Use of larger size areas as PSUs has the practical advantages such as improved supervision, better data quality, more complete coverage, and possibly lower field costs.

1.7.1 Sampling units

In general Primary Sampling Units (PSUs) are Wards in urban areas, Grama Niladhari (GN) divisions in rural areas and individual Estates in estate sector.

In urban areas Secondary Sampling Units (SSUs) are generally two census blocks per ward. In rural areas, generally one single village per GN division was selected as SSU. Therefore it can be said that in rural areas, villages form the effective PSUs. That means the outcome of the sample selection would have been practically the same had we selected villages directly. Housing units are the Third stage Sampling Units (TSUs) in all the sectors.

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Most of the estates are very small in size in terms of hosing units. Therefore in the estate sector, SSUs are one or part or group of estates, depending on the size of the estates. To avoid the need to group the estates in the whole frame special procedure was applied to select estates depending on the relative size of the estate compared to the nearby estate.

1.7.2 Sampling frame

Each zone was further stratified into three strata: urban, rural and estate sectors. Within each stratum, sampling areas were arranged according to administrative and geographical location. That is, specially prepared list consisting of Wards, Grama Niladhari divisions and Estates organized by zone, sector and within sector geographically was used as the frame for the selection of PSUs. This organization provided a better basis for stratification as it is arranged on a geographical basis. The list of census blocks prepared during the 1981 Census of Population and Housing was used as the frame for the selection of SSUs in the urban sector. Lists of villages/ estates of the selected PSU in the rural/estate sector were used as the frame for the selection of SSUs. The pre-listing forms prepared for the 1981 Census of Population and Housing were used as the frame for the selection of housing units, the Third stage Sampling Units (TSUs) in all the sectors.

1.7.3 Sample selection

In urban areas with wards as PSUs generally two census blocks were selected per selected ward as SSUs with Probability Proportional to Size (PPS). The number of housing units was taken as the measure of size. The main exception to the above pattern is in zone 1. In Colombo areas there is little advantage in clustering sample blocks into wards, while in other urban centres such clustering has the major effect of reducing the number of different urban centres coming into the sample. Therefore, in Colombo urban areas a sample of blocks as PSUs was selected directly. This option has been followed for Colombo metropolitan area as well as other urban areas of zone 1 in Colombo District. In rural areas, GN divisions as PSUs were selected with PPS. From the selected PSU, depending on the size of the villages, one or part or group of villages were selected with PPS. In all the sectors, housing units as Third stage sampling Units (TSUs) were selected systematically from the pre-listing forms of the selected census blocks. A special operation was undertaken before the survey to update the list of housing units in the selected census blocks. The survey covered private households in the selected areas. Population in institutions and institutional household was excluded.

1.7.4 *Sample size*

The target sample size in terms of completed interviews with eligible respondent was 7500. In order to achieve this sample size 258 PSUs, 703 SSUs and 8,636 housing units as TSUs were selected from all sectors. Since there was no further sampling all the eligible respondents found in the selected housing units were included in the survey. Eligible respondents were defined as ever-married women in the age group 15 – 49 years who slept in the household the previous night. All children in the age group 3 – 59 months of all the eligible respondents were taken for anthropometric measurements of height and weight. The sample was designed to provide independent estimates for seven zones in the country. The weights for each strata (urban, rural and estate) within a zone are shown in Table 1.1.

Table 1.1 Sample weights by zone

Household and individual weights by zone.

Zone	Strata		Scaled household weight	Scaled individual weight
	No.	Description		
Zone 1	11+12	Colombo urban	0.943880	0.973800
	13	Gampaha urban	0.889735	0.917709
Zone 2	20	Urban	1.088290	1.547613
		Rural	1.639377	1.578678
Zone 3	30	Urban	1.609445	1.226201
		Rural	1.136887	1.211052
		Estate	1.233418	1.235958
Zone 4	40	Urban	2.085573	1.847192
		Rural	1.795777	1.795150
		Estate	1.803179	1.766880
Zone 5	51	Urban	1.680248	1:654108
		Rural	1.653090	1.653516
	52	Estate	0.654436	0.603671
Zone 6	61	Urban	0.212992	0.160635
		Rural	0.157921	0.160885
	62	Urban	0.589298	0.544230
		Rural	0.556295	0.568745
Zone 7	71	Urban	0.148377	0.160139
		Rural	0.158070	0.157002
	72	Urban	0.508638	0.961175
		Rural	1.138574	0.947419
		Estate	0.921060	0.997155

1.8 Questionnaire

The questionnaire used in the Demographic and Health Survey – 2000 constitute of two parts; The Household questionnaire and the Individual Questionnaire. The questionnaire was of the same model used for the DHS 1993 with some modification. The questions that are no longer relevant were excluded and the new items such as birth registration, consumption of iodised salt, rubella vaccination, national immunization campaign, and prevalence of AIDS were included.

1.8.1 Household questionnaire

The household questionnaire was used to list all the usual residents and visitors, if any, who slept in the household the previous night of the interview. Basic demographic information such as age, sex, marital status, and relationship to the head of the household of every listed individual was collected. This information was used to identify the eligible respondents for individual interviews.

1.8.2 Individual questionnaire

An individual questionnaire was used for each of the eligible respondent. It consisted of nine sections. They are:

1. Respondent's background
2. Reproduction
3. Contraception
4. Health of children and mother
5. Marriage
6. Fertility preferences
7. Husband's background and work
8. AIDS and other sexually transmitted diseases
9. Height/Length and weight of children aged 3 – 59 moths

The questionnaire is detailed and complex and consisted of nearly 200 questions.

1.9 Survey organization and field operation

Demographic and Health Survey – 2000 was the third in this series conducted in Sri Lanka by the Department of Census and Statistics in collaboration with Ministry of Health. The World Bank provided the necessary financial support. The first two surveys were conducted in 1987 and 1993.

Twelve survey teams carried out the data collection operation in the urban and rural areas during the period May – June 2000. Each team consisted of 5 female interviewers, one supervisor and one measurer to measure the heights and weights of children, aged 3 – 59 months, of eligible women in the selected household. A separate team of 3 field interviewers and one measurer carried out the data collection work in the estate sector. All the interviewers and the measurers were from the department attached either to head office divisions or to the district field offices. As such they had vast experience in collecting data of all kinds in the field, through various surveys.

An intensive training for one week was provided to the field interviewers by senior staff of the Department of Census and Statistics who were involved in the previous Demographic and Health Surveys. They trained the field interviewers on interviewing techniques, field procedures, and a detailed review of the questionnaire. The enumerators were given further training by conducting mock interviews to improve their interviewing techniques and method of recording answers etc. Subject matter experts from the Family Health Bureau delivered Special lectures. Two medical doctors from Medical Research Institute (MRI) provided lectures on Family Planning programmes, contraceptive methods, anthropometrics measurements of height and weight and nutritional status of mothers and children.

The measurers were given two weeks training, at the Medical Research Institute (MRI), in measuring anthropometrics measurements, the heights and weights of children, aged (3 – 59 months). They were also given practical training in taking the accurate height and weight of children in an orphanage in Colombo using the instruments provided by MRI and UNICEF for this purpose.

Instructions were given to the interviewers to ensure that every question has been answered and the responses recorded correctly before leaving the household. Team supervisors were instructed to carry out consistency checks on each questionnaire in the field during the evening on the day of the interview.

For the data collection work in the six Districts of the North and East, excluding Kilinochchi and Mullaitivu Districts, female interviewers were selected from these Districts. With the assistance of the District administration, 57 female interviewers were selected, at the rate of one interviewer per Divisional Secretariat division. They were given both classroom training and field training for one week. The questionnaire used in these districts was slightly different form that used in the other Districts.

10 staff grade officers of the department were appointed as coordinators to coordinate all the field works related to the survey and to implement quality control procedures. The coordinators visited the interviewers in the field both at the beginning and in the middle of the fieldwork and reviewed the questionnaires completed by every interviewer for consistency of the responses.

Survey activities were delayed due to the deployment of staff for the Census of Population and Housing conducted in July 2001. The activities were carried out according to the calendar shown below.

1. Survey design	Jan – Feb 2000
2. Questionnaire design	Jan – Feb 2000
3. Finalization of instruction manuals	Jan – Feb 2000
4. Pretest of questionnaire	February 2000
5. Printing of questionnaires and manuals	March – Mid-April 2000
6. Selection of sample blocks	January 2000
7. Updating of household lists	Feb – Mid-March 2000
8. Selection of sample households	March – Mid April 2000
9. Recruitment of field staff	Feb – March 2000

10. Training of field staff	Last week of April 2000
11. Field work	May – August 2000
12.Computer programming for data entry and editing	March – May 2000
13. Manual editing and data entry	June – Oct 2000
14. Computer editing	Nov – Dec 2000
15. Tabulations for preliminary report	Jan – Feb 2001
16. Preparation of preliminary report	March 2001
17. Tabulations for final report	August – October 2001
18. Writing the chapters	October 2001– January 2002
19. Editing the chapters	Jan – March 2002
20. Preparation of draft final report	April – May 2002
21. Seminar on findings	June 2002
22. Editing the final report	July 2002
23.Printing of final report	August 2002

1.10 Data processing

In addition to the field editing by the supervisors, all the questionnaires, after bringing them to the head office of the Department, were manually edited by trained office editors. The manual editors were instructed to check carefully, each questionnaire, regarding the identification information, completeness of the questionnaire, internal consistencies, and information recorded in the filter questions and to code few items. Special attention was paid to the consistency of answers recorded to questions regarding age with other related information provided by the respondents. The supervising officers also checked 10 percent of the manually edited questionnaires.

The data entry and computer editing was carried out on microcomputers using Integrated Microcomputer Processing System (IMPS) package developed by U.S. Bureau of Census. The Statistical Package for Social Scientists (SPSS) was used to obtain tabulations.

1.11 Coverage and response rate

48,526 housing units were listed in all the seven zones and out of this, 8,636 housing units were selected for enumeration. 8,765 households were identified during the enumeration and interviews were completed in 8,169 households, which gives a household response rate of 96.3 percent. Of the 6,601 women, identified as eligible respondents from the 8,169 households, 6,385 women were interviewed fully, which yields an eligible women response rate of 96.6 percent. The results of the responses of DHS – 2000, DHS – 1993 and DHS – 1987 are shown in Table 1.2.

Table 1.2 Results of the household and individual interviews

Percent distribution of interview status of household and individual interviews.

Results of interview	DHS 1987	DHS 1993	DHS 2000
Household interview			
Completed	94.5	96.6	93.1
No competent respondent at home	1.4	0.2	0.5
Nobody at home	0.4	0.9	2 5
Refused	0.04	0.1	0.2
Dwelling vacant	1.3	1.0	1.0
Dwelling destroyed	0.6	0.3	0.6
Dwelling not found	0.5	0.3	0.9
Other	1.3	0.5	1.1
Total percent	100	100	100
Unweighted number of households	8,119	9,230	8,765
Household response rate	**96.3**	**98.9**	**96.3**
Eligible women interview			
Completed	95.1	98.7	96.6
Respondent not at home	3.6	1.0	2.8
Refused	0.2	0.1	0.1
Partly completed	0.1	-	-
Other	1.1	0.2	0.4
Total percent	100	100	100
Total unweighted number of eligible women	6,170	7,078	6,601
Eligible women response rate	**95.1**	**98.7**	**96.6**

Chapter 2 : Background Characteristics of Households

D. B. P. S. Vidyaratne

Demographic and Health Survey – 2000 surveyed 8169 households of which 1498 are from the urban sector and 6087 and 584 households are from the rural and estate sectors respectively. The household questionnaire of the survey was used to collect some basic demographic characteristics of the members and visitors of each sample household. A household, as defined in the survey, refers to a person or a group of persons who usually live in the same housing unit and have a common arrangement for the preparation and consumption of food. A visitor, on the other hand, is someone who is not a usual resident of the household, but temporarily staying with the family. Such visitors are also included in the household questionnaire.

2.1 Household population

Defacto household population by age groups are presented in Table 2.1 for urban, rural and estate sectors. Age distribution patterns of males and females are slightly different. Percentage of males in the younger age group is higher than that of females. It can be seen from the table that the age proportions increase with age from (0–4) years up to (15–19) years and thereafter decline almost gradually with successive ages. This pattern largely reflects the continuous fertility decline which the country has been experiencing during the last three decades. This is also shown in the population pyramid with a narrow base. The data from Table 2.2 also reveals that the percentage of children less than 5 years has been declining from 12.5 in 1981 to 9.0 in 1993 and further to 7.9 in 2000. This table also reveals that the percentage of women in the reproductive age group (15 – 49 years) is 54.6. This proportion has been increasing steadily for the last three decades. As a result of this relatively large reproductive base, the population of the country is bound to increase further inspite of the decline in fertility. Aged population (65 and over) has increased in the country over the past years. This percentage

which was 6.1 in 1993 has increased to 7.2 in 2000. Infact, female aged population has increased faster than that of males over this period. Age dependency ratio for children less than 15 years, shown in Table 2.2, has decreased throughout the period, from 68.6 in 1971 to 38.3 in 2000. Age dependency ratio for elderly (65 and over) population has increased due to the increase in aged population. Thus the demographic transition which has taken place in the country during the recent past has resulted in significant changes in the age structure of the population. The share of children will continue to decrease, while the share of aged population will continue to increase and as a result special attention has to be given to take care of the aged.

Sector- wise tabulation reveals that the estate sector shows the highest percentage (10.4) of children less than 5 years, compared with those of 7.5 and 8.4 in the rural and urban sectors respectively. Aged population (65 years and above) is lowest in the estate sector. This is true for both males and females.

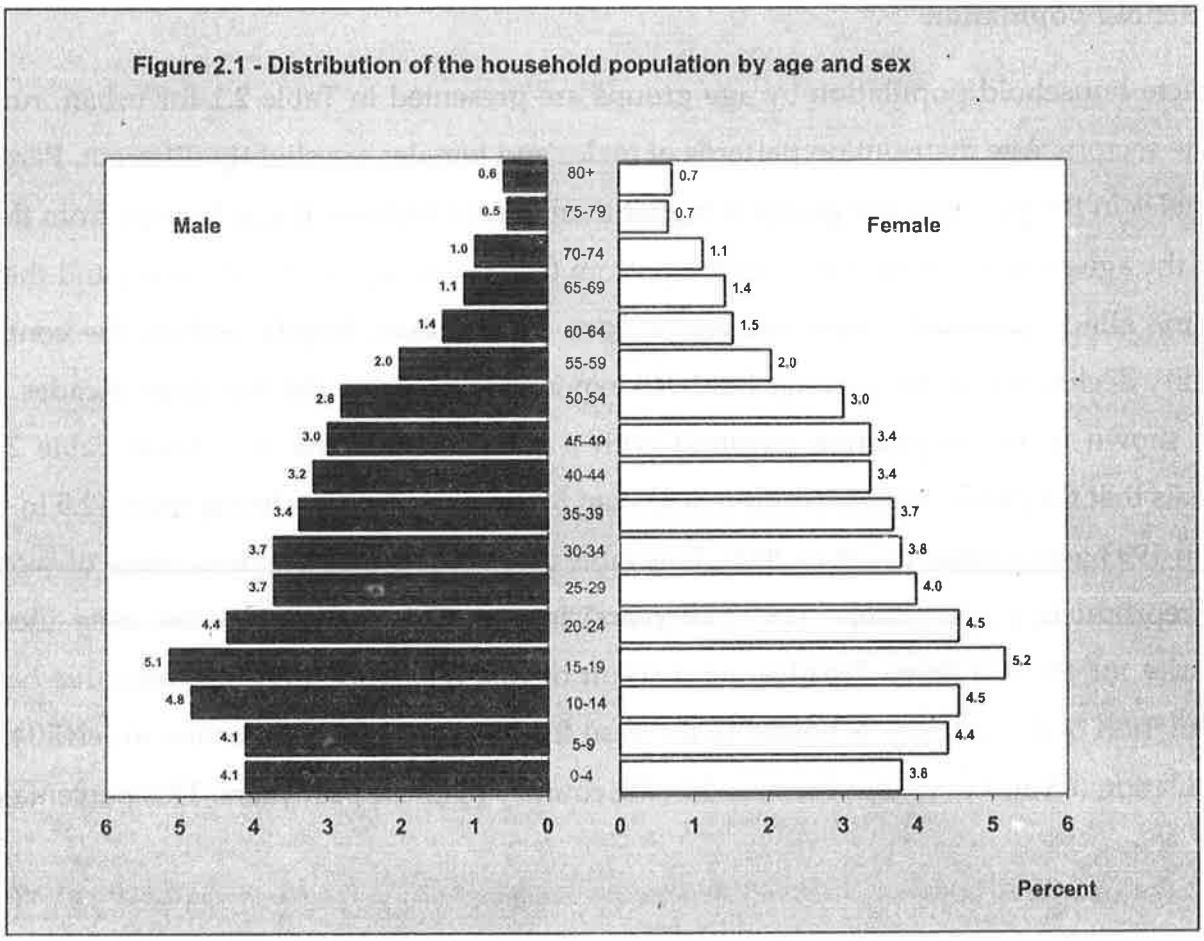


Table 2.1 De facto household population

Percent distribution of the de facto household population by five year age group, according to sex and sector.

Age group (yrs.)	Urban			Rural			Estate			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	9.1	7.6	8.4	8.0	7.1	7.5	10.6	10.2	10.4	8.4	7.4	7.9
5-9	8.6	7.5	8.1	8.2	8.7	8.4	9.8	9.6	9.7	8.4	8.5	8.5
10-14	8.7	8.2	8.4	10.1	8.9	9.5	10.9	10.8	10.8	9.9	8.9	9.4
15-19	9.1	9.4	9.3	10.8	10.3	10.6	10.1	11.2	10.6	10.5	10.1	10.3
20-24	8.8	9.2	9.0	8.9	8.7	8.8	9.4	9.6	9.5	8.9	8.9	8.9
25-29	7.6	8.3	8.0	7.6	7.8	7.7	7.7	6.6	7.2	7.6	7.8	7.7
30-34	8.1	8.4	8.2	7.5	7.2	7.4	6.4	6.2	6.3	7.6	7.4	7.5
35-39	8.1	7.5	7.8	6.7	7.2	7.0	5.7	6.2	6.0	6.9	7.2	7.0
40-44	6.8	6.9	6.8	6.5	6.6	6.6	5.6	5.7	5.6	6.5	6.6	6.6
45-49	6.1	6.2	6.2	6.1	6.8	6.4	6.1	6.5	6.3	6.1	6.6	6.4
50-54	6.4	5.9	6.1	5.5	5.9	5.7	5.6	6.6	6.1	5.6	5.9	5.8
55-59	3.6	4.3	4.0	4.1	3.9	4.0	4.9	4.3	4.6	4.1	4.0	4.0
60-64	2.9	3.2	3.0	2.9	2.9	2.9	3.2	2.8	3.0	2.9	3.0	2.9
65-69	2.2	2.8	2.5	2.5	2.9	2.7	1.2	1.7	1.4	2.3	2.8	2.6
70-74	1.6	2.2	1.9	2.2	2.3	2.2	1.5	1.2	1.4	2.0	2.2	2.1
75-79	1.2	1.3	1.2	1.1	1.3	1.2	0.8	0.5	0.7	1.1	1.3	1.2
80+	1.1	1.1	1.1	1.3	1.5	1.4	0.4	0.4	0.4	1.2	1.4	1.3
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number enumerated	3,448	3,761	7,209	13,460	13,908	27,368	1,323	1,348	2,671	18,231	19,017	37,248

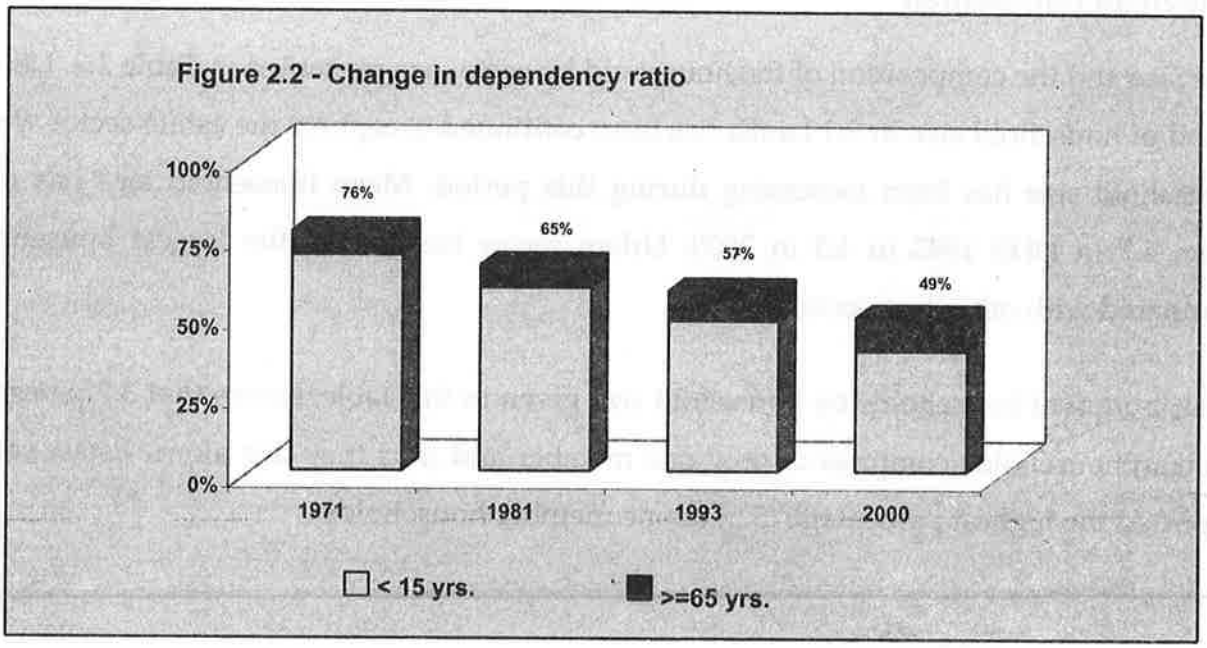


Table 2.2 Functional age groups from selected sources

Proportion of the population in selected age groups.

Age group	Census 1971 %	Census 1981 %	DHS 1993 %	DHS 2000 %
Children below 5 yrs.	13.1	12.5	9.0	7.9
Children below 15 yrs.	39.0	35.2	30.3	25.8
Children below 18 yrs.	-	-	-	31.9
Women in the reproductive age group (15-49) yrs.	49.0	52.2	53.0	54.6
Working age population (15-64) yrs.	56.8	60.5	63.5	67.1
Elderly population (>= 65) yrs.	4.2	4.3	6.1	7.2
Median age	19.7	21.4	25.0	28.0
Age-dependency ratio				
< 15 yrs.	68.6	58.2	47.8	38.3
>= 65 yrs.	7.5	7.2	9.6	10.7

2.2 Household composition

The size and the composition of the household by sector are presented in Table 2.3. Decreasing trend of household size in Sri Lanka has been continued except for the estate sector where the household size has been increasing during this period. Mean household size has dropped from 4.7 in DHS 1993 to 4.5 in 2000. Urban sector has shown the largest household size compared with other two sectors.

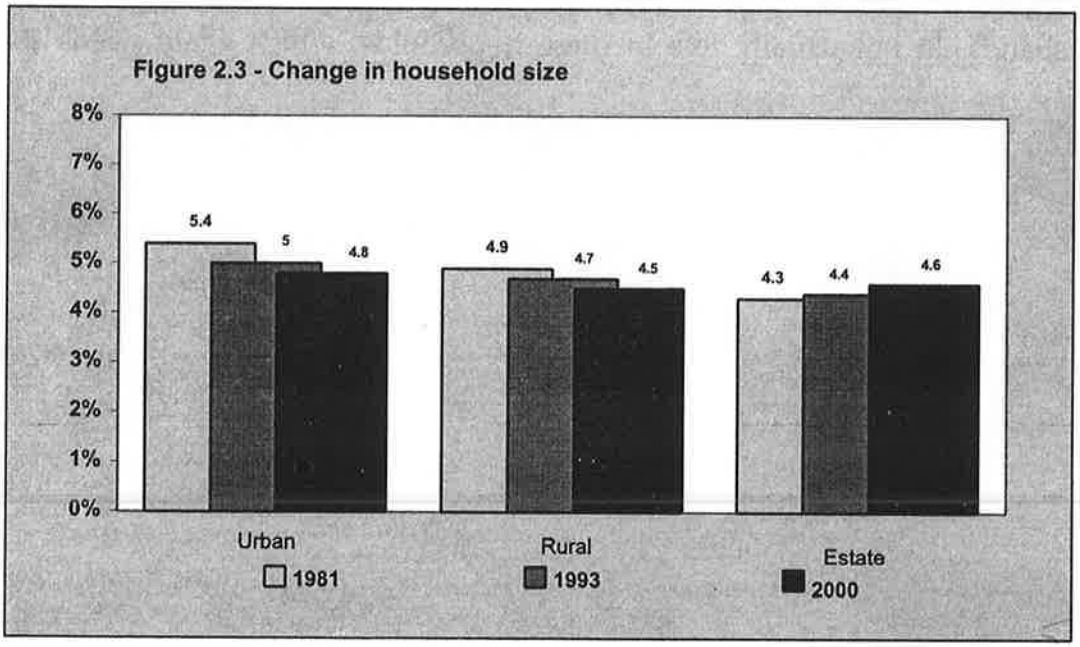
Distribution of households by household size given in this table, shows that 3.7 percent of Sri Lankan households comprise of only one member and thus they live alone. Estate sector has reported the highest percentage (5.5) of one member households.

Table 2.3 Household composition

Percent distribution of households by sex of head of household, number of usual members and household size, according to sector.

Household characteristic	Sector			Total
	Urban	Rural	Estate	
Household head				
Male	76.7	80.0	82.7	79.6
Female	23.3	20.0	17.3	20.4
Total	**100**	**100**	**100**	**100**
Number of usual members*				
1	4.2	3.4	5.5	3.7
2	7.5	8.5	9.2	8.4
3	16.5	16.8	13.8	16.6
4	24.0	25.2	21.9	24.8
5	19.3	21.6	22.9	21.3
6	11.8	13.0	12.4	12.7
7	6.8	6.0	6.7	6.2
8	4.4	2.9	4.6	3.3
9+	5.4	2.5	2.9	3.1
Total	**100**	**100**	**100**	**100**
Mean size				
DHS 2000	4.8	4.5	4.6	4.5
DHS 1993	5.0	4.7	4.4	4.7
Census 1981	5.4	4.9	4.3	4.9
Number of households surveyed	**1,498**	**6,087**	**584**	**8,169**

*Visitors and temporary occupants are excluded.



2.3 Female heads of households

Despite the fact that the " head of the household " is not a very meaningful concept due to the social and cultural factors embedded in it, this survey reveals that one of every 5 households are headed by women. As in most other countries, female headed households have been increasing in the recent past. One has to analyse the reasons for this high proportion of female headed households with the background knowledge of the social and cultural norms, which determines the heads of households from a Sri Lankan perspective. However, urban sector has reported the highest proportion of female headed households (23.4%) while the estate sector (17.3%) recorded the lowest.

Survey also reveals that, of these female heads, 8 percent live alone. The corresponding percentage for males is only 2.6. Nearly 11.8 percent of female heads are below 40 years of age. It should also be noted that 17.9 percent of female heads are fairly old, more than 70 years. Female heads of households classified by their level of education reveals that they have a lower level of education than male heads of households. Nearly 20 percent of the female heads had no schooling at all. This percentage for male heads is only 4.7. Female heads with G.C.E. (O/L) and above is 16 percent compared with 26.1 for male heads.

Heads of households classified by marital status reveals that 65 percent of female heads of households are widows. It is worth to note that 24.4 percent of female heads are currently married. Despite the cultural factors, the members of these households reported that these households are headed by females. Reasons for this have to be studied and may be in most cases husbands do not usually live in these households, which again needs to be studied further.

Table 2.4 Household heads

Percent distribution of male heads and female heads by sector, age group, marital status, household size and educational level.

Background characteristic	Total		Male		Female	
	No.	%	No.	%	No.	%
Sector						
Colombo metro	897	11.0	687	10.6	210	12.6
Other urban	601	7.3	461	7.1	140	8.4
Rural	6,087	74.5	4,873	74.9	1,214	72.9
Estate	584	7.2	483	7.4	101	6.1
Age group						
< 25	86	1.0	77	1.2	9	0.5
25-40	2,048	25.1	1,859	28.6	189	11.3
41-55	3,263	40.0	2,664	41.0	599	36.0
56-70	1,991	24.4	1,422	21.9	569	34.2
> 70	781	9.6	482	7.4	299	17.9
Marital status						
Single	200	2.4	139	2.1	61	3.7
Married	6,520	79.8	6,114	93.9	406	24.4
Widowed	1,288	15.8	203	3.1	1,085	65.1
Divorced/Separated	154	1.9	41	0.6	113	6.8
Household size						
1	305	3.7	168	2.6	137	8.2
2-3	2,037	24.9	1,463	22.5	574	34.4
4-5	3,759	46.0	3,141	48.3	618	37.2
> 5	2,068	25.3	1,732	26.6	336	20.2
Educational level						
No schooling	634	7.8	307	4.7	327	19.6
Primary	2,462	30.1	1,889	29.0	573	34.4
Secondary	3,101	38.0	2,603	40.0	498	29.9
G.C.E. (O/L)	1,250	15.3	1,074	16.5	176	10.7
G.C.E. (A/L) & higher	713	8.7	625	9.6	88	5.3
Total	**8,169**	**100**	**6,504**	**100**	**1,665**	**100**

Note: Missing information on marital status and educational level are not presented separately.

2.4 Family structure

In Sri Lanka, like in other South Asian countries, parents usually live with one of the married children. Therefore two types of households can be identified, one being households with only nuclear family and the other the extended family where more families live together. The survey results were analyzed to study this and it revealed that, 63.5 percent of the households comprised only of nuclear families. This percentage does not show any significant difference across urban, rural and estate sectors.

Table 2.5 Type of family structure

Percent distribution of households according to family structure by sector.

Background characteristic	Total households		Nuclear family only		Extended family		One member family	
	No.	%	No.	%	No.	%	No.	%
All sectors	**8,169**	**100**	**5,190**	**63.5**	**2,691**	**32.9**	**288**	**3.5**
Colombo metro	897	100	551	61.4	319	35.6	27	3.0
Other urban	601	100	361	60.1	212	35.3	28	4.6
Rural	6,087	100	3,908	64.2	1,978	32.5	201	3.3
Estate	584	100	370	63.4	182	31.2	32	5.5

Note: 1. Nuclear family is defined as the group comprising of one or more members - head of the household, spouse, offspring, adopted child, domestic servant and other occupants such as visitors and boarders.

2. Extended family is defined as the group comprising of essentially head of household and/or spouse, and one or more relations of either household head or spouse. Any other person listed under nuclear family above, may be included in these households too.

2.5 Source of drinking water

An important factor contributing to the high morbidity due to diarrhoeal diseases is the lack of access to safe drinking water and sanitary facilities. One of the United Nations goals is also to provide safe drinking water to all. Therefore, it is pertinent to examine the source of drinking water of the households from this survey. The survey data indicates that 47.2 percent

of households get their water from protected wells, 4.8 from tube wells, and 23.4 percent from main pipelines. These three sources are considered to provide safe drinking water and thus 75.4 percent of households do have access to safe drinking water. This percentage varies across sectors. Only 24.8 percent of households in the estate sector do have access to safe drinking water, while this percentage for Colombo metro is 99.2, which is the highest. Percentages of households obtaining drinking water from unprotected wells and rivers / tanks / streams are 10.7 and 10.5 respectively. Sector wise classification reveals that rural sector records the highest percentage from unprotected wells, (14.1) whereas estate sector records the highest percentage (67.1) from rivers / tanks / streams.

Incidence of water borne diseases can be reduced by using boiled water for drinking. Table 2.7 reveals that 42.8 percent of households in Sri Lanka drink boiled water irrespective of the source. This percentage is highest among estate households (61.7) and lowest (38.8) among rural households. The survey results were analyzed to see the proportion of households, who drinks boiled water, when they get water from unsafe sources. This percentage was 48.1. To study the situation further, households with children less than 5 years were analyzed separately and was found that 72.0 percent of these households give boiled water at least to the children, irrespective of the source of water. The corresponding percentages are 77.4, 73.5, 70.6, 74.5 respectively for Colombo metro, other urban, rural and estate sectors respectively.

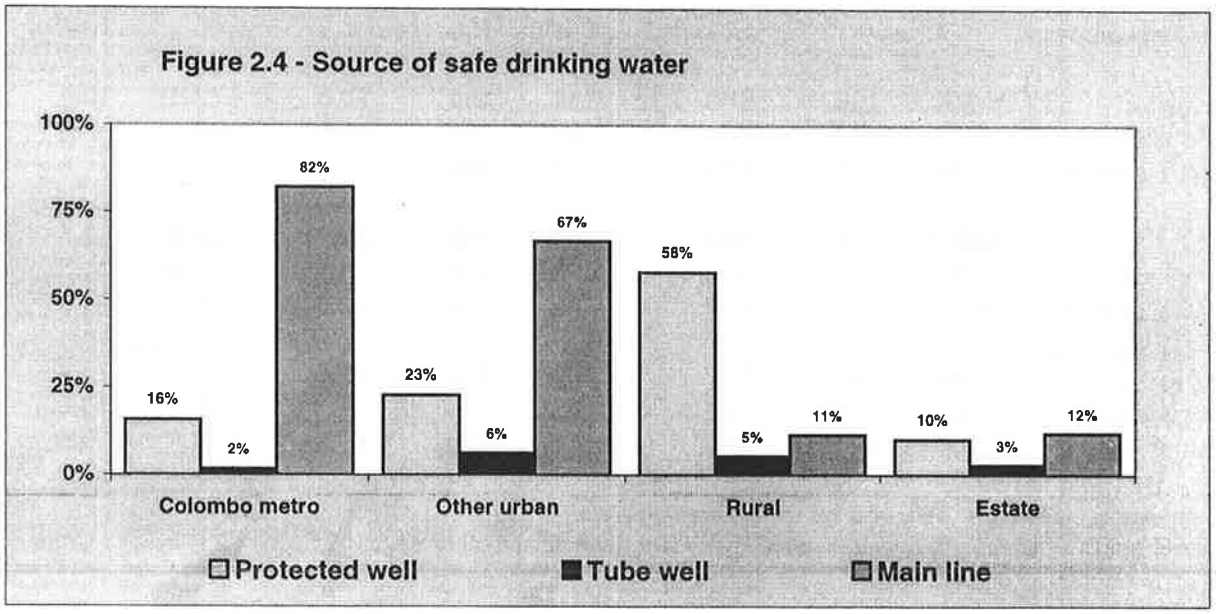


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Table 2.6 Source of drinking water

Percent distribution of households by source of drinking water by sector.

Sector	Total		Protected well		Unprotected well	Tube well	Main line		Bowser	River/ Tank/ Stream	Other
	No.	%	Within premises	Outside premises			Public taps	Tap within unit			
All sectors	**8,169**	**100**	**27.8**	**19.4**	**10.7**	**4.8**	**13.9**	**9.5**	**0.2**	**10.5**	**3.2**
Colombo metro	897	100	13.3	2.3	0.4	1.6	42.4	39.8	0.0	0.0	0.3
Other urban	601	100	15.0	7.7	1.0	6.2	37.9	28.8	0.3	0.8	2.3
Rural	6,087	100	33.4	24.4	14.1	5.4	7.8	3.6	0.2	7.6	3.5
Estate	584	100	4.8	5.3	1.9	2.8	8.2	3.7	0.4	67.1	5.8

Table 2.7 Usage of boiled water for drinking

Percent distribution of households according to usage of boiled water for drinking by source of water supply.

Sector and source of water supply	All households			Households with < 5 yr. children					
	Total		% using boiled water for all members	Total		Use of boiled water for			
	No.	%		No.	%	All members	Children only	none	Not stated
All sectors	**8,169**	**100**	**42.8**	**2,005**	**100**	**40.0**	**32.0**	**19.8**	**8.3**
Safe sources	6,160	75.4	41.1	1,515	100	37.2	34.8	20.0	7.9
Unsafe sources	2,009	24.6	48.1	490	100	48.5	23.2	18.9	9.4
Colombo metro	**897**	**100**	**47.9**	**257**	**100**	**36.6**	**40.8**	**15.2**	**7.4**
Safe sources	891	99.3	48.1	256	100	36.7	41.0	14.8	7.4
Unsafe sources	6	0.7	*	1	100	-	-	*	-
Other urban	**601**	**100**	**57.0**	**135**	**100**	**50.0**	**23.5**	**18.4**	**8.1**
Safe sources	575	95.7	56.8	128	100	50.0	24.2	18.0	7.8
Unsafe sources	26	4.3	61.5	7	100	*	*	*	*
Rural	**6,087**	**100**	**38.8**	**1,453**	**100**	**37.5**	**33.1**	**21.5**	**7.9**
Safe sources	4,551	74.6	37.6	1,086	100	35.8	35.0	21.5	7.6
Unsafe sources	1,536	25.4	42.3	367	100	42.5	27.2	21.5	8.7
Estate	**584**	**100**	**61.7**	**160**	**100**	**59.6**	**14.9**	**12.4**	**13.0**
Safe sources	145	24.8	42.8	45	100	39.1	23.9	19.6	17.4
Unsafe sources	439	75.2	68.0	115	100	67.8	11.3	9.6	11.3

Note: Safe sources – Protected well, tube well and main water line.
Unsafe sources – Unprotected well, bowser, river / tank / stream and other sources such as rain water and spring water.
* Based on fewer than 10 cases

2.6 Sanitary facilities

In this survey, information on the access to sanitary facilities and the type of latrine used by the households were collected. Data from this survey reveals that almost 94 percent of the households have access to some kind of toilet. Percentage of households without any access to toilet facilities is 6. Out of the households, which have access to toilet facilities, 81.8 percent have their own private toilet, while 11.9 percent share the toilet with another household or use public toilets. Sector-wise classification shows that 27.7 percent of households in the estate sector, do not have access to any kind of toilet, which is the highest among all four sectors as indicated in Table 2.8.

Table 2.8 Type of access to sanitary facilities

Percent distribution of households by type of access to sanitary facilities by sector.

Sector	Total households surveyed	Percentage with latrine facilities	Type of access (%)			
			Exclusively for household	Shared with another household	Community/ Public latrine	Not stated
All sectors	**8,169**	**93.9**	**81.8**	**9.3**	**2.6**	**0.1**
Colombo metro	897	99.8	74.0	11.7	14.0	0.1
Other urban	601	95.2	84.0	8.2	3.0	0.0
Rural	6,087	95.0	86.5	8.3	0.2	0.1
Estate	584	72.3	45.5	17.4	9.4	0.0

Data presented in Table 2.9 shows the type of toilet used by the households. 72.6 percent of households have water seal type of latrine which is considered to be the hygienic type of toilet by health authorities. This percentage (35.5) is lowest in the estate sector.

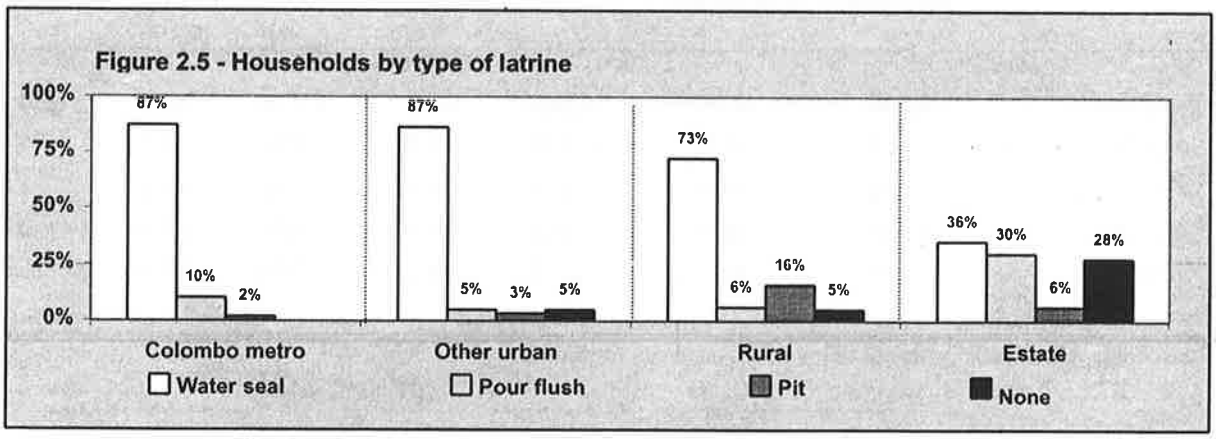


Table 2.9 Households by type of latrine

Percent distribution of households by type of latrine facility and sector.

Sector	Total No.	Total %	Water seal	Pour flush	Pit	Bucket	Other	None
All sectors	**8,169**	**100**	**72.6**	**8.2**	**12.8**	**0.0**	**0.3**	**6.1**
Colombo metro	897	100	87.3	10.2	1.8	0.1	0.3	0.2
Other urban	601	100	86.5	4.8	3.3	0.3	0.2	4.8
Rural	6,087	100	72.6	6.2	16.0	0.0	0.1	5.0
Estate	584	100	35.5	30.0	6.3	0.0	0.5	27.7

2.7 Use of iodized salt

The need to use Iodized salt in cooking was stressed in Sri Lanka during the recent past. As such, it is vital to see the success of this campaign. Therefore the availability of iodine in cooking salt in the sample households were checked using test kits and was found that 87.6 percent of the households use iodized salt and only 12.4 percent of the households do not use iodized salt. Highest percentage of households not using iodized salt has been reported in the estate sector (18.7).

Table 2.10 Usage of iodized salt for cooking

Percent distribution of households by type of salt used for cooking purposes.

Sector	Total* households surveyed	Percentage using iodized salt	Households using salt powder No.	Households using salt powder Iodized (%)	Households using salt crystals No.	Households using salt crystals Iodized (%)	Type of salt not stated No.	Type of salt not stated Iodized (%)
All sectors	**8,136**	**87.6**	**1,568**	**96.2**	**6,274**	**86.0**	**294**	**86.4**
Colombo metro	889	84.2	339	95.9	526	78.1	24	79.2
Other urban	596	89.0	199	98.5	376	85.6	21	81.0
Rural	6,068	88.6	978	95.9	4,856	87.5	234	88.0
Estate	583	81.3	52	96.2	516	80.0	15	80.0

* Households where cooking is not being done, has been excluded.

2.8 Rubella vaccination

A Nation wide programme has been launched by the health authorities, to give Rubella vaccination to all females, 11 to 44 years of age. Under this programme all school children were targeted to be covered, with Rubella vaccination. The success of this programme can be measured through the results obtained in this survey. 53.2 percent of the women in the target age group are reported to have had Rubella vaccination. Sector-wise analysis shows that 57.3 percent of rural women in this target group have reported that they received this vaccination which is highest among all four sectors. Only 38.8 percent of them have been reported to have received the Rubella vaccination from estate sector, which is the lowest.

Age wise classification indicates that highest percentage (69.3) has been reported by females aged (11 – 19) years, and lowest (28.5) has been reported by females of age (31 – 44) years.

According to the survey data on Rubella vaccination, education level of the female is positively correlated with receiving of vaccination. Higher the level of education of the female, higher the percentage who has been vaccinated upto secondary level of education. Thereafter, level of education does not seem to change this percentage significantly.

Figure 2.6 - Rubella vaccination

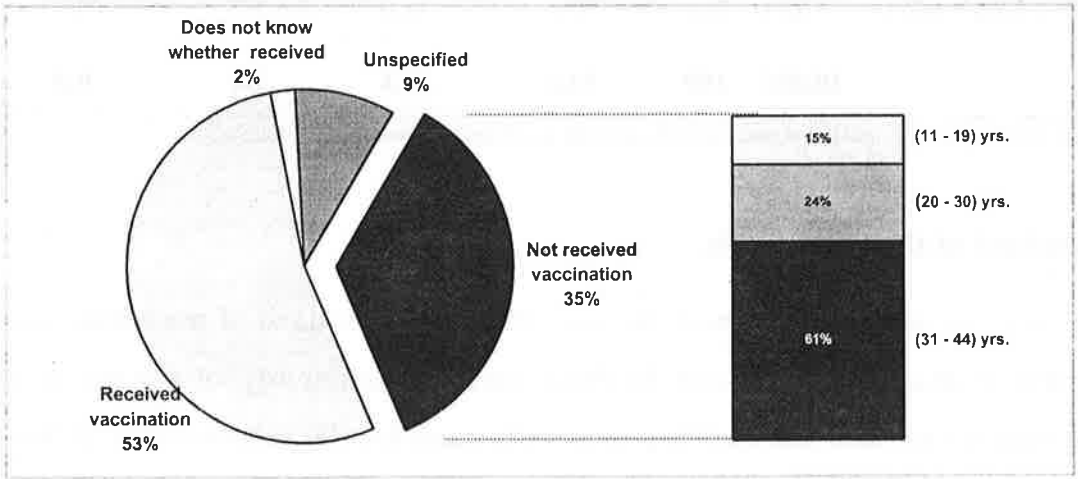


Table 2.11 Rubella vaccination

Percent distribution of women aged (11-44) yrs. who know about and have received the rubella vaccination by sector, age group, marital status and educational level.

Background characteristic	Total No.	Total %	Received vaccination	Not received vaccination	Does not know whether received	Does not know about vaccination	Not stated
Sector							
Colombo metro	1,275	100	41.2	41.6	2.8	0.6	13.7
Other urban	830	100	47.3	41.4	2.8	0.1	8.4
Rural	7,609	100	57.3	32.5	1.9	0.2	8.1
Estate	731	100	38.8	44.2	3.3	0.1	13.6
Age group							
11-19	3,246	100	69.3	16.8	1.6	0.2	12.1
20-30	3,457	100	65.0	25.8	2.5	0.1	6.6
31-44	3,742	100	28.5	59.6	2.4	0.5	9.1
Marital status							
Single	4,976	100	65.8	19.6	2.4	0.2	12.1
Married	5,090	100	42.7	49.1	1.9	0.3	6.0
Widowed	154	100	18.7	62.6	2.6	1.3	14.8
Divorced / Separated	148	100	26.2	59.7	3.4	0.7	10.1
Educational level							
No schooling	359	100	22.6	56.3	5.8	1.4	13.9
Primary	1,258	100	28.7	54.6	2.1	0.6	14.1
Secondary	5,284	100	57.0	31.1	2.0	0.2	9.7
G.C.E. (O/L)	2,085	100	59.7	32.0	1.7	0.2	6.3
G.C.E. (A/L) & higher	1,453	100	59.1	32.0	2.7	0.0	6.3
Total	**10,445**	**100**	**53.2**	**35.1**	**2.2**	**0.3**	**9.2**

Note: Missing information on marital status and educational level are not presented separately.

2.9 Living standard of the households

In this survey, an attempt was made to asses the living standard of the households based on the available household goods and facilities such as availability of electricity for lighting, radio, television etc.. and the building materials used for the construction of floor, roof and wall of the house. The survey data in Table 2.12 reveals that 68.2 percent of the households

use electricity for lighting purposes. This percentage is lowest in the estate sector (31.0%). Almost 80 percent of the households have a radio, but only 61.5 percent of the households have a television in their home. Having a refrigerator is still unaffordable to estate sector households (only 2.2%) and even at national level the percentage of households having a refrigerator is as low as 23 percent. With regard to transport equipment, bicycles seem to be the popular mode of transport and about 40 percent of the households have a bicycle at home.

Still 78 percent of the households in the country use firewood for cooking purposes. Gas is popular among urban sector where 50 percent of the households use this source of fuel for cooking. Households classified by the building material used for the floor, roof, and walls of the house they live reveals that 81 percent of the houses had terrazzo / tiled or cemented floor, 73 percent had tiles or asbestos for the roof and 78 percent had bricks and related materials for the walls at national level. Sectoral classification indicates that 46 percent of the estate households had used dung / mud for the floor, 75 percent had used tin sheets for the roof and 45 percent had used mud for walls of their houses in this sector.

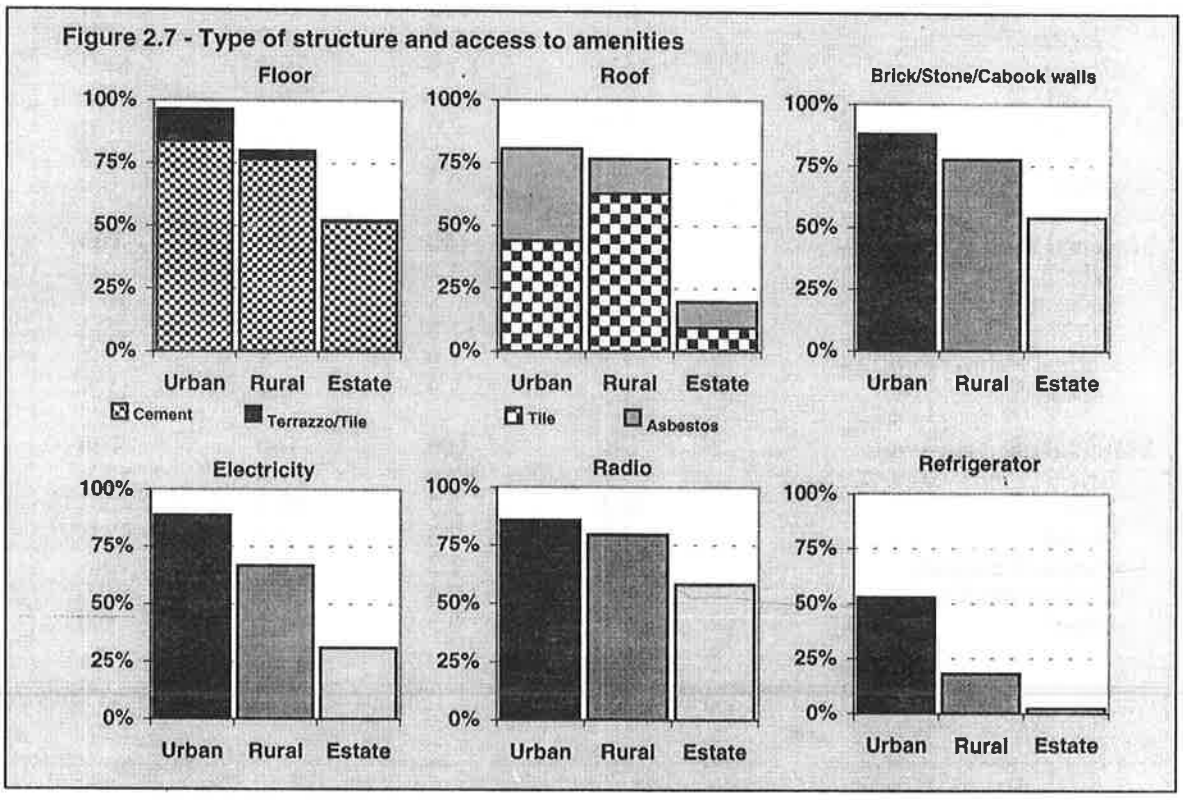


Table 2.12 Indicators of living standards

Percentage of households according to facilities available, and percent distribution of households by fuel used for cooking and type of construction of dwelling, by sector.

Background characteristic	Total	Urban	Rural	Estate
Total households surveyed	**8,169**	**1,498**	**6,087**	**584**
		Percentage of households		
Facilities available				
Electricity	68.2	88.7	66.6	31.0
Radio	79.1	85.8	79.5	58.2
TV	61.5	78.2	60.3	30.8
Refrigerator	23.3	52.7	18.0	2.2
Bicycle	39.5	33.4	43.6	12.3
Motor cycle	14.0	14.4	15.1	1.5
Car / Van	6.2	16.5	4.1	1.9
Tractor	2.3	0.6	2.8	0.8
Other vehicle	3.4	5.4	3.1	0.7
Fuel used for cooking	**100**	**100**	**100**	**100**
Fire wood	78.3	34.0	87.4	96.6
Saw dust/Paddy husk	0.1	0.2	0.0	0.3
Kerosene	3.6	14.0	1.3	1.2
Gas	17.0	50.4	10.3	1.0
Electricity	0.4	0.2	0.4	0.5
Other	0.5	1.3	0.4	0.2
Material used for floor	**100**	**100**	**100**	**100**
Terrazzo/Floor tile	4.8	12.5	3.3	0.5
Cement	76.2	83.9	76.7	51.7
Wood	0.2	0.4	0.1	0.5
Dung/Mud	17.9	2.6	19.0	46.6
Sand	0.3	0.1	0.3	0.5
Other	0.4	0.3	0.5	0.0
Material used for roof	**100**	**100**	**100**	**100**
Tile	55.5	43.8	62.8	9.4
Asbestos	17.8	36.8	13.8	10.3
Tin sheets	16.8	11.3	12.6	75.3
Cadjan/Palmyrah/Straw	7.8	1.9	9.8	3.1
Other	1.8	5.9	0.9	1.5
Material used for walls	**100**	**100**	**100**	**100**
Brick/Cement/Stone/Cabook	77.8	87.9	77.6	53.9
Mud	17.2	2.7	18.1	45.4
Wood	2.2	7.3	1.1	0.2
Cadjan/Palmyrah	1.5	1.2	1.7	0.3
Cement blocks	0.3	0.5	0.3	0.0
Other	0.9	0.3	1.1	0.0

Note: Missing information on fuel used and material used for floor, roof and walls are not presented separately.

Chapter 3 : Background Characteristics of Respondents

A.P. de Silva

Status of women in the Sri Lankan society has seen many favourable changes over the years. However, significant gender imbalances still exist among certain sections of the population attributed largely to cultural norms, poverty and submissive nature of women themselves. This scenario tend to create barriers for women in their daily life, and as a consequence compel them to accept situations such as unequal food distribution within the family, restrictions on movement outside home and limited access to services on reproductive health. Inadequate nutrition has caused a high incidence of anaemia among pregnant women in Sri Lanka, which presents serious implications at childbirth and endangers the life of the newborn as well.

In this chapter, a profile of ever married women in the reproductive age group is presented, according to key demographic and socio economic factors. Several indicators are included to depict the degree of empowerment and autonomy of the target group of women. In addition, analysis on nutritional status is also provided to show the wide disparity in receiving nutrition, among ever married women in different social strata.

3.1 Profile of survey respondents

A total number of 6,385 ever married women were interviewed at the survey. Table 3.1 describe how they are distributed according to characteristics that are generally known to have a significant influence on maternal and child health, and well being.

Sector wise differentials show that nearly three out of every four respondents are from the rural sector. Colombo metropolitan area accounted for 12 percent while 8 percent are from other urban areas. Estate sector is represented by 7 percent of ever married women.

Table 3.1 Background characteristics of respondents

Percent distribution of ever-married women by sector, zone, age group, marital status, educational level and parity.

Background characteristic	Weighted percent	Weighted number of women	Unweighted number of women
Sector			
Colombo metro	11.9	762	794
Other urban	8.5	542	487
Rural	73.0	4,658	4,513
Estate	6.6	423	591
Zone			
Zone 1	11.9	762	794
Zone 2	16.4	1,047	665
Zone 3	14.5	928	765
Zone 4	22.7	1,447	806
Zone 5	22.7	1,446	1,196
Zone 6	4.0	256	374
Zone 7	7.8	499	1,185
Age group			
15-19	2.6	163	185
20-24	9.4	603	647
25-29	15.2	971	989
30-34	18.0	1,151	1,164
35-39	18.8	1,203	1,160
40-44	17.8	1,134	1,129
45-49	18.2	1,160	1,111
Marital status			
Married	92.6	5,915	5,915
Widowed	4.1	264	260
Divorced / Separated	3.2	206	210
Educational level			
No schooling	5.3	338	380
Primary	18.0	1,151	1,333
Secondary	45.0	2,877	2,851
G.C.E. (O/L)	18.9	1,205	1,092
G.C.E. (A/L) & higher	12.7	813	727
Parity			
0	9.5	608	609
1	24.2	1,546	1,503
2	28.8	1,842	1,752
3	20.2	1,293	1,330
4+	17.2	1,096	1,191
Total	**100**	**6,385**	**6,385**

Note: Missing information on educational level is not presented separately.

The vast majority of respondents accounting to 93 percent, are found to be currently married, 4 percent widowed and 3 percent divorced or separated from spouse.

Age distribution of the respondents show 27 percent below 30 years of age, 37 percent in the age interval (30-39) years and the balance 36 percent in the (40-49) years age cohort.

It is a well known fact that educational levels have a strong implication on demographic characteristics of people. According to the survey, one out of every four respondents have reported to be either having only primary level of education or with no formal educational background. 45 percent are having secondary level, 32 percent or one third of the respondents are reported to have G.C.E. (O/L) or higher qualifications.

Women without a single living child accounted for 10 percent of ever married women. 24 percent of women have one child, another 29 percent and 20 percent have two and three children respectively, while 17 percent have reported to be having four or more children.

3.2 Educational attainment

It is a well accepted fact that educating a woman would reap higher returns than educating a man, when you consider the affect it will have on family welfare, particularly the health and nutritional level of children. Table 3.2 present the accomplishments of ever married women in the educational sphere.

Inter sector variations show that educational attainment of urban women is comparatively higher in relation to their counterparts in the rural and estate sectors. Nearly one fifth of urban women have G.C.E. (A/L) or higher qualifications. 12 percent of rural women are also found in this category, whereas only 1 percent of estate women have reported with similar educational background. Furthermore, one fourth of the estate women have never attended school while another 48 percent have had primary education only. Evidently, estate women are a very disadvantageous group vulnerable to risk factors. Uneducated women constitute a much smaller group in the other two sectors, with women who have never attended school comprising only 4 percent of respondents in both the sectors, and women with primary education accounting to 13 percent and 17 percent in the urban and rural sectors respectively.

Table 3.2 Level of education of respondents

Percent distribution of ever married women by sector, age group and parity according to educational level.

Background characteristic	No schooling	Primary	Secondary	G.C.E. (O/L)	G.C.E. (A/L) & higher	Total	Number of women
Sector							
Colombo metro	3.8	12.9	41.1	23.9	18.4	100	762
Other urban	3.5	12.7	36.9	28.6	18.3	100	542
Rural	3.8	16.8	48.9	18.3	12.2	100	4,658
Estate	26.7	48.0	20.8	3.5	1.2	100	423
Age group							
15-19	9.8	9.2	72.4	8.6	-	100	163
20-24	3.3	11.9	57.6	19.5	7.6	100	603
25-29	3.6	12.2	49.1	20.3	14.8	100	971
30-34	5.1	16.2	39.3	20.6	18.9	100	1,151
35-39	4.6	20.6	39.5	20.4	15.0	100	1,203
40-44	6.3	20.5	42.9	18.3	11.8	100	1,134
45-49	7.0	24.1	44.9	16.0	7.8	100	1,160
Parity							
0	4.4	8.1	41.5	26.5	19.4	100	608
1	2.7	9.4	46.8	21.5	19.6	100	1,546
2	4.5	13.2	44.6	21.7	16.0	100	1,842
3	6.0	25.2	47.4	15.8	5.5	100	1,293
4+	9.8	35.4	42.6	9.7	2.4	100	1,096
Total	**5.3**	**18.0**	**45.0**	**18.9**	**12.7**	**100**	**6,385**

Age wise distribution indicate that women below 40 years of age have shown comparatively higher educational attainments than those over 40 years.

It appears that family size is strongly linked with the level of education of women. Out of the women with a single child or none at all, 20 percent have G.C.E. (A/L) or higher qualifications, whereas the corresponding proportions for two children is 16 percent, for 3 children 6 percent, and for four or more children, a mere 2 percent.

3.3 Exposure to mass media

Mass media could play a very effective role in changing lifestyles for the betterment of family health, by cultivating healthy habits among mothers. It is specially beneficial to housewives who get less opportunities to expand their knowledge about current health issues, and modern medical advancements. Table 3.3 presents the use of mass media by ever married women.

Table 3.3 Exposure to mass media

Percentage of ever married women by sector, age group and educational level, according to the use of print and / or electronic media.

Background characteristic	No regular exposure to mass media	Print media	Electronic media		Regular use of all three media	Number of women
		Read newspaper at least once a week	Listen to radio at least once a week	Watch TV at least once a week		
Sector						
Colombo metro	8.5	54.5	65.7	82.0	38.7	762
Other urban	9.0	54.0	71.6	75.8	40.2	542
Rural	13.9	38.8	67.3	65.7	25.5	4,658
Estate	25.8	17.5	64.3	49.6	12.0	423
Age group						
15-19	18.4	31.9	62.6	51.5	15.3	163
20-24	13.1	36.9	67.2	69.2	25.7	603
25-29	11.1	41.8	69.3	68.4	28.0	971
30-34	12.3	42.9	68.9	69.8	30.5	1,151
35-39	13.6	43.2	67.4	68.3	27.8	1,203
40-44	14.1	40.0	66.5	67.9	27.1	1,134
45-49	16.3	38.1	65.4	64.3	26.6	1,160
Educational level						
No schooling	39.5	1.8	46.6	36.0	0.9	338
Primary	23.8	10.8	59.1	49.3	5.3	1,151
Secondary	13.3	36.3	67.3	67.0	23.6	2,877
G.C.E. (O/L)	5.1	62.7	73.2	81.6	42.9	1,205
G.C.E. (A/L) & higher	2.3	81.3	78.6	86.6	60.4	813
Total	**13.7**	**40.6**	**67.3**	**67.4**	**27.4**	**6,385**

Note: Missing information on educational level is not presented separately.

Overall, 41 percent of ever married women are in the habit of reading newspapers at least once a week. The proportion exposed to electronic media is much higher, with two out of every three women reported to be listening to radio or watching television at least once a week. It is interesting to observe that a considerable proportion (27%) of women are regularly exposed to all three media. Survey data point out that more than one tenth of women (14%), are not regularly exposed to any mass media.

Sectoral differentials show that more urban women are exposed to both print and electronic media than women in the rural & estate sectors, while exposure is lowest among estate women. It is noted that less than 10 percent of urban women have no regular exposure to any media. In contrast 26 percent of estate women are in this category.

Exposure patterns does not show notable differences between age groups, except that the youngest group of women in the age cohort (15-19) years, and the oldest group in the age cohort (45-49) years are less likely to use mass media, compared to women between 20 years and 44 years.

Educational level of women show a positive influence on exposure to mass media. It is frightening to note that 40 percent of women with no formal education are not regularly exposed to any media. The situation is less serious among the primary educated women (24%), but is far from satisfactory. In contrast, 13 percent of women with secondary education, 5 percent with G.C.E. (O/L) and 2 percent with G.C.E. (A/L) or higher qualifications, are reported to have no regular exposure to mass media. Use of all three types of media show increases with the educational level of women, considerably higher variations noted in the case of print media. Reading newspapers is found to be an infrequent habit among women in the two lowest educational levels, most probably due to a higher prevalence of illiteracy in this group of women. Only 2 percent of women with no formal education and 11 percent of primary level women, have reported to be reading newspapers at least once a week, whereas the corresponding proportions are 63 percent and 81 percent among the G.C.E. (O/L) and G.C.E. (A/L) & higher attainments respectively. Electronic media is more popular among women of all educational levels, while women with lower educational attainments show a higher tendency to listen to the radio than watch TV. The contrary is true for women with G.C.E. (O/L) or higher qualifications. Probably women in the lower strata may not have access to TV.

3.4 Medical advice

Selection of a suitable source for medical treatment or advice could vary substantially according to the nature of sickness, age of the sickly and living standards of the families. It may also depend on the educational level of the parents, to a considerable extent. At the survey, mothers with children under five years were asked what they usually do if the child is sick with a minor ailment, and what type of medical source they usually go for in the case of a serious health problem to a child. Similarly information about medical treatment taken for other members of the family was also collected. The results are presented in Table 3.4.

For common ailments of children under five years of age, the most preferred source of medical advice is the private doctor (Western) as reported by 48 percent of mothers. A mere 3 percent of mothers would seek the advice of a specialist doctor. Another 3 percent of mothers have taken treatment from an ayurvedic physician. Public health facilities are visited by considerably high percentage of mother (40%) when their young children suffer minor health problems. A higher proportion of estate women (79%) are accounted in this category, while women with lower educational attainments are also more likely to take treatment from government hospitals, for common health matters of their children.

Three out of four mothers have taken their children to the Government hospital, for illnesses of a serious nature. 14 percent of mothers have sought the advice of a private doctor while another 13 percent have taken treatment from a specialist doctor. Urban women and women with higher educational attainments are more likely to seek the advice of private doctors.

The preference for sources of medical treatment for other family members, follow more or less the same pattern as seen for children under five years of age. It is noted that even more women are likely to visit government hospitals for ailments of older family members, especially if the health problem happen to be of a serious nature.

Table 3.4 Advice on health matters of family members

(a) Percent distribution of ever married women who have children under 5 years of age by sector, age group and educational level of respondent and husband, according to source of medical advice taken for common health matters of their children.

Background characteristic	Clinic / Hospital	Western doctor	Specialist (Western)	Ayur. doctor	Family health worker	Health volunteer	No advice	Not stated	Total	Number of women
Sector										
Colombo metro	30.8	54.4	6.6	0.3	1.2	0.0	2.8	3.8	100	318
Other urban	26.1	63.8	1.8	3.7	0.0	0.0	3.7	0.9	100	218
Rural	39.8	48.1	3.1	3.1	0.7	0.0	1.9	3.2	100	1,798
Estate	78.5	12.8	0.6	1.2	0.0	0.0	0.6	6.4	100	174
Age group										
15-19	61.4	33.8	0.0	1.2	1.2	1.2	0.0	1.2	100	82
20-24	41.3	47.8	1.7	2.9	1.2	0.0	1.4	3.6	100	418
25-29	39.3	47.7	4.4	2.4	0.6	0.0	2.8	2.8	100	679
30-34	37.1	50.8	3.6	2.7	0.6	0.0	3.0	2.2	100	671
35-39	38.5	50.0	4.3	2.4	0.7	0.0	0.7	3.3	100	418
40-44	47.5	41.1	1.3	5.1	0.0	0.0	2.5	2.5	100	158
45-49	39.0	40.2	1.2	1.2	0.0	0.0	2.4	15.8	100	82
Educational level of respondent										
No Schooling	74.5	14.9	1.1	1.1	0.0	0.0	3.2	5.3	100	94
Primary	63.9	24.6	2.3	1.4	0.6	0.0	2.9	4.3	100	347
Secondary	43.4	45.8	2.0	2.6	0.8	0.1	1.8	3.6	100	1,181
G.C.E. (O/L)	24.7	63.3	5.0	2.5	0.6	0.0	1.0	2.9	100	483
G.C.E. (A/L) & higher	20.6	63.2	6.2	4.2	0.7	0.0	3.2	2.0	100	402
Educational level of husband*										
No schooling	61.2	17.9	0.0	1.5	0.0	0.0	4.5	14.9	100	64
Primary	60.4	29.9	1.3	2.7	0.0	0.2	1.6	3.8	100	445
Secondary	43.1	45.2	2.6	3.3	0.7	0.0	2.2	2.8	100	1,093
G.C.E. (O/L)	25.7	62.1	4.1	1.2	0.8	0.0	2.6	3.7	100	491
G.C.E. (A/L) & higher	19.3	65.9	6.8	2.8	1.4	0.0	1.4	2.3	100	353
Total	**40.2**	**47.9**	**3.3**	**2.6**	**0.7**	**0.0**	**2.1**	**3.3**	**100**	**2,508**

Note : Missing information on educational level of respondent is not presented separately

* Total number of women in this category is lower than the total as some women were widowed, divorced or separated from their husbands at the time

Table 3.4 Advice on health matters of family members (continued)

(b) Percent distribution of ever married women who have children under 5 years of age by sector, age group and educational level of respondent and husband, according to source of medical advice taken for serious health matters of their children.

Background characteristic	Clinic / Hospital	Western doctor	Specialist (Western)	Ayur. doctor	Family health worker	Health volunteer	No advice	Not stated	Total	Number of women
Sector										
Colombo metro	58.0	18.5	20.7	0.3	0.0	0.0	0.0	2.5	100	318
Other urban	51.6	19.4	26.3	0.9	0.0	0.0	0.0	1.8	100	218
Rural	73.8	12.6	10.4	0.4	0.1	0.0	0.0	2.7	100	1,798
Estate	80.9	7.5	4.0	0.0	0.0	0.0	0.0	7.5	100	174
Age group										
15-19	85.4	7.3	6.1	0.0	0.0	0.0	0.0	1.2	100	82
20-24	72.3	15.0	9.1	0.5	0.0	0.0	0.0	3.1	100	418
25-29	71.6	13.8	11.0	0.4	0.0	0.0	0.0	3.1	100	679
30-34	66.1	15.9	15.6	0.6	0.3	0.0	0.0	1.5	100	671
35-39	70.7	11.0	14.9	0.2	0.0	0.0	0.0	3.1	100	418
40-44	72.0	10.8	14.6	0.0	0.0	0.0	0.0	2.5	100	158
45-49	66.2	8.8	11.2	0.0	0.0	0.0	0.0	13.8	100	82
Educational level of respondent										
No schooling	89.1	4.3	4.3	0.0	0.0	0.0	0.0	2.2	100	94
Primary	79.2	11.0	5.4	0.3	0.0	0.0	0.0	4.0	100	347
Secondary	76.4	12.7	7.6	0.1	0.0	0.0	0.0	3.2	100	1,181
G.C.E. (O/L)	64.2	15.1	17.6	1.0	0.0	0.0	0.0	2.1	100	483
G.C.E. (A/L) & higher	48.6	18.8	29.5	0.5	0.5	0.0	0.0	2.0	100	402
Educational level of husband*										
No schooling	78.4	7.7	7.7	0.0	0.0	0.0	0.0	6.1	100	64
Primary	84.5	9.9	2.2	0.2	0.0	0.0	0.0	3.1	100	445
Secondary	74.7	13.1	9.3	0.4	0.0	0.0	0.0	2.5	100	1,093
G.C.E. (O/L)	65.4	14.2	16.9	0.6	0.0	0.0	0.0	2.8	100	491
G.C.E. (A/L) & higher	43.9	20.7	32.0	0.6	0.6	0.0	0.0	2.3	100	353
Total	**70.4**	**13.6**	**12.6**	**0.4**	**0.1**	**0.0**	**0.0**	**3.0**	**100**	**2,508**

Note : Missing information on educational level of respondent is not presented separately

* Total number of women in this category is lower than the total as some women were widowed, divorced or separated from their husbands at the time of the survey.

Table 3.4 Advice on health matters of family members (continued)

(c) Percent distribution of ever married women by sector, age group and educational level of respondent and husband, according to source of medical advice taken for common health matters of other family members.

Background characteristic	Clinic / Hospital	Western doctor	Specialist (Western)	Ayur. doctor	Family health worker	Health volunteer	No advice	Not stated	Total	Number of women
Sector										
Colombo metro	30.6	53.7	4.5	0.7	0.3	0.0	7.2	3.1	100	762
Other urban	29.0	58.7	3.0	4.4	0.0	0.0	4.6	0.4	100	542
Rural	48.0	42.6	2.1	3.0	0.1	0.1	3.2	0.7	100	4,658
Estate	84.4	8.3	0.7	0.5	0.0	0.0	4.7	1.4	100	423
Age group										
15-19	63.2	30.7	0.0	3.1	0.0	0.6	2.4	0.0	100	163
20-24	44.2	44.2	3.5	2.8	0.5	0.0	3.3	1.3	100	603
25-29	42.4	46.0	3.1	2.6	0.3	0.0	4.0	1.5	100	971
30-34	43.3	46.0	1.7	2.5	0.2	0.2	5.3	0.7	100	1,151
35-39	46.2	45.0	2.2	2.3	0.1	0.0	3.0	1.1	100	1,203
40-44	50.4	40.4	1.8	2.5	0.0	0.1	3.9	0.8	100	1,134
45-49	49.7	39.2	2.9	3.2	0.0	0.2	3.6	1.0	100	1,160
Educational level of respondent										
No schooling	76.8	15.3	0.9	2.1	0.0	0.0	4.1	0.6	100	338
Primary	67.8	23.8	2.0	1.5	0.0	0.1	4.2	0.7	100	1,151
Secondary	50.0	41.2	1.7	2.7	0.1	0.2	3.2	0.9	100	2,877
G.C.E. (O/L)	28.4	60.1	3.0	3.3	0.1	0.0	2.9	2.2	100	1,205
G.C.E. (A/L) & higher	20.2	63.1	5.2	3.3	0.4	0.0	7.0	0.9	100	813
Educational level of husband*										
No schooling	72.8	17.4	0.0	2.7	0.0	0.0	5.4	1.6	100	188
Primary	63.8	27.0	1.2	2.8	0.0	0.3	4.1	0.7	100	1,192
Secondary	50.3	40.4	2.3	2.6	0.1	0.1	3.2	0.8	100	2,620
G.C.E. (O/L)	28.8	60.0	3.0	3.2	0.3	0.0	2.9	1.8	100	1,172
G.C.E. (A/L) & higher	22.8	63.0	4.5	2.1	0.3	0.0	5.8	1.5	100	751
Total	**46.7**	**43.0**	**2.4**	**2.7**	**0.1**	**0.1**	**3.9**	**1.0**	**100**	**6,385**

Note: Missing information on educational level of respondent is not presented separately.

* Total number of women in this category is lower than the total as some women were widowed, divorced or separated from their husbands at the time of

Table 3.4 Advice on health matters of family members (continued)

(d) Percent distribution of ever married women by sector, age group and educational level of respondent and husband, according to source of medical advice taken for serious health matters of other family members.

Background characteristic	Clinic / Hospital	Western doctor	Specialist (Western)	Ayur. doctor	Family health worker	Health volunteer	No advice	Not stated	Total	Number of women
Sector										
Colombo metro	58.5	20.3	19.3	0.5	0.1	0.0	0.1	1.0	100	762
Other urban	59.4	17.5	21.2	1.3	0.0	0.0	0.4	0.2	100	542
Rural	78.3	12.2	8.5	0.6	0.0	0.0	0.0	0.4	100	4,658
Estate	88.6	4.5	6.4	0.0	0.0	0.0	0.0	0.5	100	423
Age group										
15-19	85.9	8.6	4.3	0.6	0.0	0.0	0.0	0.6	100	163
20-24	75.2	13.9	9.8	0.5	0.0	0.0	0.0	0.5	100	603
25-29	75.7	13.9	9.6	0.5	0.0	0.0	0.0	0.3	100	971
30-34	69.8	17.0	12.3	0.3	0.2	0.0	0.0	0.3	100	1,151
35-39	76.5	11.9	10.5	0.6	0.0	0.0	0.0	0.6	100	1,203
40-44	75.8	12.0	10.5	1.0	0.1	0.2	0.0	0.4	100	1,134
45-49	75.5	11.2	12.0	0.4	0.0	0.0	0.2	0.6	100	1,160
Educational level of respondent										
No schooling	90.6	5.6	2.9	0.3	0.0	0.0	0.0	0.6	100	338
Primary	86.4	8.2	4.6	0.3	0.0	0.2	0.2	0.1	100	1,151
Secondary	80.0	12.1	6.8	0.5	0.0	0.0	0.0	0.4	100	2,877
G.C.E. (O/L)	63.2	17.1	18.0	0.7	0.0	0.0	0.0	0.9	100	1,205
G.C.E. (A/L) & higher	51.9	20.8	25.6	1.0	0.2	0.0	0.1	0.4	100	813
Educational level of husband*										
No schooling	84.6	8.0	4.2	0.0	0.0	1.1	0.0	2.1	100	188
Primary	88.0	9.1	2.6	0.3	0.0	0.0	0.0	0.1	100	1,192
Secondary	79.2	12.4	7.4	0.4	0.0	0.0	0.1	0.4	100	2,620
G.C.E. (O/L)	65.9	16.5	16.6	0.6	0.0	0.0	0.0	0.5	100	1,172
G.C.E. (A/L) & higher	47.3	19.2	31.2	1.5	0.3	0.0	0.1	0.5	100	751
Total	**75.0**	**13.1**	**10.7**	**0.6**	**0.0**	**0.0**	**0.0**	**0.4**	**100**	**6,385**

Note: Missing information on educational level of respondent is not presented separately.

* Total number of women in this category is lower than the total as some women were widowed, divorced or separated from their husbands at the time of the survey.

3.5 Employment and occupation

Employment of women is highly co-related to her earning capacity and empowerment. Financial autonomy at a lower scale even, would raise the status of women within the family and empower her with more freedom to move outside the home, and strengthen her rights to decide about matters related to herself. Table 3.5 presents the work status of ever married women and the occupational distribution of those currently working.

The survey found that more than half of the respondents (57%) were not employed at the time of interview, while 38 percent have never worked for pay or profit. 43 percent of ever married women have reported to be currently engaged in an economic activity.

Work status of women varies substantially between sectors. Currently employed proportion is as high as 77 percent among estate women, while it is 43 percent among rural women. Only 28 percent from Colombo metro and 36 percent from other urban areas have reported to be employed. The proportion of women who have never worked is lowest in the estate sector (11%) and highest in urban areas other than metro Colombo (48%). It is also noted that women above 30 years, and women with either lowest (primary or below) or highest (G.C.E. (A/L) and higher) educational attainments are more likely to be employed.

A notable feature about the female workforce is that the vast majority of them are occupied as skilled workers or unskilled workers. Both groups together account for 70 percent of the total workforce. Among currently working estate women, the category of unskilled workers are as high as 95 percent. 76 percent of workers with no formal education and 86 percent with primary education are also found in this group.

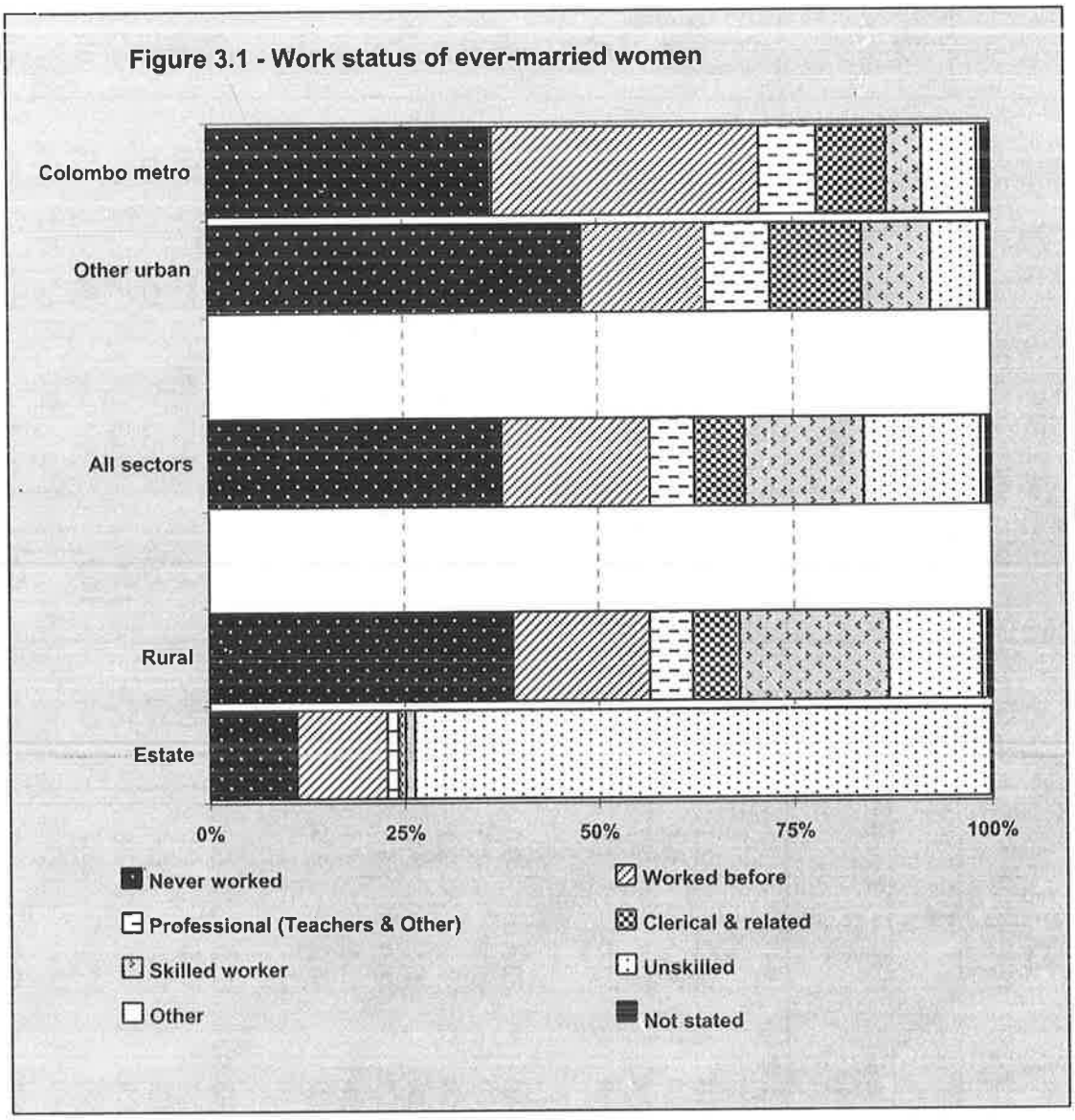
Skilled workers are seen to be concentrated in the rural sector with 44 percent of the employed rural women reporting in the affirmative. Majority in this category have at most secondary level education.

Table 3.5 Work status and occupation

Percent distribution of ever married women by sector, age group and educational level, according to work status and occupation.

Background characteristic	Currently not working			Currently working								Number of women
	Total	Never worked	Worked before	Total	Teacher	Other Prof.	Clerical/ Sales & related	Skilled worker	Unskilled worker	Other	Not stated	
Sector												
Colombo metro	70.7	36.5	34.2	28.2	3.1	4.2	8.8	4.5	7.0	0.6	1.0	762
Other urban	63.9	48.0	15.9	35.7	6.4	1.8	11.6	8.7	6.1	1.1	0.4	542
Rural	56.5	38.9	17.6	42.8	3.7	1.8	5.9	18.9	11.8	0.7	0.6	4,658
Estate	22.7	11.1	11.6	77.0	1.2	0.2	0.9	1.2	73.5	0.0	0.2	423
Age group												
15-19	69.9	50.9	19.0	29.4	0.0	0.0	0.6	11.6	17.2	0.0	0.6	163
20-24	72.7	47.5	25.2	26.9	1.5	0.7	1.6	12.1	9.8	1.2	0.3	603
25-29	68.6	44.7	23.9	31.2	2.2	1.8	5.7	11.6	9.3	0.6	0.3	971
30-34	57.1	36.7	20.4	42.9	4.8	3.0	6.2	14.6	13.9	0.4	0.0	1,151
35-39	52.2	33.5	18.7	46.9	5.5	2.0	7.5	15.5	15.6	0.8	0.9	1,203
40-44	46.6	31.0	15.6	52.8	4.1	2.3	8.7	18.5	18.7	0.5	0.4	1,134
45-49	50.0	36.0	14.0	48.7	3.4	2.0	7.2	17.1	18.1	0.9	1.3	1,160
Educational level												
No schooling	33.1	19.8	13.3	65.5	0.0	0.0	3.2	12.7	49.6	0.0	1.5	338
Primary	46.0	33.6	12.4	53.0	0.0	0.0	1.9	19.0	32.1	0.0	0.9	1,151
Secondary	63.9	42.6	21.3	35.4	0.5	0.1	4.0	17.2	12.8	0.8	0.7	2,877
G.C.E. (O/L)	65.2	43.4	21.8	34.6	2.8	3.3	11.6	12.9	3.3	0.7	0.2	1,205
G.C.E. (A/L) & higher	42.5	24.1	18.4	57.2	23.2	10.6	14.9	6.6	0.2	1.7	0.1	813
Total	**56.6**	**37.6**	**19.0**	**42.7**	**3.7**	**2.0**	**6.4**	**15.1**	**14.8**	**0.7**	**0.6**	**6,385**

Note: Missing information on educational level is not presented separately.



Clerical and sales related workers account for 15 percent of woman workers, while 13 percent have reported to be working as professionals, the majority of them (9%) are teachers. Women with G.C.E. (A/L) and higher educational attainments have shown a higher tendency to be engaged as professionals specially in the teaching profession, while women with at least G.C.E. (O/L) qualifications are the majority among clerical and sales related workers.

3.6 Women's autonomy

Women's autonomy has many dimensions. The survey made an attempt to provide information on a few important aspects related to decision making, physical mobility, economic and social autonomy.

3.6.1 Decision making

3.6.1.1 Respondents were asked whether they had a voice in the decision of using contraception and thereby have a control on their reproductive system. The results are presented in Table 3.6(a).

Overall, 80 percent of current users of contraception indicated that the use of contraceptives is the decision of both herself and the spouse, while 12 percent have reported that the vital decision was taken solely by herself. Only 8 percent of women have stated that the use of contraceptives was initiated by the husband.

It is interesting to note that women in the younger age groups and higher educational levels are more likely to join with their husbands in deciding about contraceptive use, whereas older women and women with low educational attainments have shown a higher tendency to take the decision themselves.

3.6.1.2 Female sterilization is still the most popular modern contraceptive method practiced by couples in Sri Lanka, even though it has shown a steady decline in the recent years. Table 3.6(b) present information collected from sterilized women who account for one fifth of the total number of respondents, and show the extent to which she has been able to influence the decision of getting herself sterilized.

Table 3.6 (a) Influence of women towards contraceptive use

Percent distribution of current users of contraceptives by sector, age group, educational level of respondent and husband, according to the person who makes the decision about the usage of contraceptives.

Background characteristic	Decision of both	Woman's decision	Husband's decision	Other*	Not stated	Total	Number of women
Sector							
Colombo metro	75.5	13.9	8.7	0.4	1.5	100	461
Other urban	87.0	7.2	4.2	0.6	0.9	100	331
Rural	79.4	11.6	8.1	0.2	0.6	100	3,186
Estate	80.2	11.5	6.7	0.4	1.2	100	253
Age group							
15-19	77.0	14.9	5.7	0.0	2.4	100	87
20-24	82.3	10.4	7.2	0.2	0.0	100	373
25-29	80.3	9.9	8.6	0.5	0.6	100	625
30-34	81.7	9.7	7.8	0.4	0.2	100	805
35-39	80.9	11.8	6.1	0.6	0.7	100	895
40-44	78.9	12.3	8.0	0.0	0.9	100	791
45-49	74.6	14.2	9.0	0.0	2.1	100	655
Educational level of respondent							
No schooling	73.1	18.5	4.6	0.9	2.7	100	216
Primary	76.7	13.8	8.5	0.4	0.6	100	789
Secondary	79.3	12.7	7.4	0.2	0.5	100	1,944
G.C.E. (O/L)	82.1	8.5	8.1	0.4	1.0	100	765
G.C.E. (A/L) & higher	84.9	5.2	8.7	0.0	1.2	100	517
Educational level of husband**							
No schooling	74.6	20.1	3.7	1.5	0.0	100	134
Primary	76.3	14.6	8.0	0.3	0.9	100	889
Secondary	80.2	11.3	7.7	0.3	0.5	100	1,846
G.C.E. (O/L)	81.8	9.0	8.0	0.1	1.0	100	759
G.C.E. (A/L) & higher	84.7	5.5	8.6	0.0	1.0	100	491
Total	**79.7**	**11.5**	**7.7**	**0.3**	**0.8**	**100**	**4,231**

* Includes decision of the hospital in conducting sterilization.

** Total number of women in this category is lower than the total as some women were widowed, divorced or separated from their husbands at the time of the survey.

Table 3.6 (b) Influence of women towards female sterilization

Percent distribution of sterilized ever-married women by sector, age group, educational level of respondent and husband according to the person who made the decision about sterilization.

Background characteristic	Decision of both	Woman's decision	Husband's decision	Other*	Not stated	Total	Number of sterilized women
Sector							
Colombo metro	70.3	20.3	4.2	1.7	3.4	100	118
Other urban	78.0	18.7	0.0	2.2	1.1	100	91
Rural	74.7	18.3	5.4	0.6	1.0	100	985
Estate	86.4	8.4	5.2	0.0	0.0	100	154
Age group							
20-24	100.0	0.0	0.0	0.0	0.0	100	5
25-29	89.1	9.1	0.0	1.8	0.0	100	55
30-34	80.1	11.8	6.4	1.6	0.0	100	186
35-39	77.9	15.5	4.3	1.4	0.8	100	349
40-44	73.6	20.1	4.4	0.0	1.8	100	383
45-49	72.2	20.8	5.9	0.0	1.1	100	370
Educational level of respondent							
No schooling	76.8	17.6	1.4	1.4	2.8	100	142
Primary	76.8	16.8	5.8	0.4	0.2	100	465
Secondary	75.0	19.0	4.9	0.5	0.7	100	595
G.C.E. (O/L)	74.5	13.2	4.7	2.8	4.8	100	106
G.C.E. (A/L) & higher	80.0	10.0	7.5	0.0	2.5	100	40
Educational level of husband**							
No schooling	73.2	21.1	4.2	1.5	0.0	100	71
Primary	76.9	18.6	3.5	0.2	0.7	100	424
Secondary	77.3	15.4	5.8	1.0	0.5	100	585
G.C.E. (O/L)	74.5	17.9	4.7	0.9	2.0	100	106
G.C.E. (A/L) & higher	84.9	13.2	1.9	0.0	0.0	100	53
Total	**75.9**	**17.4**	**4.9**	**0.7**	**1.2**	**100**	**1,348**

* Includes decision of hospital.

** Total number of women in this category is lower than the total as some women were widowed, divorced or separated from their husbands at the time of the survey.

Three out of every four women who have been sterilized reported that the vital decision was taken by the husband and herself together. Nearly one fifth stated that she herself took the important decision, while only 5 percent informed that the husband decided on sterilization.

Estate women, women in the younger age groups and women with G.C.E. (A/L) or higher qualifications are more likely to make the decision together with the husband. Women in the Colombo metropolitan area (20%) show a comparatively higher tendency to undergo sterilization on their own accord.

3.6..2 Economic and social autonomy

The status of women in Sri Lanka has improved considerably with women entering seats of higher learning and the rapid expansion in the women workforce. Even then, women are still subjected to restrictions imposed by the family and society as well, when they need to exercise their fundamental rights.

At the survey, the respondents were asked about the difficulties they have to undergo, when they need to get medical advice for themselves, which is a basic human need. The most prominent problems stated by women at the interview are presented in Table 3.7 and illustrated in Figure 3.2.

The gravest and commonest problem reported by women of all sectors and all educational levels is recognized as the difficulty in finding money needed. This problem is most acute among estate women, as reported by 76 percent of them and women with no formal education (67%); and least serious among urban women (20%) and women with G.C.E. (A/L) or higher attainments (6%).

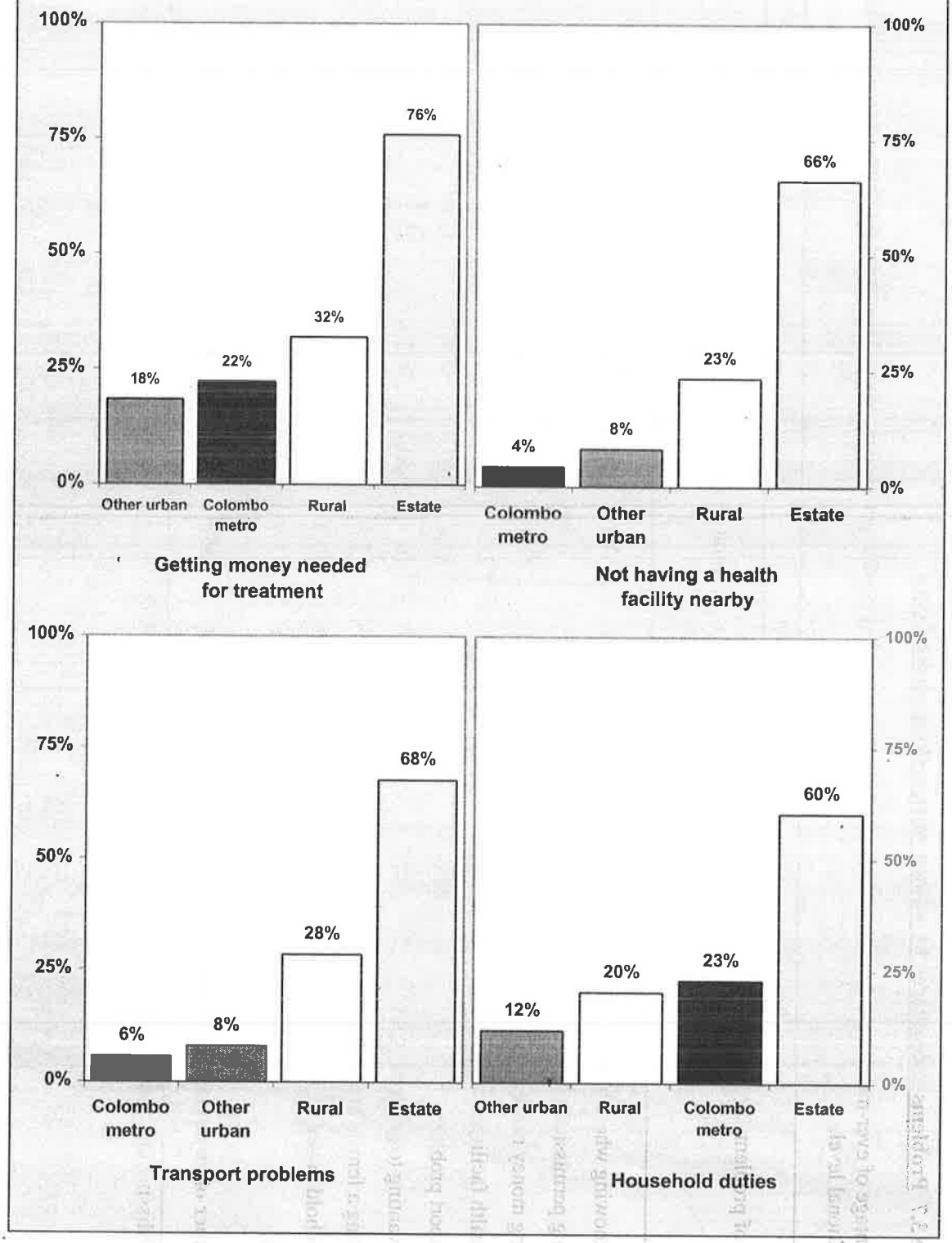
Table 3.7 Problems encountered by women when seeking medical care

Percentage of ever-married women who encounter problems when they need to get medical advice / treatment for themselves according to sector and educational level.

Type of problem	Average	Sector				Educational level				
		Colombo metro	Other urban	Rural	Estate	No schooling	Primary	Secondary	G.C.E. (O/L)	G.C.E. (A/L) & higher
Not knowing where to go	5.8	4.3	2.8	3.8	34.0	20.4	12.3	4.4	2.2	0.6
Getting permission	4.7	3.5	1.8	2.3	36.6	16.2	10.5	3.3	1.4	1.5
Getting money needed	32.5	22.2	18.3	31.9	75.9	67.0	56.7	33.7	14.8	5.8
No health facility nearby	22.6	4.3	8.1	23.4	66.2	46.6	38.3	22.8	11.1	6.6
Transport problems	26.6	5.6	7.9	28.4	67.6	50.7	43.0	26.8	14.9	9.6
Not wanting to go alone	18.2	13.5	12.7	16.7	50.1	30.7	25.8	18.4	13.0	9.3
Wanting a female health provider	8.2	5.0	7.7	7.0	28.4	19.2	13.5	7.2	5.7	3.7
Household duties	22.4	22.8	11.6	20.2	60.3	40.7	36.0	21.5	13.6	12.2
Other	2.1	3.6	2.4	1.4	6.4	2.7	3.0	1.6	2.0	2.5
Number of women interviewed	**6,385**	**762**	**542**	**4,658**	**423**	**338**	**1,151**	**2,877**	**1,205**	**813**

Note: Missing information on educational level is not presented separately.

Figure 3.2 - Major problems encountered by women when seeking medical advice / treatment for themselves



The other constraints listed by a majority of respondents include lack of transport facilities (27%), non availability of health facilities close to the residence (23%), and household chores (22%). Over 60 percent of estate women have reported to have faced all these problems when they need to get medical treatment for themselves. Nearly half of women who have never attended a school have also reported on similar lines.

Household responsibilities have posed a problem to all women across sectors and educational levels. The severity of the problem has declined with increasing educational attainments, and it is relatively lower among women in the urban and rural sectors compared to women in the estates. Even though educated women are at an advantageous position, and free from many obstacles that the others have to face, they too have recognized domestic work as a pressing problem when seeking medical treatment for themselves, as stated by one out of every ten women with G.C.E. (A/L) or higher attainments. Access to transport facilities and health facilities are not identified as serious problems by urban women and women at the highest educational level. Rural women and women at intermediate educational levels have seen them as barriers, but to a lesser degree than their counterparts in the estates and with lower levels of education.

An important feature that is worth noting is the effect of female education on women's autonomy. It is very clear that with the rise in educational attainments, women gain freedom of movement, economic independence, decision making authority and self confidence needed to react with the outside world.

3.7 Health care of the family

Personal hygiene of mothers and hygienic practices adopted by them in their daily domestic tasks, have a great influence on the health status of the whole family, specially that of young children and adolescents.

Apparently, the habit of washing hands before preparation of meals for the family, is widespread across the country and among the old and the young alike, as shown in Table 3.8. It is noted that a relatively lower proportions of women who follow this important practice is found in the estate sector (83%), and among women with no formal education (82%), both these groups representing more or less the same sub population.

Use of mosquito protection differ between sectors and among women of different educational levels. Over 90 percent of urban women use some kind of mosquito protection while this percentage has dropped to 74 percent in the rural sector, and further dropped to 54 percent in the estate sector. A sharp rise in the proportion of women who tend to protect their families from the mosquito menace is observed with increasing educational attainments, from 55 percent for the 'no schooling' category upto 92 percent for the 'G.C.E. (A/L) & higher' category.

Similar to the pattern in cooking, a very high percentage of mothers have the habit of washing their hands before feeding their babies (95%), and wash their hands with soap after cleaning their babies who are not toilet trained yet (93%). Estate mothers and mothers with primary education or lower, have not been able to reach the average levels, although their situation is also not unfavourable.

Table 3.8 Health care of the family

Percentage of ever married women who adopt hygienic practices in daily life by sector, age group and educational level.

Background characteristic	Ever married women			Mothers with children < 5 years		
	Number of ever married women	Wash hands before cooking %	Use mosquito protection method %	Number of mothers*	Wash hands before feeding the baby %	Wash hands with soap after cleaning child after he / she defected %
Sector						
Colombo metro	762	95.9	95.0	304	99.0	96.4
Other urban	542	96.9	92.1	207	95.7	95.7
Rural	4,658	91.2	74.2	1,736	94.9	93.5
Estate	423	82.7	54.1	175	84.0	80.6
Age group						
15-19	163	90.8	65.0	82	84.1	84.1
20-24	603	90.7	75.5	422	93.4	91.0
25-29	971	92.8	81.3	682	95.3	95.0
30-34	1,151	91.5	80.2	666	96.5	94.0
35-39	1,203	91.9	78.5	405	94.3	93.6
40-44	1,134	92.2	74.3	134	94.8	94.0
45-49	1,160	91.4	73.2	31	90.3	80.6
Educational level						
No schooling	338	81.7	55.0	85	80.0	84.7
Primary	1,151	86.5	66.3	326	89.6	87.7
Secondary	2,877	91.2	76.5	1,140	94.6	92.4
G.C.E. (O/L)	1,205	97.1	84.1	471	98.1	96.4
G.C.E. (A/L) & higher	813	97.0	91.6	399	98.7	98.2
Total	**6,385**	**91.7**	**76.9**	**2,422**	**94.7**	**93.2**

Note: Missing information on educational level is not presented separately.
* Mothers who do not attend to their children are excluded.

3.8 Number of live births born

For women, their reproductive health is very vital to maintain good health, physically and mentally. A woman who could control the number of children and their spacing, would have more time and a better mentality to take up the many responsibilities thrust on her, by the family and the society. Table 3.9 show the distribution of respondents by the number of childbirths they have had, according to factors known to have an influence on family size.

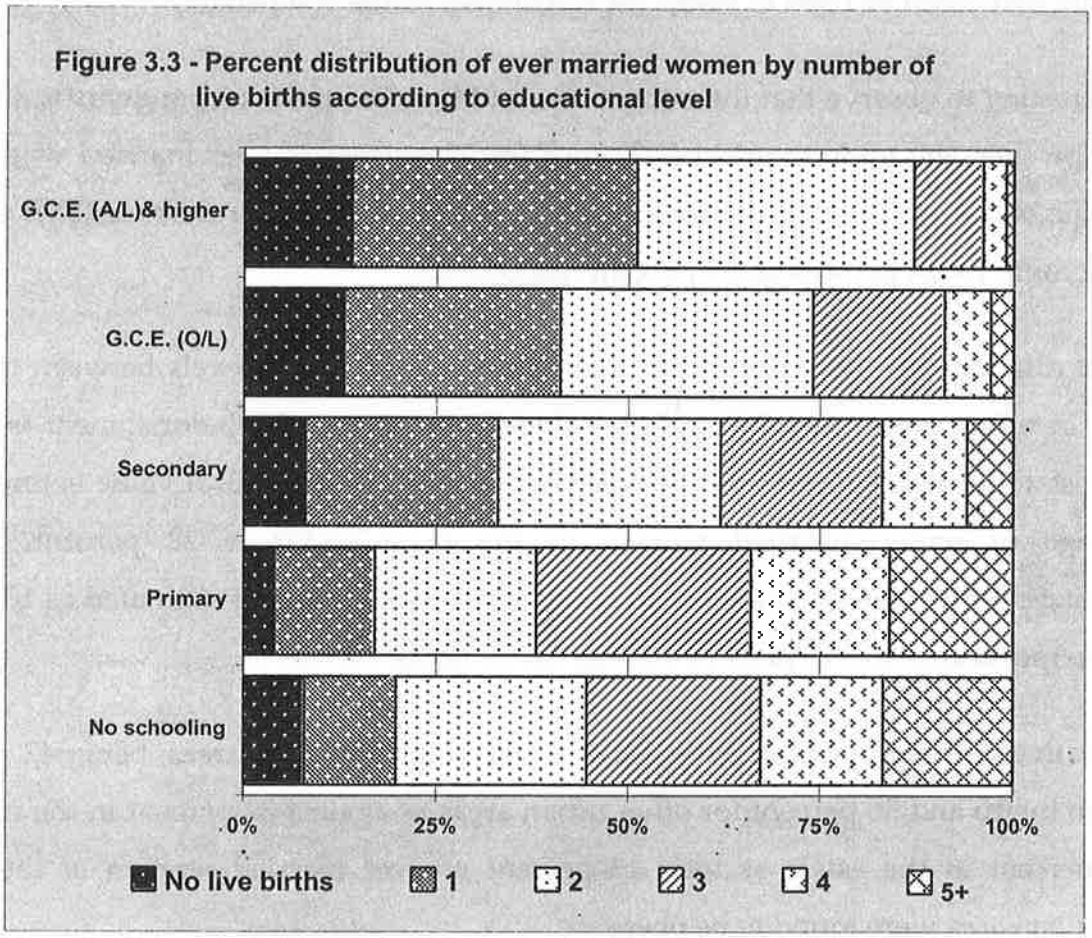
Table 3.9 Respondents by number of live births

Percent distribution of ever-married women by educational level and age group, according to number of live births.

Background characteristic	0	1	2	3	4	5+	Total	Number of women
Educational level								
No schooling	**8.0**	**12.4**	**24.6**	**23.0**	**15.7**	**16.3**	**100**	**338**
<25 years	39.2	33.9	18.8	8.1	0.0	0.0	100	36
25-40 years	4.9	11.8	27.5	26.6	18.2	10.9	100	161
41-49 years	3.5	7.6	22.8	22.6	16.9	26.6	100	141
Primary	**4.3**	**12.6**	**21.1**	**28.3**	**17.8**	**16.0**	**100**	**1,151**
<25 years	15.4	38.9	26.2	16.1	3.4	0.0	100	87
25-40 years	4.4	12.0	24.8	32.2	16.2	10.3	100	594
41-49 years	2.1	8.4	15.5	25.7	22.4	26.0	100	470
Secondary	**8.8**	**25.1**	**28.5**	**21.3**	**10.5**	**5.7**	**100**	**2,877**
<25 years	27.5	57.1	13.8	1.0	0.5	0.0	100	465
25-40 years	6.1	25.3	36.7	20.5	7.7	3.6	100	1,509
41-49 years	3.5	8.3	22.4	33.2	20.4	12.2	100	903
G.C.E. (O/L)	**13.3**	**27.7**	**33.2**	**17.0**	**6.1**	**2.7**	**100**	**1,205**
<25 years	41.6	46.4	12.0	0.0	0.0	0.0	100	132
25-40 years	12.1	31.2	37.0	13.5	4.6	1.6	100	731
41-49 years	4.9	12.9	33.4	31.1	11.7	6.1	100	342
G.C.E. (A/L) & higher	**14.5**	**37.3**	**36.3**	**8.7**	**2.8**	**0.4**	**100**	**813**
<25 years	51.2	47.6	1.2	0.0	0.0	0.0	100	46
25-40 years	12.5	42.5	35.1	7.7	2.0	0.3	100	572
41-49 years	11.8	19.6	48.1	13.9	5.8	0.8	100	195
Total	**9.5**	**24.2**	**28.9**	**20.3**	**10.3**	**6.9**	**100**	**6,385**
<25 years	30.6	51.5	14.4	2.8	0.7	0.0	100	766
25-40 years	8.0	26.5	34.1	19.2	8.1	4.1	100	3,568
41-49 years	4.2	10.1	25.1	28.6	17.8	14.3	100	2,051

Note: Missing information on educational level is not presented separately.

On the average, one third of ever married women have either one child or none. More than 50 percent of women with G.C.E. (A/L) or higher qualifications are in this group, conforming to the negative relationship between education and childbearing. In Sri Lanka today, many parents wish to limit their family sizes and the most desired number of children is generally known to be two. This attitude is confirmed by 30 percent of ever married women who have given birth to two children. Among educated women with G.C.E. (O/L) and G.C.E. (A/L) qualifications, the proportions in this group is still higher.



20 percent of women have reported to have given birth to three children. Another 10 percent have had four live births while 7 percent have reported of five or more live births. 16 percent of women with no formal education are found in each of these two latter groups representing large families.

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3.9 Nutritional status of women

Nutritional status of a woman is a determinant of her health status, while it is a key factor affecting the health status of children who will be born to her in the future. A healthy mother-to-be is an essential prerequisite for the birth of a healthy baby. The high prevalence of low birth weight babies and premature births in Sri Lanka is attributed mainly to anaemic conditions observed in a large number of pregnant women. The survey made an attempt to study how nutritional levels of ever-married women differ according to sector, age groups, educational levels, and their work statuses, by calculating the Body Mass Index (BMI) which is a measure that could be used to assess the nutritional status of a person.

It is interesting to observe that the overall mean BMI value of the respondents is a favourable 22.1. However, the undernourished account for 22 percent of ever married women with a BMI value below 18.5, while overweight (BMI value 25 or more) and obese (BMI value 30 or more) account for 24 percent and 5 percent respectively.

Sectoral differentials show significant differences in nutritional levels between the affluent women in urban areas, and the underprivileged in estates. Malnourishment is very high among estate women with one out of every two women having a BMI value below 18.5. The percentage of undernourished women in the rural sector is 22 percent, while the corresponding proportions in the urban sector is relatively low and estimated as 10 percent in Colombo metro area and 15 percent in other urban areas.

Comparatively, the proportion overweight is very high in urban areas, being 42 percent for Colombo metro and 36 percent for other urban areas as against 22 percent in the rural sector, and 4 percent in the estate sector. 13 percent of ever married women in the Colombo metropolitan area were found to be obese.

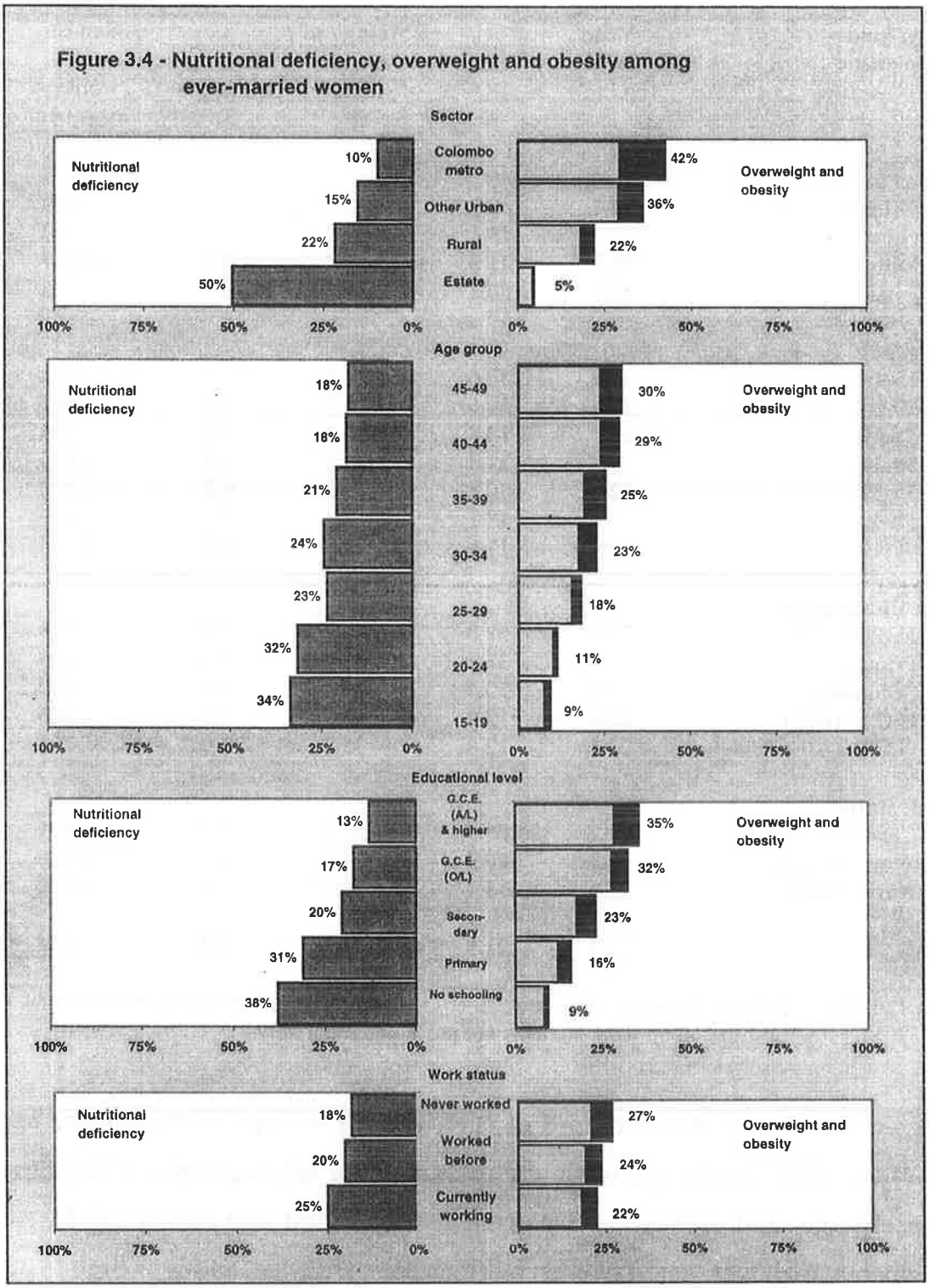
Table 3.10 Nutritional status of respondents

Among ever-married women, mean body mass index (BMI), and percentage with specified levels of BMI by sector, age group, educational level and work status.

Background characteristic	Mean BMI (kg / m^2)	BMI (kg / m^2) below 18.5 %	BMI (kg / m^2) 25.0 or more %	BMI (kg / m^2) 30.0 or more %	Number of women measured
Sector					
Colombo metro	24.4	9.7	42.3	13.0	629
Other urban	23.3	15.4	35.9	6.9	493
Rural	21.9	21.8	21.7	3.7	4,267
Estate	19.1	50.4	4.5	0.3	375
Age group					
15-19	20.2	33.6	9.2	1.7	119
20-24	20.4	31.6	11.2	1.1	471
25-29	21.5	23.4	18.1	2.6	794
30-34	21.9	24.3	22.6	5.1	1,025
35-39	22.3	20.8	25.3	6.1	1,122
40-44	22.7	18.1	29.3	5.3	1,109
45-49	22.9	17.5	30.0	6.1	1,124
Educational level					
No schooling	20.0	38.0	9.3	1.0	313
Primary	21.0	31.1	15.7	3.6	1,063
Secondary	22.1	20.4	22.8	5.3	2,580
G.C.E. (O/L)	22.8	17.2	32.0	4.5	1,083
G.C.E. (A/L) & higher	23.5	12.8	35.2	7.0	725
Work status					
Currently working	21.7	25.1	22.1	4.2	2,561
Worked before	22.2	20.3	23.5	4.4	1,046
Never worked	22.5	18.4	26.6	5.9	2,109
Total	**22.1**	**21.8**	**24.0**	**4.8**	**5,764**

Note : 1. Table excludes pregnant women and women with a birth in the preceding two months.
2. Missing information on work status is not presented separately.

Age disaggregation reveal that one third of ever married teenage women in the age cohort (15-19) years are undernourished, while the percentage of affected women declines steadily with increasing age, and stands at 18 percent for the oldest age cohort (45-49) years. In contrast, percentage of overweight women has increased with age, and is as high as 30 percent for the oldest group as against a low 9 percent for the youngest group of women.



Apparently malnourishment is highly co-related to educational attainment. More than one third of women with no formal education are found to be having a BMI value below 18.5, whereas the undernourished percentages in respect of women at different levels of schooling is relatively low, and show a noteworthy drop with each step in the academic ladder, the lowest being 13 percent for women with G.C.E. (A/L) or higher qualifications. The reverse is true in the case of proportions of women overweight, with 9 percent of the lowest educational level and 35 percent of the highest educational level found with a BMI value of 25 or more.

Women's work status is found to be negatively related with her nutritional conditions. Survey data indicates that one out of every four working women are undernourished, while this percentage is lower for women who are not currently working but have worked before (20%), and is lowest for women who have never worked for pay or profit (18%). Ironically recipients of excess nourishment is more visible among women who have never worked, as 27 percent of them are reported to be overweight and 6 percent obese.

3.10 Pregnancy terminations

The survey collected information on women who have gone through a traumatic experience in the form of a spontaneous abortion, induced abortion or a still birth. However, it is very difficult to get the respondents to talk freely about such sensitive issues, specially induced abortions, due to the illegal nature of the act. As such, the data presented in Table 3.11 may be very much underestimated.

Anyhow, survey data suggests that the incidence of spontaneous abortions are most common among urban women, while induced abortions are highest among women in the Colombo metropolitan area and delivery of still births among estate women.

Table 3.11 Pregnancy terminations

(a) Number and percentage of ever-married women who have had an abortion or a still birth by sector.

Sector	Number of women	Women who have reported					
		Spontaneous abortions		Induced abortions		Still births	
		No.	%	No.	%	No.	%
Colombo metro	762	131	17.2	22	2.9	27	3.5
Other urban	542	106	19.6	02	0.4	17	3.1
Rural	4,658	715	15.3	51	1.1	144	3.1
Estate	423	57	13.5	01	0.2	36	8.5
Total	**6,385**	**1,009**	**15.8**	**76**	**1.2**	**224**	**3.5**

(b) Number of ever married women who have had an abortion or a still birth by number of such occurrences.

Number of occurrences		Number of women who have reported		
		Spontaneous abortions	Induced abortions	Still births
1		767	58	207
2		163	11	15
3		53	4	0
4		16	1	1
5 or more		10	2	1
Affected women	No.	1,009	76	224
	%	15.8	1.2	3.5

Chapter 4 : Fertility

H.R. Gunasekera

The assessment of fertility levels, trends and differentials has been an important objective of the survey. Such information will help to understand the prevailing levels of childbearing patterns of women and also give clues to determine the impact of changes in the use of family planning and other determinants of fertility. Information on fertility in the survey was obtained by two methods. First, the respondents were asked to report the total number of live births they had during their lifetime. To minimize bias in misreporting, women were 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. Second, a complete birth history approach was utilized, in which for each live birth, information was collected on birth order, whether the birth was single or multiple, sex, date of birth, survival status, date of death (for dead children), completed age (for surviving children) and whether the child was living in the household (for surviving children). At the end of birth history section of the questionnaire, a final check was done to ensure that the number of births in the birth history is equal to the total live births recorded in the first procedure. Birth history information provide 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.

The birth history information collected in retrospective demographic surveys are subject to certain types of errors. Two such important errors commonly experienced are under-reporting of births, particularly who died at very early ages, and the difficulty in determining the date of birth of each child accurately. The first type of error tends to affect the estimates of fertility levels whereas the errors in the timing of births distort trends. It is difficult to distinguish these two types of errors from one another. Both these problems are less serious for recent time periods when the recalling of events is likely to be reasonably accurate.

Maximum precautions were taken during the interviews to record accurate dates of births. The interviewers were trained to check any documents such as birth certificate or health card before recording the dates of birth and also to probe carefully with regard to too short or too long birth intervals.

4.1 Fertility levels and trends

The current fertility levels are measured in this report using age-specific fertility rates (ASFR) and total fertility rate (TFR). The TFR is a synthetic measure of current fertility and calculated by summing the age-specific fertility rates. It can be interpreted as the average number of births a woman would have during her reproductive life span if she survived throughout that period and she experienced the same age-specific fertility rates prevailing during the period of reference. Table 4.1 and Figure 4.1 present the age-specific fertility rates for the DHS2000 together with results from selected surveys. The rates are based on birth history information recorded for the five complete years preceding the survey.

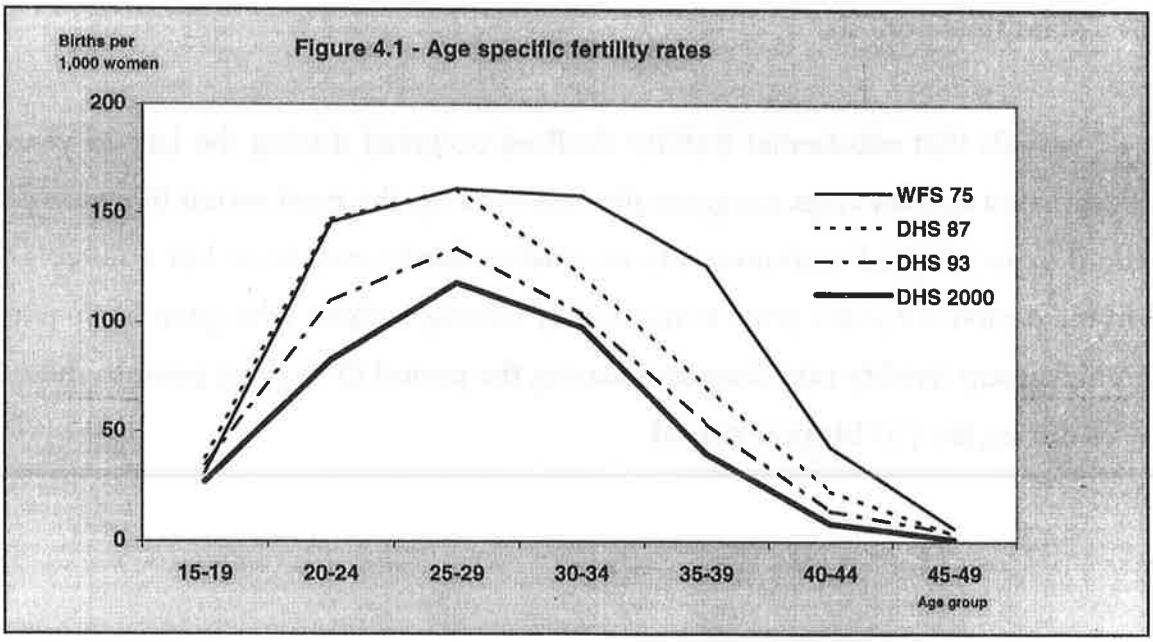
Table 4.1 Current fertility from selected surveys

Age specific fertility rates for selected surveys. (per 1,000 women)

Age group	1995-2000 DHS 2000	1988-1993 DHS 1993	1982-1987 DHS 1987	1981 CPS 1982	1974 WFS 1975	1963 *
15-19	27	35	38	34	31	52
20-24	83	110	147	172	146	228
25-29	118	134	161	222	161	278
30-34	98	104	122	177	158	240
35-39	40	54	71	99	126	157
40-44	8	14	23	37	43	46
45-49	1	4	3	0	6	7
TFR	**1.9**	**2.3**	**2.8**	**3.7**	**3.4**	**5.0**

* From Fernando (1974).

The interpretations of the measures should be undertaken with caution since some of the measures are estimated based on the data from the entire country and calculated for single years (viz; WFS and CPS) while other measures are estimated based on the data excluding northern and eastern provinces (viz; DHS1987, DHS1993 and DHS2000) and calculated for a period of several years. The TFR for 1995-2000 period is 1.9. Therefore, if current age-specific fertility rates were to remain unchanged in the future, the average woman in Sri Lanka would have 1.9 children by the end of her childbearing period. The examination of trends reveals that over the past four decades there has been substantial decline in the total fertility rate in Sri Lanka from 5.0 in 1963 to 1.9 during the period 1995-2000. The notable exception to this trend appears around early 1980's when there was a temporary increase in fertility particularly among women aged (15-34 years). However, fertility started to decline once again as evidenced by a TFR of 2.8 during 1982-1987 period. This decline is attributed entirely to the decline in the ASFR's of women aged 30 and over. Among women under 30, the ASFR's from DHS1987 are essentially the same as the rates reported twelve years earlier by WFS except for the age group 15-19. In contrast, significant declines in ASFR's for women aged below 30 years as well are recorded during 1988-1993 period. This trend has continued further during 1995-2000. This is clearly seen in Figure 4.1. The pace of decline in fertility during the last four decades can be investigated using the average annual decrease in TFR between 1963, 1974 (WFS), 1982-1987 (DHS1987), 1988-1993 (DHS1993) and 1995-2000 (DHS2000). The corresponding average rate of decline in TFR are 2.9 percent, 1.8 percent, 2.8 percent and 2.5 percent respectively.



Fertility trends can also be investigated using retrospective age-specific fertility rates from a single survey. This is calculated from the data in the birth history collected during DHS 2000 and shown in Table 4.2.

Table 4.2 Fertility trends

Age specific fertility rates for five year periods preceding the survey, by mother's age at the time of birth.

Mother's age at birth	Number of years preceding the survey						
	0-4	5-9	10-14	15-19	20-24	25-29	30-34
15-19	27	28	36	41	40	48	(20)
20-24	83	100	120	139	149	(60)	
25-29	118	133	126	157	(97)		
30-34	98	85	102	(67)			
35-39	40	47	(36)				
40-44	8	(9)					
45-49	(1)						

Note: Figures within parentheses are truncated rates

The age-specific fertility rates in the Table 4.2 are progressively truncated with the elapsed time before the survey. In addition, the bottom diagonal estimates (shown in parentheses) are partially truncated. 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 4.2 reveals that substantial fertility declines occurred during the last 25 years and the lowest estimated fertility rates are generally observed for the most recent five year period. So, one would expect to find monotonically increasing trends over time; but a notable exception occur in the period 5-9 years prior to the survey among women who gave birth at ages 30-34. For this age group fertility rate decreases during the period (5-9) years prior to the survey and then rises during the (10-14) year period.

4.2 Fertility differentials

Differentials in fertility by background characteristics are shown in Table 4.3(a), 4.3(b) and Figure 4.2.

Table 4.3(a) and Figure 4.2 reveal that rural areas have the lowest total fertility rate of 1.8. Colombo metro area has the next lowest level of 1.9. Therefore, the fertility in these areas has already reached below replacement level. In contrast, the estates have the highest TFR of 2.4 with other urban areas at intermediate levels. Comparison with the TFR recorded for five years preceding 1993 (from DHS 1993) reveals that the percentage decrease is highest for rural areas (21.7 percent) followed by other urban areas (12.5 percent). Modest 7.7 percent and 5.0 percent decreases are seen for estate and Colombo metro areas. Thus, the declining of fertility during 1993-2000 has mainly occurred in rural areas and other urban areas of Sri Lanka.

By zone, the lowest TFR of 1.7 is in zone 6 which is irrigated dry zone with major or minor irrigation schemes. Surprisingly, this zone recorded the highest fertility level during DHS1993. Further investigations are necessary to understand how this change has occurred. The highest TFR of 2.3 is in zone 7 which covers the rainfed dry zone areas. At an intermediate level of 1.8 is zone 2 (Colombo feeder areas) and zone 1 (Colombo metropolitan area), zone 4 (the lower south central hill country) and zone 5 (the south central hill country with estates) with TFR of 1.9 and zone 3 (the south western coastal low lands) with a TFR of 2.0. Comparison of corresponding TFR's with DHS 1993 reveals that the percentage decrease is highest for zone 6 (39.3 percent) followed by zone 5 (20.8 percent) whereas the declines are modest for zone 2, zone 4 and zone 7. The percentage decrease is fairly low for zone 1. So the two zones that contributed most to the decline in fertility during 1993 and 2000 are zone 6 (irrigated dry zone with major and minor irrigation schemes) and zone 5 (south central hill country with a concentration of estates). The differential in fertility by women's education is shown in Table 4.3(b). This information is available only for DHS 2000. Generally, fertility decreases with increasing education level.

Table 4.3 Fertility differentials

(a) Total fertility rate for the five years preceding the survey and mean number of children ever born (CEB) to women (45-49) yrs. by sector and zone.

Background characteristic	Total fertility rate			Mean CEB (Women 45-49)			Percent decline			
							TFR		CEB	
	1982-1987 (1)	1988-1993 (2)	1995-2000 (3)	1987	1993	2000	From (1) to (2)	From (2) to (3)	From '87 to '93	From '93 to '00
Sector										
Colombo metro	2.2	2.0	1.9	4.3	3.0	2.8	9.1	5.0	30.2	6.7
Other urban	2.3	2.4	2.1	4.9	3.5	2.9	-4.3	12.5	28.6	17.1
Rural	2.9	2.3	1.8	5.0	4.0	3.2	20.7	21.7	20.0	20.0
Estate	3.4	2.6	2.4	4.9	3.6	3.6	23.5	7.7	26.5	0.0
Zone										
Zone 1	2.2	2.0	1.9	4.3	3.0	2.8	9.1	5.0	30.2	6.7
Zone 2	2.4	2.0	1.8	3.8	3.1	2.5	16.7	10.0	18.4	19.4
Zone 3	2.6	2.2	2.0	3.9	3.4	3.2	15.4	9.1	12.8	5.9
Zone 4	2.7	2.2	1.9	5.0	3.9	3.2	18.5	13.6	22.0	17.9
Zone 5	3.2	2.4	1.9	5.3	4.3	3.3	25.0	20.8	18.9	23.2
Zone 6	3.0	2.8	1.7	6.1	4.7	4.1	6.7	39.3	23.0	12.8
Zone 7	3.4	2.6	2.3	6.6	5.2	4.0	23.5	11.5	21.2	23.1
Total	**2.8**	**2.3**	**1.9**	**4.9**	**3.8**	**3.1**	**17.9**	**17.4**	**22.4**	**18.4**

(b) Total fertility rate for the five years preceding the survey by level of education of women

Women's level of education	Total fertility rate 1995 - 2000
No schooling	2.4
Primary	2.9
Secondary	2.0
G.C.E. (O/L)	1.7
G.C.E. (A/L) & higher	1.6

Note: (1) Fertility rates are calculated for all women 15-49, using information on women's age and marital status from the household questionnaire, and on the number of births from the individual woman's questionnaire.

(2) Total fertility rate by the level of education of women was not available for DHS 1987 and DHS 1993.

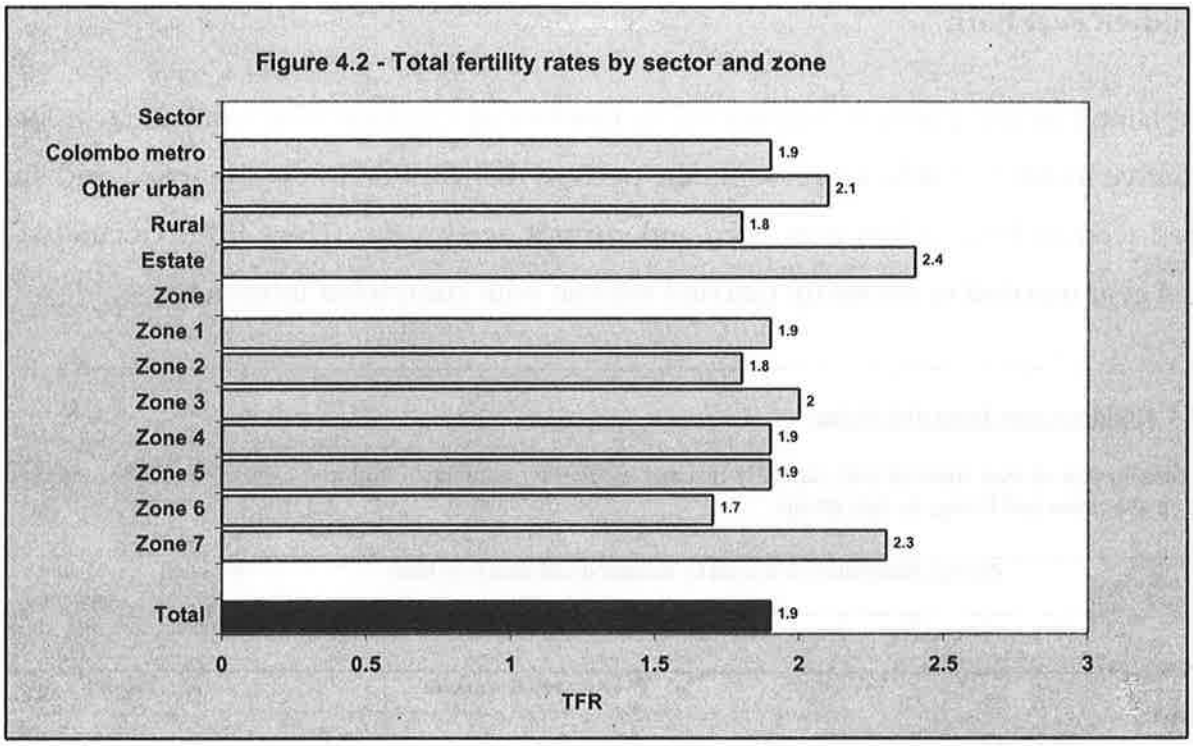


Table 4.3(a) also shows the mean number of children ever born (CEB) to women aged 45-49, i.e. women who are approaching the end of their childbearing period. It should be noted that the mean CEB measures shown here are calculated on the basis of all women who were identified in the household schedule, including those who were never married. The mean number of children ever born is an indicator of cumulative fertility. Hence the above measure for women aged 45-49 represents completed fertility. If fertility has remained stable over time, the two fertility measures, TFR and mean CEB for women 45-49 would either be equal or similar. If the fertility has declined, then TFR is less than the mean CEB for women aged 45-49. Hence a comparison of these two measures gives a rough indication on the trend in fertility over the past several decades. At the overall level, TFR is 1.2 less than the mean CEB indicating the fertility decline in the past. Among the sectors this difference is greatest for women in rural areas and among zones, zone 6 records the highest difference. Therefore, the women in these areas appear to be leading the way for further declines in fertility. The same pattern was observed for sectors in DHS1993, but the shift of the leading zone for decline is seen from zone 7 to zone 6.

4.3 Children ever born

As explained in the previous section mean number of children ever born is an indicator of cumulative fertility. Table 4.4 presents the percent distribution of ever married and currently married women by children ever born and current age group. The CEB is calculated on the basis of ever married or currently married women with completed interviews.

Table 4.4 Children ever born and living

Percent distribution of ever married and currently married women by number of children ever born (CEB), and mean number of children ever born and living, by age group.

	Percent distribution of women by number of children ever born											Number of women	Mean number of CEB	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+			
Ever married women														
Age group														
15-19	49.5	47.7	1.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	163	0.5	0.5
20-24	25.4	52.6	17.9	3.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	603	1.0	1.0
25-29	14.8	40.0	30.7	11.3	2.8	0.3	0.0	0.0	0.0	0.0	0.0	971	1.5	1.5
30-34	6.5	28.0	37.2	18.6	7.3	1.6	0.5	0.3	0.0	0.0	0.0	1,151	2.0	2.0
35-39	4.4	17.5	35.0	24.6	11.7	4.5	1.5	0.6	0.1	0.0	0.0	1,203	2.5	2.4
40-44	4.9	10.6	29.0	27.7	16.6	6.9	2.6	1.3	0.2	0.3	0.0	1,134	2.8	2.7
45-49	3.9	9.5	22.1	29.2	18.3	9.3	4.5	2.0	0.7	0.2	0.3	1,160	3.1	2.9
Total														
DHS 2000	**9.5**	**24.2**	**28.9**	**20.3**	**10.3**	**4.1**	**1.7**	**0.8**	**0.2**	**0.1**	**0.1**	**6,385**	**2.2**	**2.1**
DHS 1993	**9.2**	**19.6**	**24.6**	**20.6**	**12.9**	**7.0**	**2.9**	**1.6**	**0.8**	**0.4**	**0.5**	**6,983**	**2.6**	**2.5**
DHS 1987	**8.3**	**17.2**	**21.5**	**19.3**	**12.9**	**8.6**	**5.2**	**2.7**	**2.1**	**1.0**	**1.1**	**5,865**	**3.0**	**2.8**
WFS 1975	**8.4**	**14.6**	**14.0**	**13.5**	**11.8**	**9.9**	**8.4**	**6.5**	**5.2**	**7.7***	**-**	**6,813**	**3.9**	**-**
Currently married women														
Age group														
15-19	50.2	47.0	1.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	161	0.5	0.5
20-24	25.6	52.3	18.0	3.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	594	1.0	1.0
25-29	15.1	39.1	31.2	11.5	2.8	0.3	0.0	0.0	0.0	0.0	0.0	938	1.5	1.5
30-34	6.5	27.6	37.7	18.3	7.3	1.7	0.5	0.4	0.0	0.0	0.0	1,101	2.0	2.0
35-39	4.7	16.5	35.2	24.9	11.7	4.8	1.5	0.5	0.2	0.0	0.0	1,125	2.5	2.4
40-44	5.1	9.5	29.2	27.7	17.3	6.9	2.5	1.3	0.2	0.3	0.0	1,017	2.8	2.7
45-49	3.2	8.6	22.6	29.8	18.5	9.5	4.6	2.0	0.8	0.0	0.4	979	3.2	3.0
Total														
DHS 2000	**9.8**	**24.1**	**29.3**	**20.0**	**10.2**	**4.0**	**1.6**	**0.7**	**0.2**	**0.1**	**0.1**	**5,915**	**2.2**	**2.1**
DHS 1993	**9.5**	**19.4**	**25.0**	**20.6**	**13.0**	**6.8**	**2.8**	**1.5**	**0.7**	**0.3**	**0.4**	**6,434**	**2.6**	**2.5**
DHS 1987	**8.5**	**16.8**	**22.0**	**19.7**	**12.9**	**8.5**	**5.1**	**2.7**	**1.9**	**1.0**	**1.1**	**5,442**	**3.0**	**2.8**
WFS 1975	**8.5**	**14.2**	**14.0**	**13.5**	**12.0**	**10.1**	**8.5**	**6.3**	**5.1**	**7.9***	**-**	**6,163**	**4.0**	**-**

* CEB 9+

It is observed that the differences between the figures related to ever-married and currently married women are marginal. This indicates that most marital dissolution occurs among older women who have already completed their childbearing. At the overall level, the mean

number of children ever born to both ever-married and currently married women is 2.2. The corresponding figures for ever-married women in WFS1975, DHS1987 and DHS1993 were 3.9, 3.0 and 2.6 respectively. Thus consistent declines in cumulative fertility are apparent during the last 25 years. Table 4.4 also suggests that child mortality appears to be relatively low; out of the mean value of 2.2 children ever born alive, 2.1 survive. The average number of children ever born gradually increases with the age of the woman reflecting the family building process. The comparison of the distribution of ever-married women by CEB with DHS1993 reveals that the percentages increase upto 2 children and the pattern is reversed thereafter. Further the percentage of ever-married women with 2 or less children ever born is 63 percent as compared to 53 percent in 1993. These facts confirm further fertility declines after 1993.

Children ever born to women aged 45-49, indicate the completed fertility. Table 4.5 compares the completed fertility experience of women with DHS1993, DHS1987, CPS1982 and WFS1975.

Table 4.5 Children ever born to women aged 45-49

Percent distribution of ever married and currently married women aged (45-49) yrs. by number of children ever born, for selected surveys.

Number of children ever born	Ever married women					Currently married women				
	DHS 2000	DHS 1993	DHS 1987	CPS 1982	WFS 1975	DHS 2000	DHS 1993	DHS 1987	CPS 1982	WFS 1975
0	3.9	2.7	3.3	2.8	3.2	3.2	2.6	2.6	2.1	2.3
1	9.5	6.9	4.7	5.4	5.4	8.6	5.9	4.4	5.0	3.6
2	22.1	16.1	9.1	8.0	7.8	22.6	17.6	9.5	8.5	6.4
3	29.2	21.3	9.1	8.2	7.5	29.8	21.1	9.4	8.5	6.9
4	18.3	17.9	20.1	11.0	8.8	18.5	19.2	21.2	11.0	8.5
5	9.3	13.8	13.4	12.7	10.4	9.5	13.5	13.7	13.3	11.2
6	4.5	8.3	12.5	13.2	13.3	4.6	7.8	12.3	13.3	14.4
7	2.0	5.1	8.7	9.7	11.6	2.0	5.4	8.9	8.7	11.0
8	0.7	3.8	9.0	7.1	9.3	0.8	3.1	7.8	7.3	9.7
9+	0.5	4.1	10.1	21.8	22.8	0.4	3.8	10.2	22.2	26.0
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of women	1,160	1,060	639	536	995	979	896	535	436	817
Mean CEB	**3.1**	**4.0**	**5.1**	**5.8**	**6.0**	**3.2**	**4.0**	**5.1**	**5.8**	**6.3**

For ever-married women in the 45-49 age group, the mean CEB is 3.1. For currently married women it is 3.2. This shows a decline of 22.5 percent and 20.0 percent respectively for currently married and ever-married women as compared to DHS 1993. The reduction in completed fertility is reflected in the differences in parity distributions between the different surveys. Comparison of DHS1987 with CPS1982 and WFS1975 reveals that there is an increase, in general, in the proportion of women with parities 0 through 5 and a concomitant decrease in the proportions with parities 6 or higher indicating fewer women are moving on to higher parities than in the past. (Department of Census and Statistics (1988)). Examination of parity distribution of DHS1993 and DHS1987 for both ever married and currently married women shows that there is an increase in the proportion of women with parties 1 through 3 and the proportion generally decreases thereafter. The same pattern is observed for currently married women during 1993-2000. This indicates that less and less women are further moving on to higher parities in 2000 than in the past. For example, in 1993 the percentage of currently married women with 3 or less children ever born is 47.2 percent and it increases to 64.2 percent in 2000. Table 4.5 also shows that 3.2 percent of currently married women have never had a child. Although this percentage remained relatively stable during 1987-1993, a slight increase is seen in the year 2000.

Differentials in cumulative fertility by selected socio-economic characteristics of respondent and their husbands are shown in Table 4.6.

The largest differentials are observed for the woman's education and husband's occupation. Women with G.C.E (Advanced level) and higher education level have 1. 5 children less than the women with primary education. These differentials widens as the age group of women advances. Differentials are not very prominent for woman's work experience. Husband's education seems to be inversely related to the cumulative fertility but less pronounced than the woman's education. Women whose husbands are in security forces have a relatively small number of children ever born. Women whose husbands are retired or currently without employment showed higher cumulative fertility.

Table 4.6 Mean number of children ever born

Mean number of children ever born by background characteristics of currently married women and their husbands, according to age of woman.

Background characteristic	Age of woman			Total
	15-24	25-34	35-49	
Woman's education				
No schooling	0.9	2.8	3.5	2.9
Primary	1.6	2.5	3.5	3.0
Secondary	0.9	1.8	2.9	2.2
G.C.E (O/L)	0.7	1.5	2.3	1.8
G.C.E.(A/L) & higher	0.5	1.3	1.8	1.5
Woman's work status				
Currently working	1.0	1.8	2.8	2.4
Worked previously *	0.9	1.6	2.5	1.9
Never worked **	0.9	1.8	2.9	2.2
Husband's education				
No schooling	1.4	2.3	3.5	2.8
Primary	1.2	2.4	3.5	2.9
Secondary	0.9	1.8	2.9	2.2
G.C.E (O/L)	0.8	1.4	2.3	1.8
G.C.E (A/L) & higher	0.5	1.3	2.0	1.7
Husband's occupation				
No occupation/Retired	1.0	2.2	3.0	2.9
Police and forces	0.8	1.4	2.0	1.4
Admi/Professionals	0.7	1.3	2.2	1.7
Technical & related	0.6	1.3	2.0	1.7
Clerical & related	0.8	1.3	2.4	1.8
Sales & service workers	0.8	1.7	2.6	2.1
Agri & fishery workers	0.9	1.9	3.3	2.6
Skilled workers	0.8	1.7	2.7	2.0
Machine operators	0.8	1.6	2.6	1.9
Unskilled workers	1.2	2.3	3.1	2.6
Total	**0.9**	**1.8**	**2.8**	**2.2**

* Woman is not currently working, but she had worked before marriage and /or after marriage

** Woman is not currently working and she had not worked either before marriage or after marriage

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Table 4.7 shows the mean number of children ever born to ever-married women by age at first marriage and duration since first marriage.

Table 4.7 Children ever born by age at first marriage

Mean number of children ever born (CEB) to ever-married women*, by age at first marriage and duration since first marriage, and mean CEB for years 2000, 1993 and 1987

Duration since first marriage (yrs.)	Age at first marriage						Average		
	<15	15-17	18-19	20-21	22-24	25-27	DHS 2000	DHS 1993	DHS 1987
0-4	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.8	1.0
5-9	1.6	1.7	1.8	1.8	1.7	1.7	1.7	1.9	2.3
10-14	2.7	2.4	2.5	2.5	2.4	2.3	2.4	2.7	3.1
15-19	3.1	3.1	2.9	3.0	2.8	2.5	2.8	3.2	3.8
20-24	3.2	3.3	3.4	2.9	2.9	2.8	3.1	3.6	4.6
25-29	4.3	4.1	3.6	3.2	3.1	-	3.5	4.3	5.4
30+	4.7	4.5	4.1	-	-	-	4.5	5.7	6.8
Mean CEB									
DHS 2000	3.0	2.7	2.6	2.4	2.1	1.9	2.4	-	-
DHS 1993	4.7	3.2	2.9	2.7	2.3	2.0	-	2.7	-
DHS 1987	5.6	3.8	3.2	2.9	2.6	2.1	-	-	3.1

* Ever married women whose age at first marriage is below 28 yrs.

Irrespective of the marriage duration, age at first marriage has an effect on the cumulative fertility. For example, CEB declines monotonically from 3.0 for women married before age 15 to 1.9 for those who married between 25-27. The decrease of completed fertility as age at marriage increases is expected as late age at marriage results less years of exposure to conception and childbearing. However, the comparison with the corresponding values from DHS1993 reveals that the level of CEB is smaller for DHS 2000 for all categories of age at first marriage. It is also noted that the effect of age at first marriage on completed fertility is far more pronounced at higher marriage durations. For example, hardly any differentials exist in

completed fertility by age at first marriage for marriage durations 0-4 and 5-9; but there is a difference of 1.2 children between the lowest and highest age at first marriage levels for the duration 25-29 years. A similar pattern was observed in DHS1993 too.

4.4 Birth intervals

The length of the interval between live births has implications for both fertility and mortality. It is hypothesized that women who have births in rapid successions complete their childbearing years with more children than those who space births farther apart. Further, birth interval analysis helps to understand the patterns of choosing additional children by individual couples as each child is born, as well as the factors that influence those patterns and distribution. On the other hand, birth interval greatly influences child mortality. When a child has a short preceding birth interval, then his chance of survival at early stages is much less than a child with a longer preceding interval. Birth intervals less than two years long are generally considered as too short and hence treated as having the highest risk of mortality; intervals of three or more years usually carry the least risk.

Table 4.8 shows the percent distribution of births in the five years prior to the survey according to the length of the interval since the previous birth.

The median length of birth interval is 43 months. This shows an increase of 6 months compared to DHS 1993. Distribution by background characteristics reveals that the median birth interval is shorter than the average for women living in estates and urban areas other than Colombo metro, for women in zones 5 and 7 and for women who are either had no schooling or had only primary education. Further, the median birth interval increases substantially with the age of the mother, from 25 months in the (15-19) age group to 75 months in the 40+ age group. It is also seen that the median birth interval is very much shorter for births whose prior sibling had died.

Table 4.8 Birth intervals

Percent distribution of births in the five years preceding the survey by number of months since previous birth according to selected demographic and background characteristics.

Background characteristic	Number of months since previous birth					Total	Median months since previous birth		Unweighted Number of births
	7-17	18-23	24-35	36-47	48+		2000	1993	
Sector									
Colombo metro	7.0	8.9	18.4	18.2	47.4	100	47.0	37.0	213
Other urban	12.8	7.7	24.9	13.1	41.5	100	38.0	37.0	149
Rural	5.9	9.8	19.8	18.0	46.5	100	46.0	38.0	1,125
Estate	13.5	15.6	33.1	17.4	20.5	100	30.0	31.0	222
Zone									
Zone 1	7.0	8.9	18.4	18.2	47.4	100	47.0	37.0	213
Zone 2	4.3	10.1	20.9	16.5	48.2	100	47.0	41.0	139
Zone 3	10.5	8.8	18.0	17.1	45.6	100	45.0	38.0	228
Zone 4	10.5	9.4	22.7	11.7	45.6	100	44.0	36.0	180
Zone 5	5.5	12.3	24.6	21.6	36.0	100	40.0	33.0	340
Zone 6	4.4	7.9	13.5	22.8	51.4	100	51.0	37.0	236
Zone 7	6.7	10.7	25.7	18.8	38.1	100	39.0	35.0	373
Age of mother									
15-19	35.2	14.0	29.3	11.7	9.8	100	25.0	18.0	53
20-29	8.5	13.1	23.8	19.8	34.8	100	38.0	30.0	880
30-39	4.3	6.9	19.6	15.4	53.8	100	51.0	42.0	724
40+	6.1	1.7	2.3	16.7	73.2	100	75.0	54.0	52
Birth order									
2-3	7.1	10.5	20.4	18.1	44.0	100	44.0	37.0	1,386
4-6	9.9	8.7	25.7	14.4	41.3	100	40.0	37.0	297
7+	0.8	0.8	44.9	18.8	34.7	100	42.0	33.0	26
Sex of prior birth									
Male	8.5	10.3	22.3	18.3	40.6	100	42.0	38.0	860
Female	6.5	9.9	20.6	16.7	46.3	100	46.0	36.0	849
Survival of prior birth									
Living	6.8	10.0	21.4	17.9	43.8	100	44.0	37.0	1,664
Dead	29.5	12.5	25.4	2.7	29.8	100	26.0	35.0	45
Educational level									
No schooling	9.7	11.0	29.4	16.9	33.0	100	36.0	34.0	112
Primary	10.5	11.0	28.2	15.9	34.6	100	37.0	33.0	384
Secondary	5.0	10.9	20.0	15.8	48.3	100	47.0	37.0	772
G.C.E. (O/L)	9.5	8.7	15.2	21.4	45.3	100	46.0		262
G.C.E. (A/L)	9.6	6.3	21.9	20.2	42.0	100	43.0	42.0	155
Degree or higher	0.0	11.0	17.3	28.9	42.9	100	46.0		24
Total 2000	**7.5**	**10.1**	**21.5**	**17.5**	**43.4**	**100**	**43.0**		**1,709**
1993	**9.6**	**11.8**	**26.5**	**17.2**	**34.8**	**100**		**37.0**	**2,289**

Note : Excluding first order births

The percentage figures at the bottom of Table 4.8 indicate that nearly 43 percent of the births occurred four years or longer after previous birth, 39 percent had a two to four year interval and only about 18 percent had an interval of less than two years. The corresponding percentage figures from DHS 1993 were 35, 44 and 21 respectively. So, the percentage of births occurred below 2 years and (2-3) years from the previous birth have decreased and the corresponding percentage above 4 years has increased substantially during 1993 – 2000. These facts clearly show that Sri Lankan women prefer relatively long birth intervals and an increasing trend in the length of birth intervals is apparent.

4.5 Age at first birth

The age at which childbearing begins has important demographic and health consequences. A rise in the age at first birth is usually a result of increase in age at marriage. In many countries postponing the first birth, combined with spacing the second, has contributed greatly to reducing fertility. On the other hand, bearing children at an early age entails significant risks to the health of both the mother and the child.

Table 4.9 presents the percent distribution of Sri Lankan women by age at first birth, according to their current age. The women here relate to those who recorded in the household questionnaire. The household questionnaire did not contain information on births to women who are never married which is negligible in Sri Lanka. Median age at first birth which is shown in the last column, has censored information for some age categories since less than 50 percent of the women in that age category have their first birth at an older age.

The median age at first birth for younger women is generally higher than older cohorts in 1987 and 1993, but such pattern is not seen in 2000. For example in DHS 2000 the lowest median age at first birth records for the youngest cohort, 25-29. Further the comparison with DHS1993 data reveals that the median age at first birth has decreased for all age groups except

for 45-49 in contrast to the pattern prevailed during 1987 and 1993. This is an interesting phenomenon which needs further investigations. Another important feature in Table 4.9 is the relatively high percentage of women with no births. For example, 43 percent of women in the age group (25-29) and 21 percent of women aged (30-34) have had no births.

Table 4.9 Age at first birth

Percent distribution of all women* by age at first birth (including the category no birth) according to current age.

Current age (yrs.)	No births	Age at first birth								Total	Number of women	Median age at first birth		
		<15	15-17	18-19	20-21	22-24	25-27	28-30	31+			2000	1993	1987
15-19	95.8	0.1	2.4	1.7	NA	NA	NA	NA	NA	100	1,926	**	**	
20-24	72.2	0.6	4.7	8.4	8.9	5.1	NA	NA	NA	100	1,687	**	**	
25-29	43.4	0.6	5.0	7.6	12.2	17.3	12.1	1.9	NA	100	1,480	22.6	26.3	24.7
30-34	21.2	0.4	5.5	8.4	9.5	20.8	16.1	13.6	4.4	100	1,403	24.2	25.3	24.1
35-39	14.8	0.4	4.7	11.4	13.7	17.6	15.2	11.2	11.0	100	1,369	24.0	24.6	24.9
40-44	12.2	1.1	4.7	10.8	15.1	20.2	14.5	9.0	12.5	100	1,260	23.9	24.8	23.1
45-49	10.3	1.2	6.9	9.8	11.5	20.8	17.2	10.2	12.0	100	1,261	24.2	23.5	21.8
All ages														
DHS 2000	43.3	0.6	4.7	7.9	9.5	13.4	9.7	5.9	5.0	100	10,386			
DHS 1993	44.6	0.6	5.8	8.7	10.3	12.8	8.2	4.8	4.3	100	11,442			
DHS 1987	43.9	1.5	6.7	9.6	11.0	12.5	7.8	4.2	2.9	100	9,585			

* Taken from household questionnaire

** Omitted since more than 50 percent of women in the age cohort have not given birth to a child.

NA – Not applicable

The prevalence of early childbearing is often associated with high infant and maternal morality. Hence the percentage of women whose first birth occurs before they reach the age of 18 is an important indicator of health for both mother and child. Table 4.9 indicates that at the overall level only 5.3 percent of women have had their first birth before age 18. This shows a drop of 1.1 percentage points from DHS1993 figures. Further, this percentage decreases with each five year age group from 45-49 (8.1 percent) to 15-19 (2.5 percent) except for slight increase in 30-34 age cohort. Therefore, the percent of women who are at high risk because of early age at first birth has declined in recent years.

Differentials in the age at first birth are shown in Table 4.10.

Table 4.10 Age at first birth by background characteristics

Median age at first birth among all women* aged (25-49) yrs. by sector and zone according to current age.

Background characteristic	Current age					All ages (25-49)		
	25-29	30-34	35-39	40-44	45-49	2000	1993	1987
Sector								
Colombo metro	23.1	25.2	25.8	24.1	25.3	24.3	26.6	25.3
Other urban	21.9	24.8	23.6	24.1	25.5	23.7	26.1	26.5
Rural	22.6	24.1	23.5	23.8	23.9	23.1	24.7	23.7
Estate	21.6	22.4	23.3	24.1	23.9	22.2	23.4	22.5
Zone								
Zone 1	23.1	25.2	25.8	24.1	25.3	24.3	26.6	25.3
Zone 2	23.0	24.9	25.4	24.6	25.5	24.0	26.1	25.2
Zone 3	22.9	24.2	24.2	26.2	24.7	23.7	27.0	26.4
Zone 4	22.6	24.2	23.3	23.9	23.5	23.2	24.7	23.5
Zone 5	22.7	23.4	23.6	22.8	23.9	23.0	24.3	23.5
Zone 6	21.8	23.3	22.8	23.0	21.5	21.9	22.2	22.2
Zone 7	20.8	22.3	21.3	20.5	22.3	20.8	22.2	21.4
Total	**22.6**	**24.2**	**24.0**	**23.9**	**24.2**	**23.2**	**25.2**	**24.0**

* Taken from household questionnaire.

The median age at first birth for all women 25-49 is 23.2 years. This is a decrease of 2.0 years during 1993-2000 period. Women in Colombo metro areas have the highest median age at first birth of 24.3 years as compared to the lowest value of 22.2 years for estate women. In fact, the estate women record the lowest median age at first birth for all age groups except for (40-44). Comparison with the corresponding DHS1993 figures reveals that the median age at first birth has decreased for all sectors. By zone, the women in Colombo metropolitan areas, zone 1, have the highest median age at first birth and zone 7 covering the rain fed dry zone areas record the lowest value. Compared to DHS1993, the median age at first birth has decreased in all zones.

Chapter 5 : Family Planning

R. Balakrishnan

Several agencies including government, private and non government organizations are involved in the promotion of family health programmes including family planning activities over the past few decades. Studies about the Knowledge, Attitude and Practice of contraceptive methods are needed to asses

I. the success of the existing family planning programmes
II. the issues involved in implementing family planning programmes including health problems and
III. also to formulate future policies with regard to reproductive health programmes

Demographic and Health Survey 2000 gathered information from ever married women aged (15-49) years about their knowledge on contraceptive methods, extent of use, source of supply, issues related to use and supply, age, and number of children when used first, discontinuation with reasons, willingness to pay for family planning services, age when sterilized, side effects if any, future use and attitudes towards pregnancies. Some important findings of the survey and trends observed in contraceptive practice are summarized in this chapter.

5.1 Contraceptive knowledge

All ever married women between the age group (15-49) years were initially requested to tell all methods known to them to delay or avoid pregnancies without prompting and their immediate replies were recorded. Subsequently they were prompted with brief description about modern and traditional methods, which were not recognized by them spontaneously. The methods so described were, eight modern methods viz. Pills, IUD, Injection, Vaginal Methods, Condom, Female Sterilization, Male Sterilization, Norplant and two traditional methods viz. Withdrawal and Safe period. Respondents who have stated at least one method without prompting or recognized one method when prompted are considered to have contraceptive knowledge.

5.1.1 *Levels and Trends*

Unprompted and prompted knowledge by different methods for ever married and currently married women is shown in Table 5.1. Almost all ever married (99.1%) and currently married (99.2%) women know at least one method of contraception. Almost all ever married women and all currently married women who reported such knowledge know a modern method. It is seen that 75.8 percent of ever married and 76.4 percent of currently married women know a traditional method. More than 90 percent of women both ever married and currently married reported knowledge of female sterilization, pill and injection. The pill is the most known method. Except for vaginal methods and norplant, modern methods are better known than traditional methods.

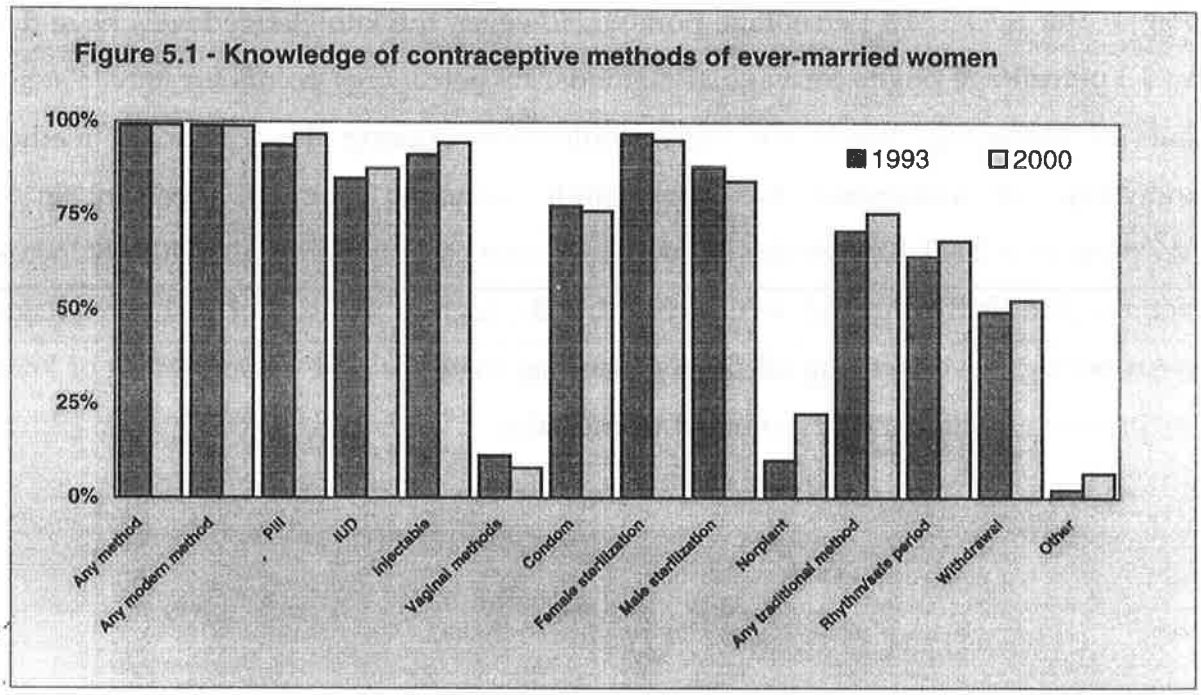
Unprompted knowledge is higher for modern methods such as pill, IUD and injection for both ever married and currently married women than prompted knowledge. Prompted knowledge is higher for female sterilization, male sterilization, norplant and withdrawal than unprompted knowledge. For ever married women during the period 1993-2000, the knowledge of any family planning method and any modern method have remained around 99 percent. Knowledge of traditional methods, on the other hand has increased by 4.8 percentage points during the period. This is clearly seen in Figure 5.1. Among the modern methods, the largest increase in knowledge levels were recorded for norplant (12.4 percentage points) followed by injection (3.2 percentage points), pills (2.9 percentage points) and IUD (2.8 percentage points). However, the knowledge levels have decreased by 3.3 percentage points for vaginal methods, 1.9 percentage points for female sterilization and 3.9 percentage points for male sterilization. Among the traditional methods, the knowledge of withdrawal has significantly increased from 49.7 percent in 1993 to 52.7 percent in 2000. Knowledge of safe period and other methods also slightly increased. In fact, norplant is the method, which recorded the highest increase of 12.4 percentage points in knowledge levels among all family planning methods. The same pattern of knowledge can be seen among currently married women also.

Table 5.1 Knowledge of contraceptive methods

Percentage of ever married and currently married women aged (15-49) yrs. knowing any method, any modern method and / or any traditional method, DHS 1993 and DHS 2000.

Contraceptive method	Ever-married women				Currently-married women			
	Know method		Unprompted knowledge	Prompted knowledge	Know method		Unprompted knowledge	Prompted knowledge
	DHS 1993	DHS 2000			DHS 1993	DHS 2000		
Any method	**99.1**	**99.1**	**92.5**	**91.1**	**99.3**	**99.2**	**93.3**	**91.3**
Any modern method	**99.0**	**98.9**	**91.6**	**88.9**	**99.3**	**99.1**	**92.4**	**88.9**
Pill	93.8	96.7	76.2	20.2	94.5	96.9	77.3	19.5
IUD	84.9	87.7	50.0	37.5	85.7	88.1	50.7	37.4
Injectable	91.3	94.5	61.8	32.5	92.0	94.8	63.3	31.4
Vaginal methods	11.2	7.9	1.5	6.3	11.6	8.0	1.5	6.4
Condom	77.6	76.3	37.1	39.0	78.7	77.0	38.1	38.9
Female sterilization	97.0	95.1	43.9	51.0	97.3	95.1	44.2	50.9
Male sterilization	88.2	84.3	20.7	63.4	88.6	84.4	20.8	63.5
Norplant	10.0	22.4	6.9	15.4	10.5	23.0	7.2	15.8
Any traditional method	**71.0**	**75.8**	**38.7**	**57.5**	**72.6**	**76.4**	**39.2**	**58.1**
Rhythm/safe period	64.3	68.5	34.0	34.4	65.9	69.2	34.6	34.5
Withdrawal	49.7	52.7	10.1	42.4	51.3	53.6	10.3	43.2
Other	2.1	6.5*	2.1*	4.3*	2.1	6.4*	2.2*	4.3*
Number of women	**6,983**	**6,385**	-	-	**6,434**	**5,915**	-	-

Note : Vaginal methods are diaphragm, foam and jelly.
* Includes prolonged abstinence.



5.1.2 *Differentials in knowledge*

Table 5.2 gives the percentage distribution of currently married women who knew any method, any modern method and any traditional method by age group. Knowledge of all modern methods is uniformly high (more than 98.6%) among women in all age groups, except the youngest, where it is marginally lower (94.4%). On the other hand, knowledge of traditional methods is significantly low among the youngest age group (15-19) having only 49.7 percent.

Table 5.2 Knowledge of contraceptive methods by age

Percentage of currently married women aged (15-49) yrs. knowing any method, any modern method and any traditional method by current age of women.

Current age	Any method	Any modern method	Any traditional method
15-19	94.4	94.4	49.7
20-24	100.0	100.0	73.2
25-29	99.5	99.5	75.6
30-34	99.4	99.4	78.5
35-39	99.1	99.1	81.2
40-44	99.4	99.4	79.2
45-49	98.7	98.6	75.9
Total	**99.2**	**99.1**	**76.4**

Currently married women knowing at least one modern method by number of living children, sector, zone and education is shown in table 5.3. Contraceptive knowledge is uniformly high in all sectors, zones and educational categories. Estate women show a decrease in the level of knowledge from 98.5 percent in 1993 to 95.2 percent in 2000. There are no significant differences among the zones. As expected, the knowledge level of women with no education is low for both surveys and level of knowledge varies in a narrow range from 97.6 percent for no education to 99.9 percent for women with more than GCE (A/L) and higher level education. In general, there is a clear relationship between knowledge and parity. Women with no children have marginally lower knowledge generally in all categories.

Table 5.3 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women aged (15-49) yrs. knowing at least one modern method, by sector, zone and educational level according to number of living children.

Background characteristic	Number of living children							Total		
	0	1	2	3	4	5	6+	DHS 2000	DHS 1993	DHS 1987
Sector										
Colombo metro	98.6	99.5	98.8	100.0	100.0	100.0	100.0	99.4	99.2	99.5
Other urban	95.2	99.2	100.0	100.0	100.0	100.0	85.7	99.0	99.3	99.8
Rural	97.9	99.5	100.0	99.8	98.6	100.0	99.0	99.5	99.3	99.1
Estate	83.3	95.9	94.9	97.5	93.5	100.0	100.0	95.2	98.5	97.2
Zone										
Zone 1	98.6	99.5	98.8	100.0	100.0	100.0	100.0	99.4	99.2	99.5
Zone 2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	99.8	99.3	99.4
Zone.3	96.9	99.1	100.0	98.6	97.3	100.0	100.0	98.7	99.6	97.8
Zone 4	99.2	99.4	100.0	100.0	100.0	100.0	100.0	99.8	99.6	99.0
Zone 5	94.6	98.9	98.7	99.7	97.9	100.0	91.4	98.6	98.8	99.2
Zone 6	100.0	98.1	100.0	100.0	100.0	100.0	100.0	99.6	99.6	99.7
Zone 7	95.3	99.0	100.0	97.8	95.0	100.0	95.6	97.8	98.7	99.1
Educational level										
No schooling	92.0	97.1	100.0	97.1	100.0	100.0	94.7	97.6	96.1	97.2
Primary	85.4	95.4	99.2	99.3	97.7	100.0	96.1	97.9	98.9	99.0
Secondary	98.0	99.7	99.8	99.8	98.4	100.0	97.5	99.4	99.7	99.2
G.C.E. (O/L)	98.1	100.0	99.5	100.0	98.5	100.0	100.0	99.6	99.8	99.8
G.C.E. (A/L) & higher	100.0	100.0	99.3	100.0	100.0	100.0	-	99.9		
Total										
2000	**97.2**	**99.4**	**99.6**	**99.6**	**98.4**	**100.0**	**96.6**	**99.2**	-	-
1993	**96.5**	**99.1**	**99.7**	**99.7**	**99.9**	**99.5**	**98.9**	-	**99.3**	-
1987	**96.2**	**98.8**	**99.5**	**99.6**	**99.7**	**99.0**	**99.2**	-	-	**99.1**

5.1.3 Source of Knowledge

Table 5.4 shows percentage distribution of ever married women by source for each of the contraceptive methods known to them. It could be seen from the responses, more than 90 percent of the respondents knew the source for pill, IUD, injection, female sterilization and male sterilization while 88.1 percent knew the source for condom. However 37.5 percent and 22.3 percent of the respondents who said that they knew vaginal method and norplant were not aware of the source for vaginal method and norplant respectively, probably due to low popularity of these two methods. The principal source for pill, IUD,

injection, norplant, female sterilization and male sterilization was government facilities mainly Government Hospitals/MCH centers, Family Health Bureau and family health workers. It is seen that 90.3 percent of the ever married women who are aware of female sterilization and 87.5 percent of the women who are aware of male sterilization indicated that the main source for sterilization is Government Hospitals/MCH centers. A small percentage of the respondents indicated Non Government Organization as source for contraceptives. However, 49.2 percent of the ever married women who knew about condom reported private sources as the source for condom of which 47.4 percent indicated pharmacy/shop as the source. Around 20 percent for pill and vaginal methods and 13.0 percent for injection indicated private sources as the source for these methods. Small percentage of respondents indicated private sources for IUD, norplant and female sterilization. Very negligible fraction not exceeding even one percent of the respondents indicated other sources for contraceptives, except for Rhythm / Safe period.

Table 5.4 Source knowledge of contraceptive methods

Percent distribution of ever-married women aged (15-49) yrs. knowing a method by supply source named.

Source of supply	Contraceptive methods								
	Pill	IUD	Injectable	Vaginal methods	Condom	Norplant	Female sterili -zation	Male sterili-zation	Rhythm/ Safe period*
Government facilities									
Government hospital / MCH centre	26.7	70.2	65.1	26.3	12.4	60.7	90.3	87.5	4.7
Family health bureau	2.3	3.3	3.1	3.2	1.4	2.6	1.3	1.2	1.3
Family health worker / nurse	42.7	7.6	10.0	7.9	23.5	3.0	0.9	0.9	34.4
Non government organizations									
Family planning association	1.8	2.8	2.2	4.8	0.8	5.1	1.9	2.7	1.3
Non government clinic	0.7	0.6	1.3	0.3	0.3	0.1	0.5	0.5	0.3
Private Sources									
Private doctor / private nursing home	1.7	2.7	9.0	3.4	0.5	4.0	2.2	1.8	2.3
Mobile clinic	3.0	3.4	3.4	0.3	1.3	1.2	0.2	0.2	1.3
Pharmacy / shop	15.4	0.9	0.6	15.3	47.4	0.2	-	-	0.5
Other									
Ayurvedic doctor	0.0	0.0	0.1	0.3	0.1	0.1	0.0	0.0	0.1
Friend / relative	0.1	0.1	0.1	0.0	0.2	0.4	0.0	0.0	21.6
Other field workers	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.5
Media	-	-	-	-	-	-	-	-	15.7
Other	0.2	0.1	0.1	0.6	0.2	0.3	0.1	0.1	4.0
Not stated	5.2	8.3	4.8	37.5	11.9	22.3	2.6	4.8	12.0
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of unweighted women	6,115	5,432	5,999	506	4,602	1,535	6,005	5,188	4,196

Note: Vaginal methods are diaphragm, foam and jelly.
* Source of obtaining instructions.

5.1.4 *Main problems in getting or using methods.*

Table 5.5 gives percentage distribution of respondents the problems in getting or using methods as revealed by ever married women of the age group 15-49 years for each method known to them. It is difficult to answer this question by a respondent who only knows the method unless she is/was a user of that method. Therefore a very high percentage of the respondents failed to answer this question as expected. For norplant and vaginal methods (73% and 71.8%) failed to give any reply probably due to its low usage and popularity. Similarly for male sterilization and condom 60.2 percent and 52.0 percent respectively did not give any answers may be due to the fact that these methods are used by husbands. Highest percentage (54%) of the respondents who knew safe period method indicated that they have no problem with safe period but 10.8 percent of them had reservation about its effectiveness. Only about one fourth of the respondents who knew pill, injection or condom indicated that they have no problem in getting or using these methods whereas 34.2 percent of the respondents who knew about female sterilization have indicated that they have no problem. Only about one percent of the respondents have given husband disapproval as a problem for most of the methods except for condom (8.3%), withdrawal (4.4%) and male sterilization (3.5%). Out of the specific problems, health concern is considered to be a problem to a significant proportion of respondents who knew modern methods with the exception of condom. Higher proportion of respondents indicated health concern as a problem for injection (28.9%) followed by pill (28.1%), IUD (21.0%) and female sterilization (14.1%). Health concern is not considered as a problem for traditional methods whereas ineffectiveness (11%) and inconvenience (6%) to use traditional methods were indicated by the respondents who knew these methods. About 5 percent of the respondents have indicated that pill, IUD and condom are inconvenient to use. Negligible proportion of respondents indicated cost or access as a problem for each of the methods.

Table 5.5 Main problems in getting or using methods

Percent distribution of ever- married women aged (15-49) yrs. who have ever heard of a method by the main problem perceived in getting or using particular methods, if any, according to method.

Main problem	Contraceptive methods									
	Pill	IUD	Injectable	Vaginal methods	Condom	Norplant	Female sterili -zation	Male Sterili -zation	Rhythm/ Safe period	With-drawal
Husband disapproves	1.1	1.3	1.0	1.5	8.3	0.6	1.3	3.5	0.7	4.4
Health concerns	28.1	21.0	28.9	7.6	2.1	7.8	14.1	10.1	0.2	0.3
No access / scarcity	0.7	0.4	0.9	0.5	0.2	1.1	0.3	0.2	-	0.0
Costs too much	0.2	0.0	0.1	0.0	0.3	0.2	0.0	0.0	0.0	0.0
Not effective	1.1	2.3	1.2	2.5	4.5	0.3	1.3	0.7	10.8	11.6
Inconvenient to use	4.8	4.8	1.9	1.5	4.7	0.8	0.7	0.7	6.3	5.3
Other	2.8	4.3	3.3	2.3	3.2	2.7	5.6	4.7	1.8	1.7
No problem	24.3	17.6	24.7	12.3	24.6	13.5	34.2	19.9	54.0	48.7
Not stated	36.8	48.3	37.9	71.8	52.0	73.0	42.6	60.2	26.1	27.9
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of unweighted women	6,115	5,432	5,999	506	4,602	1,535	6,005	5,188	4,196	3,095

Note: Vaginal methods are diaphragm, foam and jelly.

5.2 Contraceptive use

5.2.1 *Ever use of Contraceptives*

Table 5.6 gives comparative data on ever use of contraceptives by ever married women by method as revealed by WFS 1975, CPS 1982, DHS 1987, DHS 1993 and DHS 2000. The trend regarding the ever use of any contraceptive methods show a sharp increase from 1975 to 1982 and continue to increase gradually from 71.8 percent in 1987 to 76.2 percent in 1993 and further to 83.0 percent in 2000. Percentage of ever married women who have ever used any modern method increased rapidly from 1975 to 1982 and then increased steadily from 1987 to 2000. Ever use of any modern method is 67 percent in 2000 which showed an increase of 11.1 percentage points from that was in 1993. In the case of traditional methods the percentage of respondents who ever used any traditional method increased from 30 percent in 1975 to 46.6 percent in 1982 and then decreased to 44.3 percent in 1987 and further to 43.5 percent in 1993 and recorded an increase to 47.4 percent in 2000. This trend can be clearly observed in Figure 5.2.

Table 5.6 Trends in ever use of contraceptives

Percentage of ever-married women who have ever used a contraceptive method by major methods, WFS 1975, CPS 1982, DHS 1987, DHS 1993 and DHS 2000.

Type of method	Percentage of ever users				
	WFS 1975	CPS 1982	DHS 1987	DHS 1993	DHS 2000
Any method	46.5	69.2	71.8	76.2	83.0
Any modern method	27.4	41.0	50.4	56.9	67.0
Any traditional method	30.0	46.6	44.3	43.5	47.4

Note: 1. Data from the northern and eastern provinces have been excluded from the WFS and in order to make these two surveys comparable with the geographic areas covered by DHS 1987, DHS 1993 and DHS 2000.
2. Estimates for 2000 differ from those presented in the preliminary report, due to a computational error in the former publication.

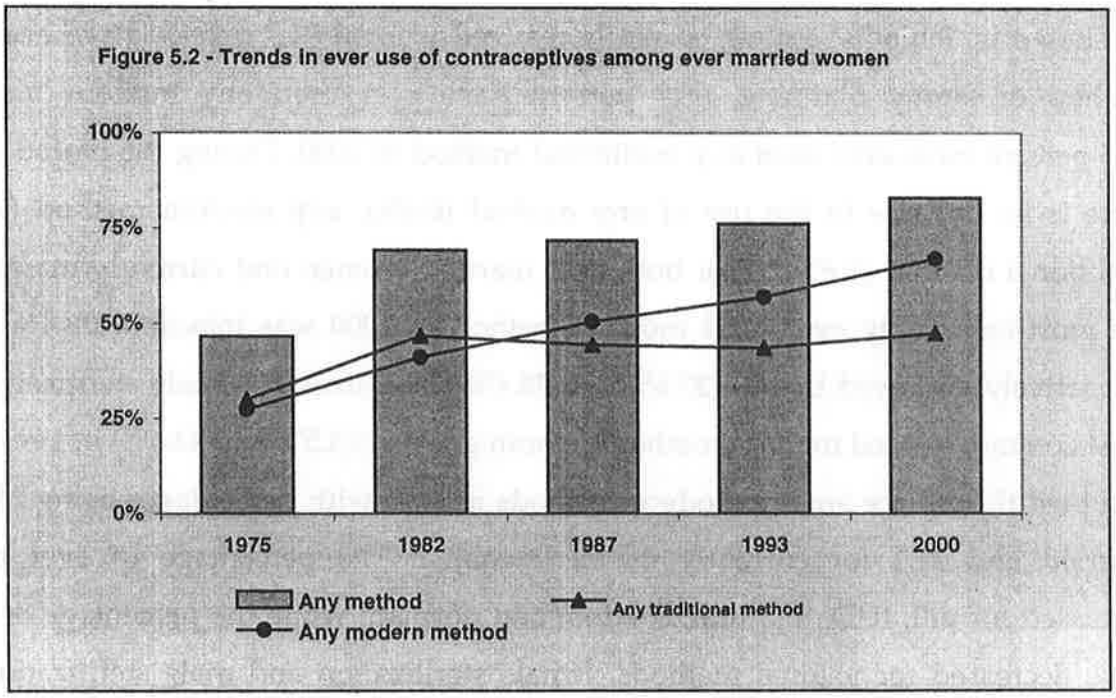


Table 5.7 Ever use of contraceptives among ever married and currently married women

Percentage of ever married and currently married women who have ever used a method by specific method, DHS 1987, DHS 1993 and DHS 2000.

Contraceptive method	Percentage of ever users among					
	ever-married women			currently married women		
	DHS 2000	DHS 1993	DHS 1987	DHS 2000	DHS 1993	DHS 1987
Any method	**83.0**	**76.2**	**71.8**	**84.7**	**78.3**	**73.9**
Any modern method	**67.0**	**56.9**	**50.4**	**68.7**	**58.5**	**52.2**
Pill	27.6	20.3	15.2	28.4	21.2	15.8
IUD	11.1	7.6	8.7	11.1	7.9	8.9
Injectable	28.4	15.5	5.9	29.7	16.4	6.3
Vaginal methods	0.1	0.1	0.2	0.0	0.1	0.2
Condom	13.7	10.3	9.4	14.3	10.7	9.9
Female sterilization	21.2	23.5	24.2	21.1	23.6	24.9
Male sterilization	2.5	3.8	5.4	2.4	4.0	5.7
Norplant	0.3	0.1	0.1	0.4	0.1	0.1
Any traditional method	**47.4**	**43.5**	**44.3**	**48.5**	**44.9**	**45.4**
Rhythm / Safe period	35.6	34.9	38.6	36.6	35.8	39.6
Withdrawal	25.6	22.1	17.2	26.4	23.0	17.8
Other	5.6	1.4	0.8	5.6	1.4	0.9

Note :1. Vaginal methods are diaphragm, foam and jelly.
2. Estimates for 2000 differ from those presented in the preliminary report, due to a computational error in the former publication.

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As shown in Table 5.7 among currently married women 84.7 percent have ever used any method of family planning, 68.7 percent have ever used any modern methods and 48.5 percent have ever used any traditional method in 2000. During the period 1993 –2000 there is an increase in the use of any method (6.4%), any modern method (10.2%) and traditional method (3.6%). For both ever married women and currently married women the most commonly ever used modern method in 2000 was injection (28.4% and 29.7% respectively) followed by pill (27.6% and 28.4% respectively). Female sterilization was the most commonly used modern method for both groups (23.5% and 23.6%) in 1993 whereas it occupied third place among modern methods in 2000 with percentages being 21.2 for ever married and 21.1 for currently married women. The percentage of ever users have increased for pill, IUD, injection, condom and norplant while the percentage of ever users have decreased for vaginal methods, female sterilization and male sterilization for both ever married and currently married women over the period 1993-2000. The percentage of ever users of any traditional methods have increased for both ever married and currently married women in 2000 as compared to that in 1993.

Table 5.8 shows that 83.0 percent of the ever married women and 84.7 of the currently married women have ever used a contraceptive at some time in their life. Almost two thirds of both ever married women and currently married women have ever used a modern method while slightly less than half of the ever married and currently married women have ever used a traditional method in the past. Most commonly used modern method is injection and most commonly used traditional method is safe period.

Percentages of ever married women who have ever used pill, IUD or condom increased with age and reaches a maximum of 34.8 percent, 14.4 percent and 15.7 percent respectively at the age group of 30-34 years and decreased thereafter. In the case of injection these percentages increased with age and reached a maximum of 45.3 percent for the age group 25-29 and decreased thereafter, whereas for female and male sterilization these percentages increased with age and reached a maximum for the age groups 40-44 years and 45-49 years respectively. This indicates that ever use of permanent methods occur at higher ages as compared to other modern methods. With regard to the ever use of traditional methods, the

percentage of users increases with age for both methods and reaches a maximum at the age of 40-44 years for safe period and at 35-39 years for withdrawal. Similar trend can be seen for currently married women in the ever use of contraceptive methods by age.

Table 5.8 Ever use of contraceptives by age

Percentage of ever-married and currently married women who have ever used specific methods by current age.

Contraceptive method	Current age of women							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Ever-married women								
Any method	**64.4**	**78.8**	**83.1**	**86.5**	**86.9**	**84.0**	**79.5**	**83.0**
Any modern method	**54.6**	**66.0**	**70.4**	**74.7**	**71.3**	**63.9**	**57.4**	**67.0**
Pill	22.1	32.0	33.8	34.8	30.5	23.0	15.0	27.6
IUD	8.0	8.6	11.4	14.4	11.2	9.0	10.9	11.1
Injectable	31.3	44.4	45.3	39.4	28.1	15.2	7.6	28.4
Vaginal methods	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.1
Condom	4.9	13.4	15.3	15.7	14.6	13.4	11.2	13.7
Female sterilization	0.0	0.8	5.8	16.2	28.8	34.0	32.1	21.2
Male sterilization	0.0	0.3	0.7	1.1	2.2	4.5	5.3	2.5
Norplant	0.0	0.5	0.2	0.5	0.7	0.2	0.0	0.3
Any traditional method	**26.4**	**39.6**	**41.7**	**46.5**	**51.9**	**53.6**	**49.2**	**47.4**
Rhythm/Safe period	17.8	23.9	28.1	35.9	37.9	43.0	40.5	35.6
Withdrawal	16.0	25.2	25.2	25.4	28.8	26.2	23.8	25.6
Other	3.1	3.8	3.6	4.6	7.0	6.3	7.5	5.6
Number of women	**163**	**603**	**971**	**1,151**	**1,203**	**1,134**	**1,160**	**6,385**
Currently married women								
Any method	**65.2**	**79.8**	**83.7**	**87.9**	**88.3**	**85.6**	**83.4**	**84.7**
Any modern method	**55.3**	**66.8**	**71.5**	**76.2**	**72.4**	**65.1**	**60.6**	**68.7**
Pill	22.4	32.5	34.6	35.2	31.0	23.2	15.7	28.4
IUD	8.1	8.8	11.4	14.9	11.0	8.6	11.4	11.1
Injectable	31.7	45.1	45.8	40.6	28.2	16.1	8.4	29.7
Vaginal methods	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0
Condom	5.0	13.6	15.9	16.0	15.1	14.0	12.3	14.3
Female sterilization	0.0	0.8	6.0	16.5	28.9	34.4	33.5	21.1
Male sterilization	0.0	0.3	0.6	1.2	2.3	4.1	5.6	2.4
Norplant	0.0	0.5	0.2	0.5	0.7	0.2	0.0	0.4
Any traditional method	**26.7**	**40.1**	**41.9**	**47.4**	**53.1**	**55.6**	**52.1**	**48.5**
Rhythm/Safe period	18.0	24.1	28.4	36.9	38.9	45.1	43.2	36.6
Withdrawal	16.1	25.6	25.0	25.7	29.6	28.1	25.4	26.4
Other	3.1	3.9	3.7	4.7	7.1	6.2	7.4	5.6
Number of women	**161**	**594**	**938**	**1,101**	**1,125**	**1,017**	**979**	**5,915**

Note: 1. Vaginal methods are diaphragm, foam and jelly.
2. Estimates for total differ from those presented in the preliminary report, due to a computational error in the former publication.

5.2.2 *Current use of contraceptives*

Table 5.9 and Figure 5.3 provide an overview of trends in contraceptive prevalence among currently married women by method over the period 1975-2000. The proportion of currently married women using any contraceptive method at the time of the survey in 1975 was 34.4 percent and it increased rapidly to 57.8 percent in 1982 and thereafter showed moderate increases and reached 70 percent in 2000. Use of any modern method increased gradually from 20.2 percent in 1975 to 49.5 percent in 2000. Use of traditional method was 14.2 percent in 1975 and it increased to 26.0 percent in 1982 and fluctuated around 21 percent during the period 1987 - 2000.

Table 5.9 Trends in current use of contraceptives

Trends in current contraceptive use by method, among currently married women aged (15-49) yrs., WFS 1975, CPS 1982, DHS 1987, DHS 1993 and DHS 2000.

Contraceptive method	Percent currently using				
	WFS 1975	CPS 1982	DHS 1987	DHS 1993	DHS 2000
Pill	1.7	2.7	4.1	5.5	6.7
IUD	5.2	2.9	2.1	3.0	5.1
Injectable	0.4	1.0	2.7	4.6	10.8
Vaginal methods	-	-	0.0	0.0	-
Condom	2.3	3.3	1.9	3.3	3.7
Sterilization	10.6	22.0	29.8	27.2	23.1
Norplant	-	-	0.0	0.1	0.1
Rhythm / Safe period	8.9	14.2	14.9	15.2	11.9
Withdrawal	1.6	5.1	3.4	5.0	7.1
Prolonged abstinence	-	-	-	-	1.4
Other	3.7	6.7	2.8	2.2	0.1
Any modern method	**20.2**	**31.9**	**40.6**	**43.7**	**49.5**
Modern temporary	9.6	9.9	10.8	16.5	26.4
Sterilization	10.6	22.0	29.8	27.2	23.1
Any traditional method	**14.2**	**26.0**	**21.1**	**22.4**	**20.5**
Any method	**34.4**	**57.8**	**61.7**	**66.1**	**70.0**

Note: 1. Data from the northern and eastern provinces have been excluded from the WFS and CPS in order to make these two surveys comparable with the geographic areas covered by DHS 87, DHS 93 and DHS 2000.
2. Modern temporary methods are pill, IUD, Injection, vaginal methods, condom and norplant.
3. Vaginal methods are diaphragm, foam and jelly.

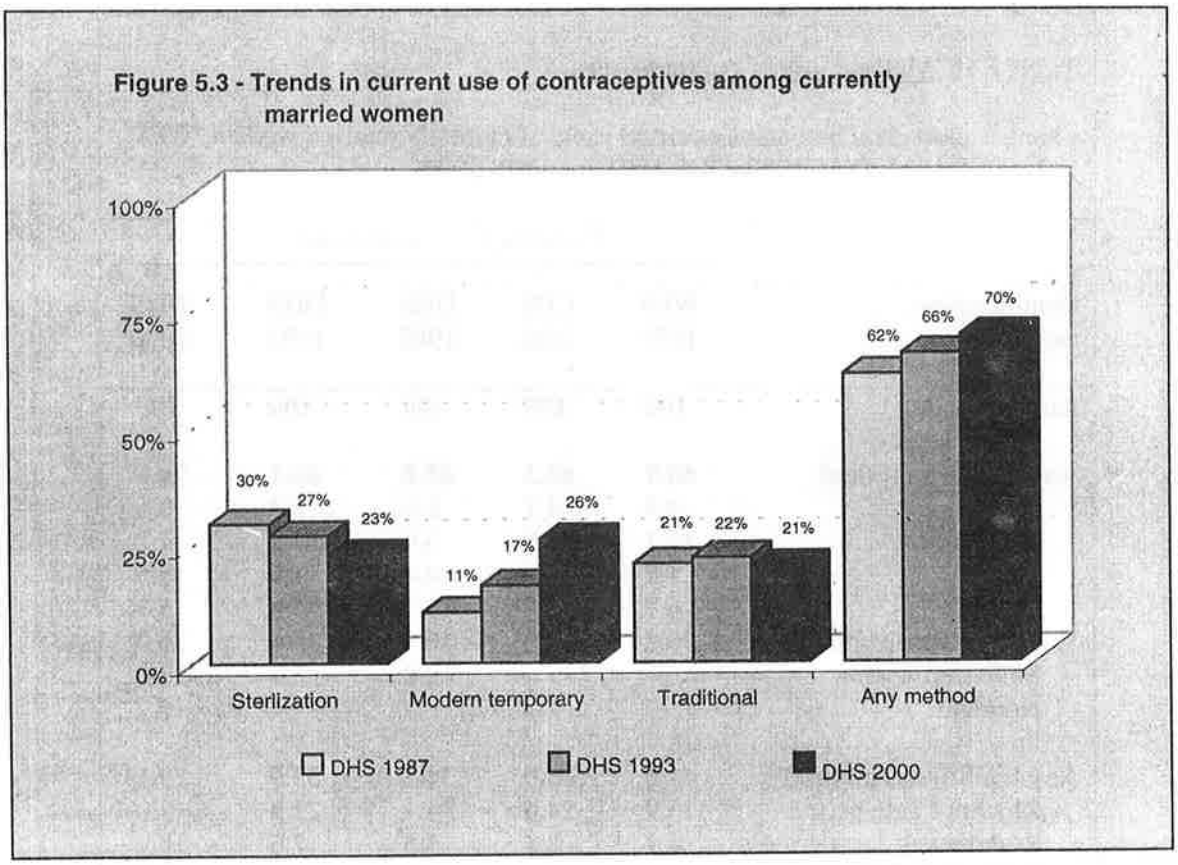


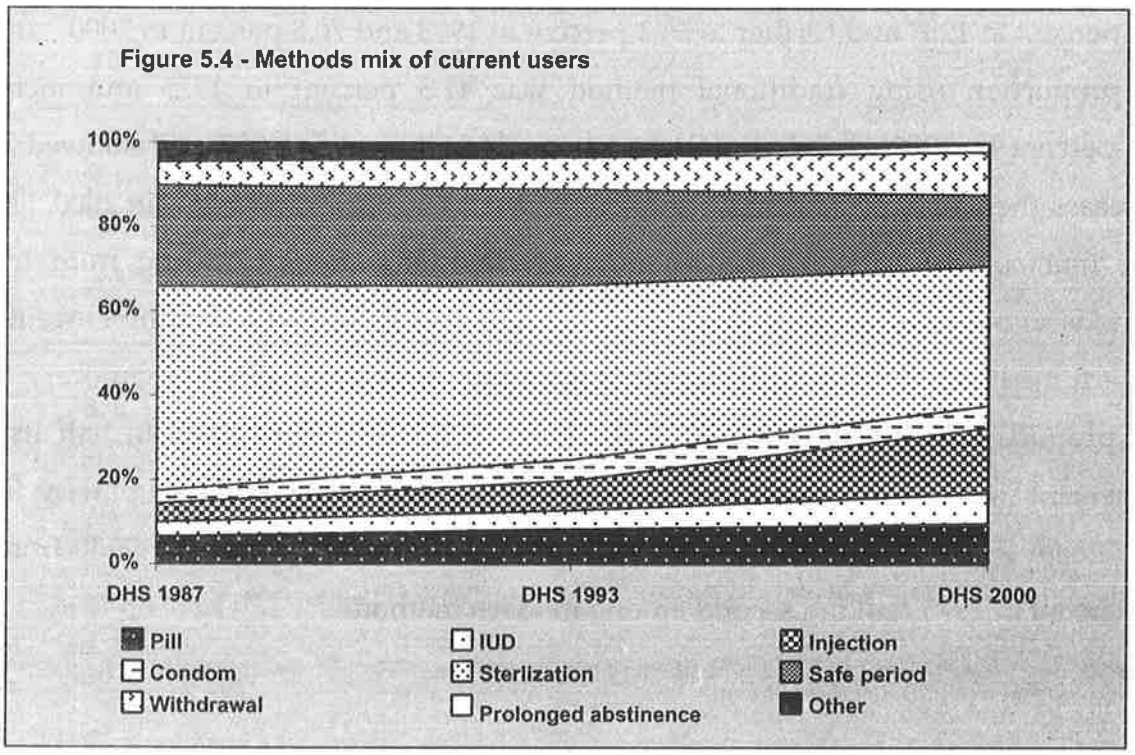
Table 5.10 shows the changes in method mix among current users of currently married women since 1975. The proportion of current users of any modern method was 58.7 percent in 1975 and decreased to 55.2 percent in 1982 and thereafter increased sharply to 65.8 percent in 1987 and further to 66.1 percent in 1993 and 70.8 percent in 2000. In contrast the proportion using traditional method was 41.3 percent in 1975 and increased to 45.0 percent in 1982 and declined sharply to 34.2 percent in 1987 and showed marginal decreases thereafter and recorded 33.9 percent in 1993 and 29.1 percent in 2000. Thus, it is clear that current users of contraceptive methods are slowly shifting from traditional methods to modern methods since 1982. It could also be seen that among current users of modern methods, there is a gradual shift from permanent methods to temporary methods. The proportion using IUD was 15.1 percent in 1975 and it dropped to half its level to 7.2 percent in 2000. Proportion using Pill increased marginally from 4.9 percent in 1975 to 9.6 percent in 2000. Percentage using injection reached 15.5 percent in 2000 from a mere 1.2 percent in 1975 ranking second among modern methods.

Table 5.10 Method mix of current users

Changes in method mix among current users of currently married women, WFS 1975, CPS 1982, DHS 1987, DHS 1993 and DHS 2000.

Contraceptive method	Percentage of current users				
	WFS 1975	CPS 1982	DHS 1987	DHS 1993	DHS 2000
Any method	**100**	**100**	**100**	**100**	**100**
Any modern method	**58.7**	**55.2**	**65.8**	**66.1**	**70.8**
Pill	4.9	4.7	6.6	8.3	9.6
IUD	15.1	5.0	3.4	4.5	7.2
Injectable	1.2	1.7	4.4	7.0	15.5
Condom	6.7	5.7	3.1	5.0	5.3
Female sterilization	30.8	38.0	40.3	35.6	30.0
Male sterilization			8.0	5.6	3.0
Norplant	-	-	-	-	0.2
Any traditional method	**41.3**	**45.0**	**34.2**	**33.9**	**29.1**
Rhythm / Safe period	25.9	24.6	24.1	22.9	17.0
Withdrawal	4.7	8.8	5.5	7.6	10.1
Prolonged abstinence	-	-	-	-	1.9
Other	10.8	11.6	4.5	3.3	0.1

Note: Data from the northern and eastern provinces have been excluded from the WFS and CPS in order to make these two surveys comparable with the geographic areas covered by DHS 87, DHS 93 and DHS 2000.



5.2.3 *Differentials in current use of contraceptives*

Table 5.11 shows the current use of contraceptive methods by current age for currently married women. It is apparent from Table 5.11 that the proportions of currently married women using contraceptives at the time of the surveys have increased in all the age groups in 2000 as compared to that in 1993, the increases being higher at the younger age groups than that were in older age groups. The lowest age group (15-19) years recorded the highest increase of 22.5 percentage points from a rate of 30.3 percent in 1993 to 52.8 percent in 2000. In both surveys, the contraceptive prevalence rates by age groups increases with age and reached a maximum of 76.7 percent in 1993 and 77.5 percent in 2000 at the age group of (35-39) years and thereafter recorded slight decline in the prevalence rates as the age increases. For women of the age group (15-34) years the use of injection showed sharp increase in 2000 as compared to that was in 1993 while moderate increases were noted for older ages. In 2000 the use of pill recorded high rate of 10.4 percent for both age groups, (25-29) years and (30-34) years and for ages less than 25 years marginal decreases were shown and considerable drops were recorded for ages above 34 years. The percentage of women using temporary modern methods is low for women above 35 years. Vaginal methods was not used by any one and the use of norplant is negligible among all ages. No female and male sterilizations were recorded for the youngest age group (15-19) years. Percentage of female sterilizations increases up to 44 years starting from 20 years of age for both surveys. The percentage of male sterilization is low. Percentage users of safe period decreased from 15.2 percent in 1993 to 11.9 percent in 2000. The proportion using this method is low up to 24 years and increases thereafter with age up to 44 years and slightly dropped after 44 years.

Table 5.11 Current use of contraceptives by age

Percent of currently married women aged (15-49) yrs. according to contraceptive method currently using by age, DHS 1993 and DHS 2000.

Current age	Survey year	Percent currently using: Any method	Pill	IUD	Injectable	Vaginal methods	Norplant	Condom	Female sterili-zation	Male sterili-zation	Rhythm/ Safe period	With-drawal	Prolonged abstinence	Other	Number of women
15-19	1993	30.3	7.1	3.8	5.3	0.6	-	0.8	0.0	0.0	6.7	5.4	0.6	0.0	141
	2000	**52.8**	**9.3**	**8.1**	**22.4**	-	**0.0**	**1.2**	**0.0**	**0.0**	**6.2**	**5.0**	**0.6**	**0.0**	**161**
20-24	1993	53.6	12.3	5.0	12.0	0.0	-	2.4	3.5	0.5	9.3	7.3	1.1	0.1	722
	2000	**61.2**	**9.2**	**5.2**	**26.4**	-	**0.3**	**2.5**	**0.8**	**0.0**	**7.2**	**7.9**	**1.7**	**0.0**	**594**
25-29	1993	60.7	9.2	5.0	8.7	0.0	-	3.2	12.5	1.2	14.8	4.6	1.5	0.1	1,101
	2000	**65.0**	**10.4**	**6.7**	**21.2**	-	**0.1**	**5.1**	**5.9**	**0.2**	**8.1**	**6.0**	**1.3**	**0.0**	**938**
30-34	1993	67.4	6.5	3.2	4.5	0.0	-	5.4	21.3	4.0	15.8	5.5	1.0	0.2	1,287
	2000	**72.8**	**10.4**	**7.9**	**13.5**	-	**0.2**	**4.9**	**16.3**	**1.2**	**10.8**	**6.2**	**1.4**	**0.0**	**1,101**
35-39	1993	76.7	4.1	2.9	3.2	0.0	-	3.8	32.3	5.3	18.4	4.9	1.8	0.0	1,173
	2000	**77.5**	**7.0**	**4.8**	**6.1**	-	**0.2**	**4.1**	**29.1**	**2.1**	**14.0**	**8.8**	**1.3**	**0.0**	**1,125**
40-44	1993	74.4	1.7	1.3	0.9	0.0	-	3.1	35.5	5.0	18.4	5.5	3.1	0.0	1,115
	2000	**75.2**	**2.6**	**2.2**	**2.4**	-	**0.0**	**3.4**	**34.3**	**3.3**	**17.2**	**8.6**	**1.0**	**0.2**	**1,017**
45-49	1993	62.4	0.5	0.7	0.3	0.0	-	1.4	33.7	5.6	12.4	2.5	5.2	0.0	894
	2000	**63.8**	**1.0**	**2.6**	**0.4**	-	**0.0**	**1.8**	**33.1**	**5.2**	**12.5**	**5.4**	**1.5**	**0.3**	**979**
Total	**1993**	**66.1**	**5.5**	**3.0**	**4.6**	**0.0**	-	**3.3**	**23.5**	**3.7**	**15.2**	**5.0**	**2.2**	**0.1**	**6,434**
	2000	**70.0**	**6.7**	**5.1**	**10.8**	-	**0.1**	**3.7**	**21.0**	**2.1**	**11.9**	**7.1**	**1.4**	**0.1**	**5,915**

Note: Vaginal methods are diaphragm, foam and jelly.

Current uses of contraceptives by sector, parity, education and desire for children are shown in Table 5.12. Estate sector records the highest percentage (36.9%) of non current users among all sectors in 2000 compared to a still higher percentage (45.5%) of non users in 1993. Among the estate respondents 43.1 percent reported sterilization and it is the highest percentage among all sectors. Sterilization among the estate women however reflected decrease of 1.3 percentage points over the period 1993 - 2000. Current use of traditional methods by currently married estate women recorded the lowest (6.9%) among all sectors and current use of modern temporary method also recorded the lowest (13.1%). Among zones percentage of non use varies from 25.3 percent to 35.9 percent and no significant variation can be seen among the users of modern temporary method. Women using sterilization is higher in zone 5 (32.9%) followed by zone 6 (29.5%) and zone 7 (26.5%) whereas the use of traditional methods in these zones are low (13.7%,15.2% and 9.3% respectively). There is a direct relationship between parity and current use of contraception. This is more pronounced for sterilization. Non use is highest (84.2%) among women with no children and it decreases to 16.2 percent for women with 4 or more children. Use of modern temporary methods recorded the highest percentage (40.6%) for women with one child and decreases with number of children mainly due to the shift to modern permanent methods by women who have more than one child. Use of either traditional or modern temporary methods increases with education whereas the use of sterilization decreases with education. It implies that educated women prefer to use temporary methods to permanent methods. Among women who wants a child soon, 47.2 percent of them are non users of any method in 2000 compared to a very high percentage (73.9%) of non users of any method in 1993. Among women who wants to have a child after two years, 60.0 percent are using modern temporary methods and 20.1 percent are using traditional methods. 35.5 percent of women who don't want any more children are sterilized.

Table 5.12 Current use of contraceptives by background characteristics

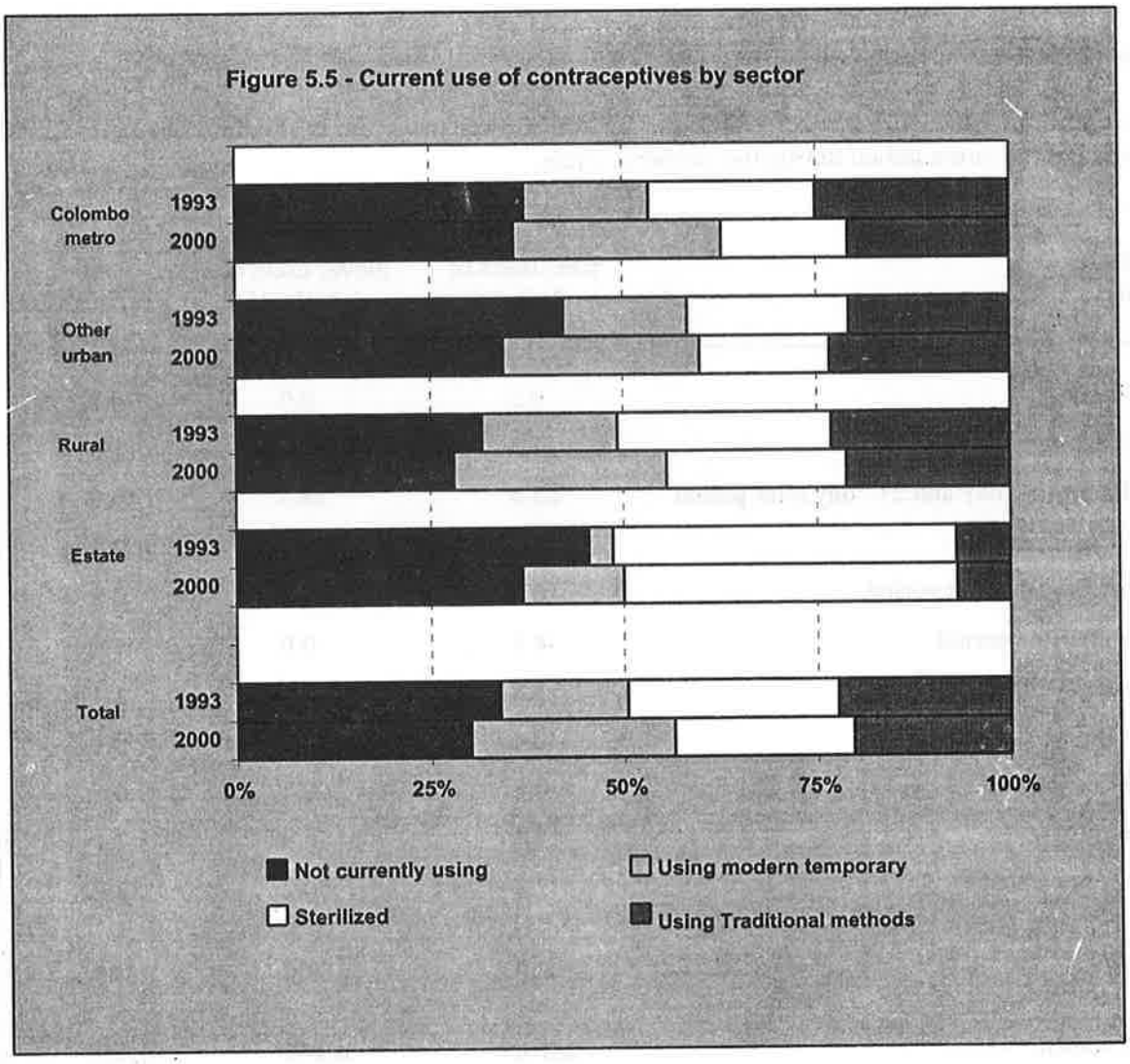
Percentage of currently married women by sector, zone, parity, educational level and desire for children according to current use of contraceptives.

Background characteristic	Not currently using		Current use of contraception: Using modern temporary		Sterilized		Using traditional method		Total	Number of women	
	1993	2000	1993	2000	1993	2000	1993	2000		1993	2000
Sector											
Colombo metro	37.3	35.9	16.2	26.9	21.5	16.3	25.1	20.9	100	793	704
Other urban	42.3	34.5	16.0	25.4	20.8	16.8	20.8	23.3	100	465	505
Rural	31.7	28.0	17.6	27.6	27.6	23.2	23.2	21.2	100	4,836	4,309
Estate	45.5	36.9	3.1	13.1	44.4	43.1	7.0	6.9	100	340	397
Zone											
Zone 1	37.3	35.9	16.2	26.9	21.5	16.3	25.1	20.9	100	793	704
Zone 2	28.9	31.8	17.4	24.6	23.7	17.8	29.9	25.7	100	1,049	966
Zone 3	36.0	31.3	16.0	23.6	20.6	17.1	27.4	27.9	100	870	876
Zone 4	32.4	26.1	16.2	28.7	26.6	22.4	24.6	22.8	100	1,323	1,330
Zone 5	36.3	28.7	15.7	24.8	36.9	32.9	11.2	13.7	100	1,253	1,349
Zone 6	32.8	25.3	19.5	30.0	36.1	29.5	15.9	15.2	100	414	236
Zone 7	34.1	33.6	16.2	30.5	28.6	26.5	21.2	9.3	100	731	453
Parity											
0	88.3	84.2	3.6	7.6	0.9	-	7.2	8.3	100	609	603
1	47.6	36.8	24.8	40.6	1.7	0.6	25.9	22.1	100	1,249	1,472
2	27.3	22.5	25.9	36.1	15.7	13.9	31.0	27.5	100	1,610	1,807
3	20.0	18.3	14.4	17.5	45.3	46.7	20.4	17.5	100	1,324	1,163
4+	21.0	16.2	7.6	10.8	53.1	56.8	18.4	16.1	100	1,642	870
Educational level											
No schooling	41.8	27.9	7.2	14.6	40.6	49.9	10.4	7.4	100	497	287
Primary	31.1	25.8	11.8	17.0	41.4	44.8	15.7	12.4	100	1,493	1,021
Secondary	32.2	28.9	18.2	29.2	26.4	23.2	23.2	18.7	100	2,412	2,675
G.C.E. (O/L)	36.0	34.0	20.3	29.9	14.4	9.0	29.2	27.2	100	2,032	1,146
G.C.E. (A/L) & higher		34.9		28.1		5.4		31.7	100		784
Desire for children+											
Wants no more	22.0	21.0	13.4	20.7	41.8	35.5	22.8	23.0	100	4,190	3,224
Wants to space*	41.9	20.0	31.6	60.0	-	-	26.5	20.1	100	1,198	838
Wants one soon**	73.9	47.2	11.6	30.6	-	-	14.5	22.0	100	803	499
Wants but don't know when	75.8	37.7	14.5	53.6	-	-	9.7	8.7	100	96	204
Unsure	61.4	36.0	10.5	35.6	-	1.4	28.1	27.1	100	147	293
Total	**33.9**	**30.0**	**16.5**	**26.4**	**27.2**	**23.1**	**22.4**	**20.5**	**100**	**6,434**	**5,915**

+ The target group for this particular query excluded currently married women who had never given birth to a child, and those who are not in a position to give a birth to a child due to various reasons.

* Wants to space is defined as wants a child after 2 or more years.

** Wants one soon is defined as wants a child within the next 2 years.



5.3 Knowledge of the fertile period

It is seen from Table 5.13 that 40.9 percent of all ever married women, 63.4 percent of ever users of safe period and 28.5 percent of never users of safe period method related the period defined by the 9th and 21st day after period as the fertile period. About half the ever married never users of safe period were not aware or did not answer about the fertile period. It is seen that 11 percent of all ever married women, 11.3 percent among the ever users and 10.8 percent among the never users of safe period method stated that one week after the period as the fertile period.

Table 5.13 Knowledge of the fertile period

Percentage of ever married women aged (15-49) yrs. by ever use and never use of rhythm / safe period, and the knowledge of the fertile period during the ovulatory cycle.

Opinion about fertile period	Knowledge among		
	Ever users of rhythm / safe period	Never users of rhythm / safe period	All ever-married women
During the period	0.2	0.7	0.5
One week after the period	11.3	10.8	11.0
Period defined by 9th day and 21st day after period	63.4	28.5	40.9
One week before period	5.4	2.4	3.5
One week before and after period	0.8	-	0.3
Two weeks after the period	4.1	0.0	1.5
3rd and 4th weeks after the period	3.8	-	1.4
Two weeks before the period	0.4	-	0.1
At any time	0.8	0.4	0.5
Other responses	7.4	6.9	7.1
Don't know / not stated	2.3	50.2	33.2
Total	**100**	**100**	**100**
Number of women	2,276	4,109	6,385

5.4 Age at sterilization

Table 5.14 shows the percentage distribution of sterilized women by age at the time of sterilization by number of years since sterilization. Median age at which women got sterilized varies from 29.4 years in 1993 to 29.0 years in 2000. Median age at sterilization recorded highest value of 33.2 years for women who were sterilized between 1996 and 2000 and it decreased gradually with increase in number of years since sterilization and recorded median age of 27.4 years for women who were sterilized more than 12 years ago from 2000. Percentage of women who were sterilized at the age group (25-29) years was highest (38.3%) followed by women at the age group (30-34) years (29.1%). Almost two thirds of the women who got the sterilization done, did it at the age group 25-34 years. The pattern is same in 1993 too.

Table 5.14 Age at sterilization

For ever married women who have undergone sterilization (sterilization of spouse also included), the percent distribution by age of woman at the time of sterilization, according to the number of years since sterilization.

Years since operation	Age at sterilization					Total	Number of women		Median age	
	< 25	25-29	30-34	35-39	40+		1993	2000	1993	2000
< 4	5.6	24.2	35.4	27.3	7.6	100	365	198	30.9	33.2
4-5	10.7	22.7	42.0	18.0	6.7	100	126	150	29.8	32.2
6-7	6.5	38.7	34.9	16.7	3.2	100	182	186	30.3	30.7
8-9	18.6	32.1	33.6	15.7	0.0	100	219	140	30.3	29.9
10-11	20.7	37.9	20.7	20.7	-	100	219	87	29.4	29.1
12+	28.3	46.6	23.4	1.8	-	100	526	715	28.3	27.4
Total	**19.3**	**38.3**	**29.1**	**11.2**	**2.1**	**100**	**1,637**	**1,476***	**29.4**	**29.0**

* Missing information on the year of sterilization is not presented separately.

5.5 Number of living children at the time of first use

Table 5.15 gives the percentage distribution of ever married women classified by number of living children they had when they first used contraceptives according to current age. 16.9 percent of the ever married women never used contraceptives. It is seen that 12 percent of ever married women of all ages (15-49) started using contraceptive methods before the first birth and another 45 percent commenced using contraception before the second birth. It could be seen, among ever married women who commenced using contraceptives before the first birth, the percentage of women using contraceptives is higher in the younger age groups with 32 percent in the age group 15-19 and it decreases as the age increases. The contraceptive first use recorded highest percentage of 53.3 for the age group 25-29 years among women with one child and showed gradual decreases for younger ages and older ages.

Table 5.15 Living children at the time of first use of contraception

Percent distribution of ever-married women aged (15-49) yrs. by number of living children at the time of first use of contraception by current age.

Current age	Never used	Number of living children when starting contraception						Total	Number of women
		0	1	2	3	4+	Don't know		
15-19	35.6	31.9	31.3	0.6	0.6	0.0	0.0	100	163
20-24	21.2	28.8	44.9	3.8	0.7	0.0	0.7	100	603
25-29	16.9	17.9	53.3	8.1	2.5	1.0	0.2	100	971
30-34	13.5	13.3	51.3	13.7	5.6	2.3	0.3	100	1,151
35-39	13.1	8.6	47.7	15.6	9.1	5.7	0.1	100	1,203
40-44	16.0	5.8	39.9	17.1	11.6	9.0	0.6	100	1,134
45-49	20.4	4.0	35.8	16.1	11.4	11.9	0.3	100	1,160
Total	**16.9**	**12.0**	**45.0**	**13.0**	**7.3**	**5.4**	**0.3**	**100**	
Number of women	1,082	769	2,872	830	467	344	21		6,385

5.6 Source of supply

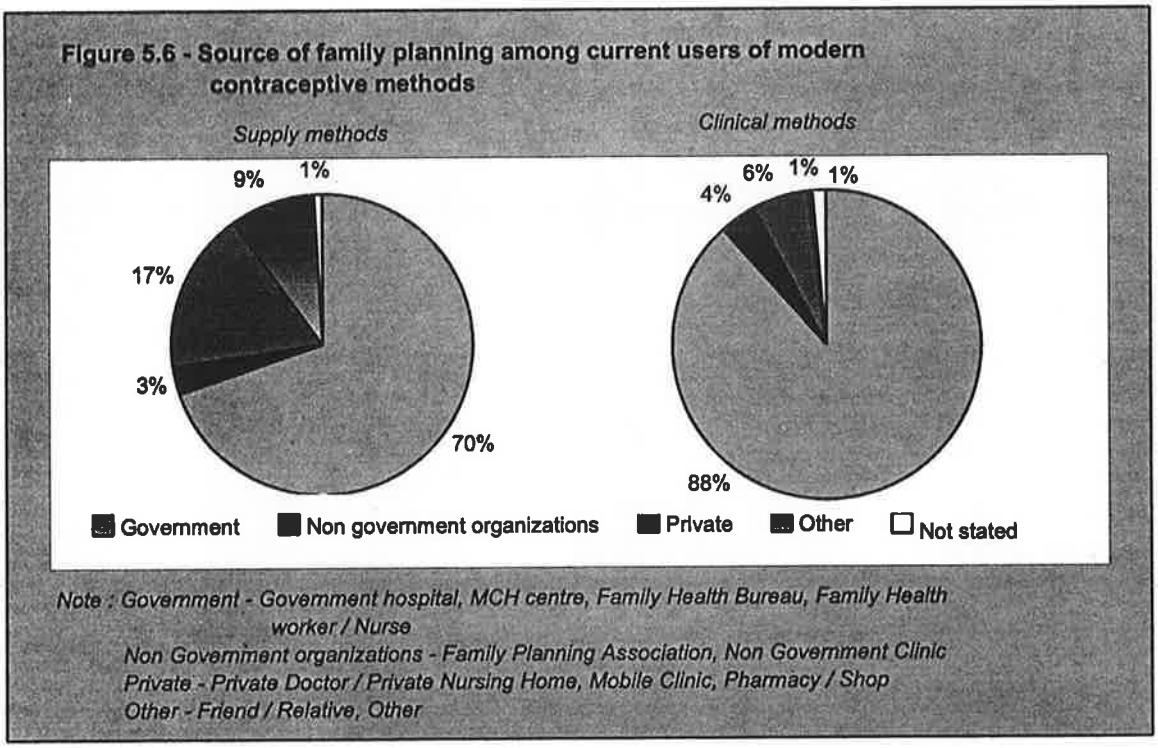
Table 5.16 shows on a percentage basis the current source of contraceptive supply for current users by methods. It can be seen from the Table 5.16 and Figure 5.6 below that 70 percent of the supply methods and 88 percent of the clinical methods were obtained from Government facilities which include government hospitals, MCH centres, Family Health Bureau and Family Health Worker/Nurse. In the case of condom, around 27.5 percent of current users indicated private sources as the source and another 27.5 percent reported the source as other sources. Majority of the current users of all the methods except condom, tend to have obtained these from government sources. About 10.0 percent of the current users of pill, injection, condom and IUD obtained their supplies from private doctors or nursing home. About 3.0 percent of the current users of any method obtained their supplies from the Family Planning Association. Around 17.0 percent of current users of condom and 6.0 percent of current users of pills obtained their supplies in Pharmacies and Shops.

Table 5.16 Source of supply by specific method

Percent distribution of current users of contraceptive methods, according to most recent source of supply by method.

Source of supply	Supply methods				Clinical methods				Total all methods
	Pill	Injec -table	Condom	Total	IUD	Female sterili -zation.	Male sterili -zation	Total	
Government facilities									
Government hospital / MCH centre	13.4	35.5	6.7	23.4	41.3	79.9	73.5	72.7	52.4
Family health bureau	2.7	1.4	2.6	2.1	5.5	2.2	2.9	2.9	2.5
Family health worker / Nurse	55.0	41.8	32.9	44.3	36.2	8.3	3.2	12.6	25.8
Non government organizations									
Family planning association	2.6	2.7	1.6	2.4	3.4	2.9	7.3	3.2	2.9
Non government clinic	0.1	1.2	0.0	0.7	0.3	0.6	2.4	0.7	0.7
Private sources									
Private doctor / Private nursing home	11.3	10.2	9.2	10.4	9.4	4.3	5.5	5.2	7.4
Mobile clinic	0.9	1.9	1.1	1.4	1.4	0.3	3.3	0.7	1.0
Pharmacy / Shop	6.1	0.6	17.2	5.2	0.0	0.0	0.0	0.0	2.2
Other sources									
Friend / Relative	5.0	3.4	12.5	5.5	1.6	0.0	0.0	0.4	2.5
Other	2.8	0.7	15.0	3.9	0.9	0.5	0.0	0.3	2.0
Don't know / Not stated	0.0	0.5	1.1	0.7	0.0	0.9	1.9	1.3	0.7
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of unweighted women	396	705	198	1,299	271	1,321	123	1,715	3,014

Note : None of the current users have reported to be using vaginal methods.



Current users of contraceptives were asked about their satisfaction of the services of the source from which they obtained their supply. This question was asked from the husbands of the current users and the opinion given by them are given in Tables 5.17A and 5.17B. Majority of the current users, 92 percent and 80 percent of current users husband have indicated that they did not have any complaints against services rendered by the source of supply. It is revealed that 81 percent of the current users who obtained their supplies mentioned that they had no problem in obtaining the supplies but 6 percent of them complained that they have to wait long. About 94 percent of the women using Family Health Worker/Nurse had no problem while 2.8 percent mentioned about delay. Number of current users who stated non government organization as the source of contraceptive supply was relatively low and out of that around 90 percent had indicated that they had no problem. Highest percentage of women (94.2%) indicated no problem in obtaining the method from Private Doctor/Private nursing home while 5.3 percent reported that there was a delay in obtaining the supply from mobile clinic. Only about 1 percent of the current users of contraceptive had indicated that it is expensive mainly from non government clinics (4.3%) and Private Doctor/Nursing home (2.2%)

Table 5.17A Source of supply and wife's opinion about the service received

Percentages of current users of contraception obtaining a method at a source, by their opinion of the service received at the source last visited.

Source of supply	Opinion of the service received								Number of women
	No complaint	Wait too long	Staff discourtious	Service expensive	Desired service unavailable	Don't know	Other	Not stated	
Government facilities									
Government hospital / MCH centre	91.8	2.2	0.9	0.6	0.6	1.0	1.2	3.2	1,632
Family health bureau	81.0	6.0	1.2	0.0	3.6	10.7	1.2	2.4	84
Family health worker / Nurse	94.0	2.8	0.5	1.1	1.2	1.2	0.4	0.5	1,045
Non government organizations									
Family planning association	89.9	2.0	2.0	0.0	3.0	0.0	1.0	2.0	99
Non government clinic	87.0	0.0	0.0	4.3	0.0	0.0	0.0	8.7	23
Private sources									
Private doctor / Private nursing home	94.2	0.0	0.0	2.2	0.7	0.7	1.8	0.7	278
Mobile clinic	86.8	5.3	2.6	0.0	0.0	0.0	2.6	0.0	38
Not stated	35.3	0.0	0.0	0.0	0.0	0.0	0.0	52.9	17
Total	**92.0**	**2.3**	**0.7**	**0.9**	**0.9**	**1.3**	**1.0**	**2.3**	**3,216**

Note: Percentages add up to more than 100% per source, due to multiple answers received for the query.

Table 5.17B Source of supply and husband's opinion about the service received

Percentages of current users of contraception obtaining a method at a source, by their husband's opinion of the service received at the source last visited.

Source of supply	Opinion of the service received								Number of women
	No complaint	Wait too long	Staff discourtious	Service expensive	Desired service unavailable	Don't know	Other	Not stated	
Government facilities									
Government hospital / MCH centre	80.4	1.3	0.7	0.5	0.5	2.8	0.8	12.6	1,632
Family health bureau	76.2	4.8	0.0	0.0	2.4	11.9	2.4	3.6	84
Family health worker / Nurse	80.0	1.4	0.2	1.0	1.0	4.8	0.2	11.5	1,045
Non government organizations									
Family planning association	69.7	0.0	0.0	0.0	3.0	2.0	0.0	21.2	99
Non government clinic	69.6	0.0	0.0	4.3	0.0	13.0	0.0	13.0	23
Private sources									
Private doctor / Private nursing home	82.0	0.0	0.0	2.5	0.7	2.9	1.1	10.1	278
Mobile clinic	86.8	0.0	2.6	0.0	0.0	7.9	2.6	2.6	38
Not stated	23.5	0.0	0.0	0.0	0.0	0.0	0.0	64.7	17
Total	**79.7**	**1.3**	**0.5**	**0.8**	**0.8**	**3.8**	**0.6**	**12.2**	**3,216**

Note: Percentage add up to more than 100% per source, due to multiple answers received for the query.

5.7 Attitudes towards becoming pregnant

Table 5.18 gives the percentage distribution of currently married exposed women who are not using contraceptives by their attitudes towards becoming pregnant in the next few weeks according to number of living children. It is seen that 89.7 percent of the above category of women who have no children reported that they will be happy if they become pregnant as expected and this percentage steadily decreases with parity and recorded 6.1 percent for women with 4 or more children.

Table 5.18 Attitudes towards becoming pregnant

Among currently married exposed* women not using contraception, the percent distribution by attitude towards becoming pregnant in next few weeks, according to number of living children.

Number of living children	Attitudes towards becoming pregnant			Total	Number of unweighted women
	Happy	Not happy	Does not matter		
0	89.7	7.2	3.0	100	261
1	68.3	26.2	5.4	100	230
2	40.4	45.8	13.7	100	133
3	14.5	77.4	8.1	100	62
4+	6.1	81.6	12.2	100	59
Total	**62.4**	**31.0**	**6.6**	**100**	**745**

* Exposed to the risk of pregnancy is defined as:
  - menstruated in last 6 weeks and
  - had sex in last 4 weeks

On the other hand 7.2 percent of the above category of women with no children reported unhappy if they become pregnant and their percentage steadily increased with number of children (parity) and reached 81.6 percent for women with 4 or more children. Out of all currently married women who are exposed are not using contraception, 62.4 percent state that they will be happy if they become pregnant, 31 percent said they will be unhappy and the balance 6.6 percent of them said that it does not matter. The attitudes of this category of women towards becoming pregnant were similar even in 1993.

5.8 Main reasons for non use of contraception

Table 5.19 and Figure 5.7 gives the percentage distribution of currently married women who are exposed and not currently using any contraception and said that they will be unhappy if they become pregnant by reason for non use of contraception by age group. About 4.6 percent of women of the above category of age (15-29) years said reason related to fertility such as infrequent sex and Menopausal/Sub fecund and 16.3 percent of them said postpartum breast feeding as the reason for not using contraception. Among the women who stated reasons related to fertility, higher proportion of older women (21.8% each) had stated infrequent sex and Menopausal/ Sub fecund as the reasons for not using. 13.6 percent of the women (15-49) years said health concerns as the reasons for not using and another 8.9 percent of them have stated the reason such as opposed to family planning or husband disapproval. Cost too much and side effects are the two reasons given by 2 percent of them and another 5 percent of them stated that it is against their religion.

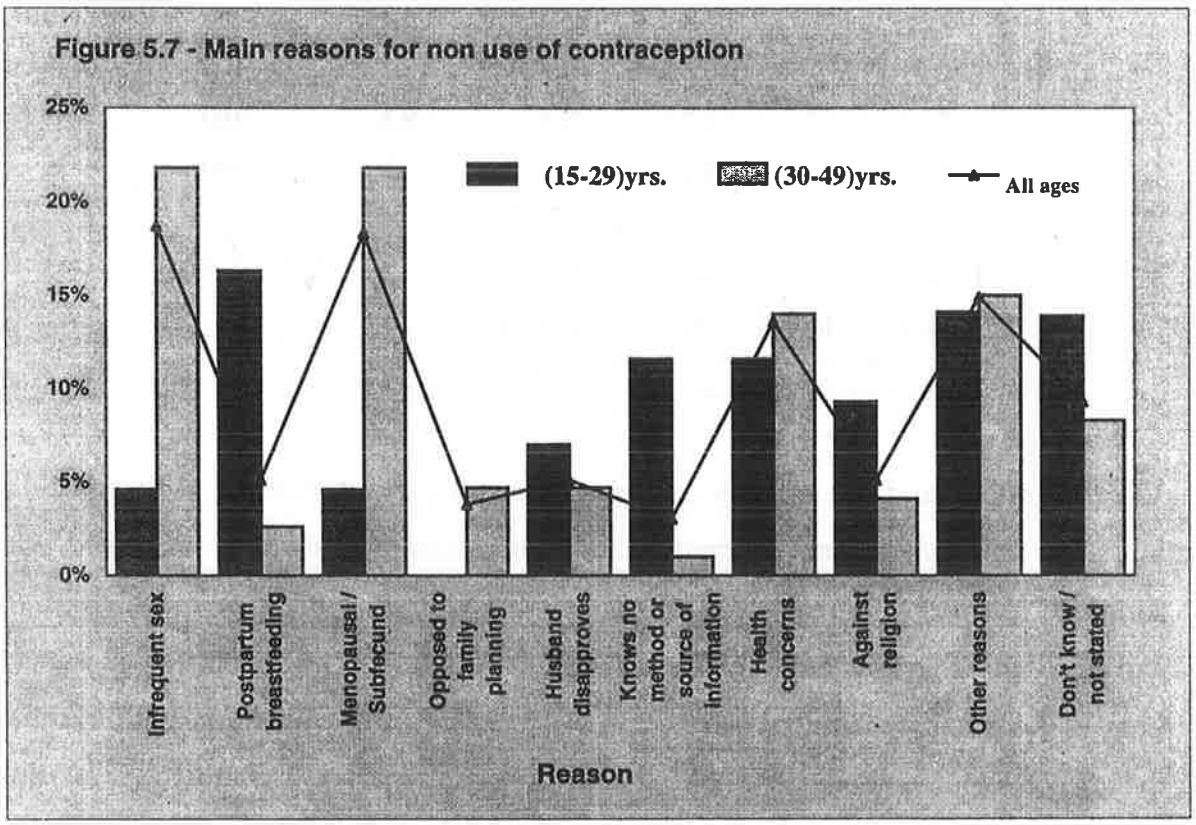


Table 5.19 Main reasons for non use of contraception

Among currently married exposed* women not using contraception, but who would not be happy if they become pregnant, the percent distribution by the main reason for non use, according to current age.

Reason	Current age (yrs.) 15-29	30-49	All ages
Fertility related reasons			
Infrequent sex	4.6	21.8	18.7
Postpartum breastfeeding	16.3	2.6	5.1
Menopausal / Subfecund	4.6	21.8	18.3
Opposition to use			
Opposed to family planning	0.0	4.7	3.8
Husband disapproves	7.0	4.7	5.1
Lack of knowledge			
Knows no method or source of information	11.6	1.0	3.0
Method related reasons			
Health concerns	11.6	14.0	13.6
No access / Scarcity	2.3	1.0	1.3
Costs too much	0.0	1.0	0.9
Against religion	9.3	4.1	5.1
Worry about side effects	4.6	0.0	0.9
Other reasons	14.1	15.0	14.9
Don't know / not stated	13.9	8.3	9.3
Total	**100**	**100**	**100**
Number of unweighted women	49	186	235

* Exposed to the risk of pregnancy is defined as:
- menstruated in last 6 weeks and
- had sex in last 4 weeks

5.9 Future use of contraceptives

All currently married women who were not using any method of contraception at the time of the survey were asked whether they intend to use a method in the future. Table 5.20 shows by percentage distribution of currently married women not currently using any method of contraceptives, their intention to use in the future classified by number of children. It is seen that 21.7 percent of the currently married women not using any method mentioned that they intend to use contraceptive within 12 months and another 9.5 percent said that they intend to use after 12 months. Also 54.2 percent of currently married women who are not using any method now do not want to use in the future too. This percentage of women who do not intend to use increases with parity from 47.3 percent for women with one child to 69.4 percent

of women with four or more children. Around 10 percent of all currently married women not using any method were not decided about using any method in the future whereas 17.4 percent of this category with no children has stated that they have undecided about using any method in the future.

Table 5.20 Future use of contraceptives

Among currently married women aged (15-49) yrs. not currently using any method of contraception, the percent distribution by intention to use in the future, according to number of living children.

Intention to use a method	Number of children*					
	0	1	2	3	4+	Total
Next 12 months	3.4	22.7	30.7	27.6	21.8	21.7
After 12 months	13.4	11.8	8.5	5.1	1.9	9.5
Unsure about timing	4.1	3.0	4.2	2.4	2.1	3.3
Undecided about using	17.4	13.5	5.7	1.5	4.5	9.9
No intention to use	61.2	47.3	48.9	62.2	69.4	54.2
Not stated	0.5	1.7	2.0	1.3	0.2	1.4
Total	**100**	**100**	**100**	**100**	**100**	**100**
Number of unweighted women	332	600	455	242	174	1,803

* Including current pregnancy.

5.10 Intended method for future use

Table 5.21 shows among currently married women not currently using any method of contraceptives but who intend to use in the future by preferred method. Most preferred method is the injection (25.6%) for both categories of women who intend to use a method within next 12 months (23.8%) and after 12 months(29.3%) followed by female sterilization (21.5%) and pills (18.6%). About 57 percent of them preferred modern temporary methods for future use and another 21.5 percent preferred a permanent method and about 9 percent preferred a traditional methods to be used in the future.

Table 5.21 Intended method for future use

Among currently married women not currently using any method of contraception but who intend to use in the future, the percent distribution by preferred method, according to whether they intend to use in the next 12 months or after 12 months.

Preferred method	Intend to use method in		Total
	Next 12 months	After 12 months	
Pill	17.6	21.0	18.6
IUD	14.5	2.4	10.8
Injectable	23.8	29.3	25.6
Condom	2.1	1.2	1.8
Female sterilization	20.4	24.0	21.5
Male sterilization	-	-	-
Safe period	5.9	5.4	5.8
Withdrawal	3.9	1.8	3.2
Norplant	1.6	1.2	1.4
Prolonged abstinence	-	-	-
Vaginal methods	-	-	-
Other	0.7	0.0	0.4
Not decided	9.6	13.8	10.8
Total	**100**	**100**	**100**
Number of unweighted women	402	184	586

Note: 1. Prolonged abstinence refers to abstaining from sex for 2 or more months.
2. Vaginal methods are diaphragm, foam and jelly.
3. None of the women have reported male sterilization, prolonged abstinence or vaginal methods as preferred methods

Desired prices for selected modern temporary contraceptives

It is observed from the DHS 2000 that about 70 percent of the supply methods and bout 88 percent of the clinical methods are provided by government sources free of charge. An attempt was made in this survey to find out the attitudes of the current users of pills, injections and condom about the price levels of these contraceptives without affecting the percentage user rate. The current users of these contraceptives were requested to suggest the price they can afford to pay for these methods. The prices suggested by them are given in the following tables by percentage users for each of these methods.

Table 5.22 Desired prices by current users

Percentage distribution of current users of pill, injection and condom according to price ranges suggested by them.

(a) Pill

Price range	Rs. < 10	Rs. 10-15	Rs. 16-25	Rs. 26-35	Rs. 36-50	Rs. > 50	Unspecified	Total
Percentage users	35.3	35.2	6.3	12.6	4.5	1.8	4.3	100

35.3 percent of the users of pills suggested a price less than Rs.10/= while another 35.2 percent of the users suggested a price between Rs.10/= and Rs.15/=. However, about one fourth of the users suggested prices higher than Rs.15/=.

(b) Injection

Price range	Rs. < =10	Rs. 11-25	Rs. 26-35	Rs. 36-50	Rs. 51-75	Rs. 76-100	Rs. 101-200	Unspecified	Total
Percentage users	8.9	6.9	14.4	27.0	6.0	13.3	10.0	13.5	100

Widely ranging prices were suggested for this method depending on the economic background of the users. About 57 percent of the users of injection suggested a price below Rs.50/= and only 30 percent of the users suggested a price higher than Rs.50/=. 13.5 percent didn't make any comment regarding the price, which they can pay.

(c) Condom

Price range	Rs. 1.00	Rs. 1.00-2.50	Rs. 2.50-5.00	Rs. 5.00-10.00	Rs. 10.00-20.00	Unspecified	Total
Percentage users	12.7	25.0	34.6	10.5	6.3	10.9	100

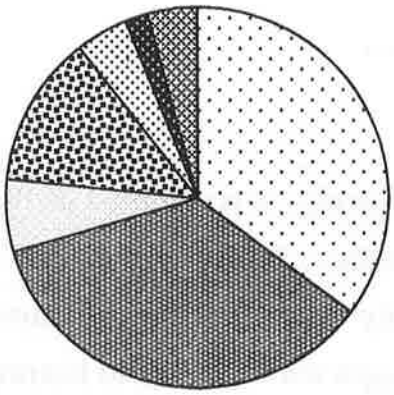
12.7 percent of the users of condom suggested very low prices even less than Rs.1/=, while 25 percent suggested a price between Rs.1 – 2.50 and 34.5 percent suggested a price between Rs.2.50 and Rs. 5.00. Small percentages of 10.5 percent and 6.3 percent suggested prices between Rs.5-10 and Rs.10-20 respectively.

No one suggested prices more than Rs.20 for condom.

These are clearly observed in the Figure 5.8.

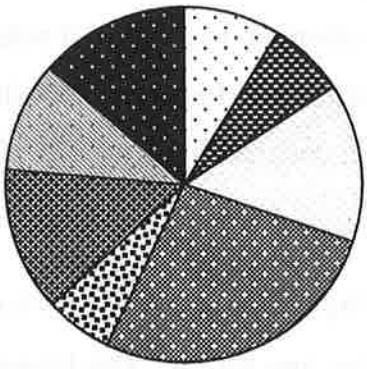
Figure 5.8 - Suggested prices for selected contraceptive methods

Pills / Card



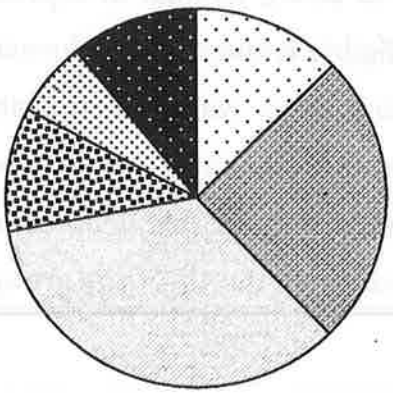
- Rs.<10
- Rs.10 - 15
- Rs.16 - 25
- Rs.26 - 35
- Rs.36 - 50
- Rs.>50
- Unspecified

Injectables



- Rs.<=10
- Rs,11-25
- Rs.26-35
- Rs.36-50
- Rs.51-75
- Rs.76-100
- Rs.101-200
- Unspecified

Condom



- Rs.<=1.00
- Rs.>1.00 - 2.50
- Rs.>2.50 - 5.00
- Rs.>5.00 - 10.00
- Rs.>10.00 - 20.00
- Unspecified

Chapter 6 : Other Proximate Determinants of Fertility

Indu Bandara

In Sri Lanka as in many other Asian countries, marriage is considered as the key indicator of the exposure of women to the risk of pregnancy. Hence the marital structure of the population has a close relationship with the fertility trends in the population. If women in the reproductive age group tends to marry at lower ages with early child bearing, one can expect high fertility in that population, unless they use contraceptives to regulate fertility.

There are factors other than contraception which affects women's risk of becoming pregnant. They are; marital status, age at first marriage, singulate mean age at marriage, breast feeding, postpartum amenorrhea , reaching menopause, abstinence from sexual relations and induced abortions which together with contraception are commonly known as proximate determinants of fertility. This chapter concerns factors other than contraception which affects women's risk of becoming pregnant.

Demographers capture the dynamics of nuptiality through various characteristics of the current marital status of the women in reproductive age group. The frequency of marriages, the characteristics of married women and the dissolution of marriages are measured and analyzed to study nuptiality patterns in the population.

In the Demographic & Health Survey 2000 (DHS 2000), women in reproductive age group who had ever been married were identified as eligible women and information was collected using individual questionnaires. Detailed information was collected about their current martial status such as whether they are currently married, widowed, divorced or separated. It is important to note that computations of some tables in this chapter are based on ever married, currently married and never married women in the 15-49 age group.

Current marital status

As stated earlier, composition of the current marital status of the women in reproductive age group is an important aspect in analysis of levels of fertility of a country. Unlike biological events such as births and deaths, marriages and divorces are very much regulated by customs and laws that widely vary by ethnic or religious group. For example, in Sri Lanka the main laws on marriages are known as Kandian law, General law and Muslim law. In Sri Lanka, the term 'marriage' refers to legally recognized unions. However, there are small proportion of couples who are customarily married. It is important to state that in present, Sri Lankan marriage is essentially monogamous, where each man or woman may be married to only one person of the opposite sex at a time. Even though polygamy is permitted among Muslims it is rarely practiced in Sri Lanka. Even though 'living together' is not socially acceptable in Sri Lanka, DHS 2000 attempted to capture this concept.

In DHS 2000, women's current marital status had been identified under six categories as given below;

(i) Currently married and living together
(ii) Currently married but not living together
(iii) Living together outside wedlock
(iv) Widowed
(v) Divorced
(vi) Separated

The women who fall under three categories namely currently married & living together with the husband and living together outside wedlock have higher risk of becoming pregnant than, women in 'currently married status but not living together at present'. The women in the latter category are the women who mentioned that their husbands are temporarily away for reasons such as employment, migration abroad or to other parts of Sri Lanka for 6 or more months. However, all three groups will form the 'currently married' category.

Table 6.1 Current marital status

Percent distribution of ever-married women aged (15-49) yrs. by current age according to current marital status.

Current age	Current marital status							
	Currently married			Widowed	Divorced	Separated	Total	Number of unweighted women
	Living together	Not living together	Living together outside wedlock					
15-19	97.7	0.9	0.0	0.0	0.4	1.0	100	185
20-24	95.1	2.9	0.5	0.3	0.2	1.1	100	647
25-29	93.9	2.8	0.0	1.4	0.2	1.7	100	989
30-34	93.2	2.4	0.0	1.8	0.4	2.2	100	1,164
35-39	90.8	2.3	0.4	3.6	0.5	2.4	100	1,160
40-44	87.0	1.9	0.6	6.0	0.4	4.1	100	1,129
45-49	82.9	1.2	0.4	10.4	0.5	4.7	100	1,111
Total	**90.2**	**2.1**	**0.3**	**4.2**	**0.4**	**2.8**	**100**	**6,385**

Data in Table 6.1 gives the percent distribution of ever married women aged (15-49) yrs. by current age according to current marital status. It is seen that 92.6 percent of women are currently married out of the total ever married women. The percentage of women who are currently married and living together decreases gradually with the increase of current age. For instance there are 97.7 percent of currently married women in (15-19) age group who are living together have dropped to 82.9 percent in the age group (45-49). This is due to the fact that with advancing in age some women end their married life with widowhood, divorce or separation.

Even when women in reproductive age group are classified as married, on the average 2.1 percent of them are temporary out of risk of becoming pregnant because they are not living together. The young women, mainly in the age group (20-39) are not living with their husbands, at the time of the survey; implying they are not exposed to the risk of becoming pregnant.

As 'living together outside wedlock' is not socially acceptable in Sri Lanka, there is a very small percentage (0.3%) who fall into this category. These couples are mainly those who are over 35 years of age.

Widowhood increases steadily with age. Only 0.3 percent of women under age of 25 years are widows. It increases to 10.4 percent among the (45-49) age group. The overall figures of divorce & separation are rather low as they are generally not acceptable social norms.

6.2 Age at first marriage

Age at first marriage is another important indicator which determine the level of fertility, because child bearing in Sri Lanka, generally takes place after marriage. Table 6.2 presents the percent distribution of ever married and never married women by current age according to their age at first marriage and median age at first marriage. The median age at first marriage is presented for 5 year age cohorts for women who are 25 years or older. For the two youngest age cohorts the median age is not calculated because in each of these age groups more than 50 percent of women have never married.

The percentage of women never married has decreased to 37.2 percent in 2000 from 38.2 percent in 1993. The percentages of women who got married below 20 years of age also show a decline from 1987 to 2000. Thus the overall trend shows an increase from 1987 to 2000 for age at first marriage for women who got married after 20 years of age.

The median age at first marriage for women in the age group (25-29) years shows comparatively lower figure, than other age groups. According to further investigations, more than 50 percent of women in this particular age group consisted of rural women with secondary level of education.

Table 6.2 Age at first marriage

Percent distribution of all ever-married and never married women (from household schedule)*, by current age accord age at first marriage and median age at first marriage.

Current age	Never married	Age at first marriage								Total	Number of women	Me age a marri
		< 15	15-17	18-19	20-21	22-24	25-27	28-30	31+			
15-19	91.4	0.7	5.7	2.2	0.0	0.0	0.0	0.0	0.0	100	1,926	*
20-24	62.9	1.5	10.0	10.3	9.5	5.8	0.0	0.0	0.0	100	1,687	*
25-29	33.3	1.0	9.7	11.5	12.0	18.3	12.2	1.9	0.0	100	1,480	2
30-34	15.8	1.5	8.9	11.0	10.6	22.4	16.3	10.8	2.5	100	1,403	2
35-39	10.8	1.0	10.6	14.0	13.7	17.8	15.1	8.0	8.9	100	1,369	2
40-44	7.6	1.2	10.1	15.3	16.6	17.8	13.2	8.6	9.6	100	1,260	2
45-49	6.6	2.3	11.4	12.0	15.9	19.0	15.4	8.2	9.0	100	1,261	2
Total												
2000	**37.2**	**1.3**	**9.3**	**10.4**	**10.4**	**13.4**	**9.4**	**4.8**	**3.8**	**100**	**10,386**	
1993	**38.2**	**2.3**	**10.5**	**11.6**	**10.2**	**12.4**	**7.4**	**3.1**	**4.4**	**100**	**11,295**	
1987	**37.5**	**3.4**	**12.2**	**12.2**	**10.9**	**11.5**	**6.7**	**2.7**	**3.0**	**100**	**9,389**	

* All women (taken from household schedule) includes women ever married, currently married and never marri
** Defined as the age by which one-half of all women have ever-married.
*** Omitted as more than 50 percent of women were never married.

Table 6.3 presents the historical data on the proportion of ever married women by age gro It also shows the percent of women who are ever married among five year age cohorts for censuses of 1963, 1971 and 1981 and the WFS 1975, DHS 1987, DHS 1993 and DHS 2000. Table also indicates the singulate mean age at marriage (SMAM) for the same time perio This is based on the percentage of never married women within each age group at a spe point of time.

The SMAM show an upward trend from 1963 census to WFS 1975 and decreased by 0.7 po in 1981 and then again show an increase upto DHS 1993. However, SMAM has droppe 0.9 points between 1993 and 2000. This decreasing trend of SMAM in the year 2000 further confirmed by cross checking data collected for Labour Force Survey 2000 which accounted to 24.9 years.

Table 6.3 Proportion of ever-married women

Proportion of all women in five year age groups who have ever-married and singulate mean age at marriage (SMAM) from Census 1963, Census 1971, WFS 1975, Census 1981, DHS 1987, DHS 1993 and DHS 2000.

Age group	Proportion ever-married						
	Census 1963	Census 1971	WFS 1975	Census 1981	DHS 1987	DHS 1993	DHS 2000
15-19	14.8	10.6	6.8	9.9	7.3	7.1	8.6
20-24	57.6	46.8	39.4	44.7	42.9	38.8	37.1
25-29	81.0	75.4	68.1	69.6	70.0	66.3	66.7
30-34	88.6	89.1	86.3	84.2	85.8	82.3	84.2
35-39	89.8	94.2	94.2	91.1	90.9	88.9	89.3
40-44	86.1	95.3	95.4	94.1	93.8	90.8	92.4
45-49	81.6	95.9	97.9	95.5	96.5	94.8	93.5
SMAM	**22.1**	**23.5**	**25.1**	**24.4**	**24.8**	**25.5**	**24.6**

Note: 1. WFS – World Fertility Survey
2. DHS – Demographic and Health Survey

A comparison of the proportions of ever married women derived from 1987 to 1993 indicates that slight decrease in the proportion of ever married women in each age group from 1987 to 1993. However, except in the age groups (20-24) and (45-49), the proportion of ever married has increased slightly from 1993 to year 2000, in all other age groups.

The differentials in age at marriage in terms of median age and singulate mean age at marriage in respect of sector, zone and educational attainment is presented in Table 6.4.

Table 6.4 Median age at first marriage and singulate mean age at marriage

Median age at first marriage among all ever-married women aged (25-49) yrs., and singulate mean age at marriage* by sector, zone and educational level.

Background characteristic	Current age (yrs.)					Median age at marriage for women aged (25-49) yrs.	Singulate mean age at marriage for women aged (15-49) yrs.
	25-29	30-34	35-39	40-44	45-49		
Sector							
Colombo metro	22.4	24.4	24.8	22.6	24.6	24.0	25.5
Other urban	22.5	24.0	23.9	23.2	25.0	23.9	24.5
Rural	21.8	23.3	23.0	22.7	23.0	22.7	24.6
Estate	21.2	21.2	21.9	22.8	20.8	21.7	23.4
Zone							
Zone 1	22.4	24.4	24.8	22.6	24.6	24.0	25.5
Zone 2	22.3	23.7	24.3	23.7	24.6	23.9	24.9
Zone 3	22.8	23.1	25.5	25.0	23.8	23.8	25.5
Zone 4	21.8	23.8	22.3	22.9	22.9	22.8	24.6
Zone 5	22.0	22.6	23.0	21.6	22.7	22.4	24.5
Zone 6	20.8	22.7	22.0	21.8	21.0	21.5	23.5
Zone 7	20.2	22.3	20.4	20.2	21.1	20.9	23.0
Educational level							
No schooling	20.7	19.4	20.9	21.5	21.4	20.7	23.9
Primary	19.5	20.5	20.3	20.4	20.6	20.3	24.2
Secondary	21.1	22.8	22.6	21.6	22.5	21.9	25.4
G.C.E. (O/L)	22.9	24.5	25.1	24.6	26.2	24.4	27.0
G.C.E. (A/L) & higher	24.8	25.7	26.9	28.1	28.2	26.3	29.0
Total	**21.8**	**23.5**	**23.3**	**22.7**	**23.5**	**22.9**	**24.6**

* All women (taken from household schedule) includes women ever-married, currently married and never married

The highest median age at first marriage by sector, which is 25 years is among the age cohort (45-49) in urban areas other than Colombo metro, whereas the highest median value by zone which is 25.5 years is recorded for age cohort (35-39) in zone 3. The highest median age at first marriage by educational level is 28.2, recorded for the age cohort (45-49) for women with G.C.E. (A/L) and higher category. It is of interest to note that women in the younger age cohort with G.C.E. (A/L) and higher level of education, show a low median age at first marriage than older women with the same level of education.

The lowest median age at first marriage among all categories which is 19.4 years recorded for women in the age group 30-34 with no schooling category. By sector, estate women in age group (45-49) show the lowest value of 20.8 and women in zone 7 with age groups (25-29) and (40-44) shows the lowest value of 20.2 by zone.

There is a clear variation in the median age at first marriage, by sectors for women in age group (25-49). That is the highest value recorded for Colombo metro is 24.0 years followed by 23.9 years for other urban areas, 22.7 years for rural and 21.7 years for estate sector. Decreasing trend also could be observed for zone 1 to zone 7. In contrast, the median age at marriage for women with primary education shows the lowest value which is 20.3 years. The figures indicate that median age at first marriage increases with increasing the level of education of women.

It is interesting to note that both median age at first marriage and SMAM has decreased slightly from 1993 to 2000. For instance median age at first marriage for the age cohort (25-49) is 23.2 years in 1993 and the corresponding figure for 2000 is 22.9 years; which is 0.3 points decline from 1993 to 2000. The value of SMAM was 25.5 years in 1993 and it has dropped to 24.6 years in 2000. When analyzing by sector, the SMAM shows that women in Colombo metro area, delay their marriage than other urban, rural or estate women. The estate women have a relatively low age at marriage. The differentials by zones show that women in zone 1 and zone 3 show the highest value (25.5 years) and women in zone 7 have the lowest level of 23.0 years.

SMAM shows an interesting pattern by level of education of the woman. There is a steady increase in SMAM from women with no schooling to women with G.C.E. (A/L) & higher level of education. It is interesting to note that a differential in SMAM among the lowest and the highest level of education is 5.1 years.

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Table 6.5 shows the statistics on exposure to conception status.

Table 6.5 Exposure to conception status

Percent distribution of currently married women aged (15-49) yrs. by exposure to conception status according to current age.

Exposure to conception status	Current age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Currently pregnant	17.6	15.6	11.1	7.9	4.2	0.7	0.0	6.2
Amenorrheic	7.6	7.4	7.9	5.2	1.9	0.7	0.3	3.7
Infecund*	0.0	0.8	4.8	3.9	5.8	9.8	13.1	6.5
No sex in last 4 weeks	10.6	9.4	7.8	7.6	7.8	19.0	28.3	13.3
No period in last 6 weeks	5.3	2.6	8.4	1.2	4.0	2.3	7.1	4.3
Women exposed**	**58.9**	**64.1**	**60.0**	**74.3**	**76.2**	**67.5**	**51.1**	**65.9**
Using sterilization	0.0	0.7	5.1	16.9	31.0	29.5	24.3	19.0
Using modern temporary	30.4	37.4	31.8	33.2	16.7	8.1	4.5	21.1
Using traditional	9.4	13.2	12.8	17.1	21.7	23.1	15.2	17.4
Not contracepting	19.1	12.8	10.3	7.1	6.8	6.8	7.1	8.4
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of unweighted women	183	633	956	1,107	1,085	1,009	942	5,915

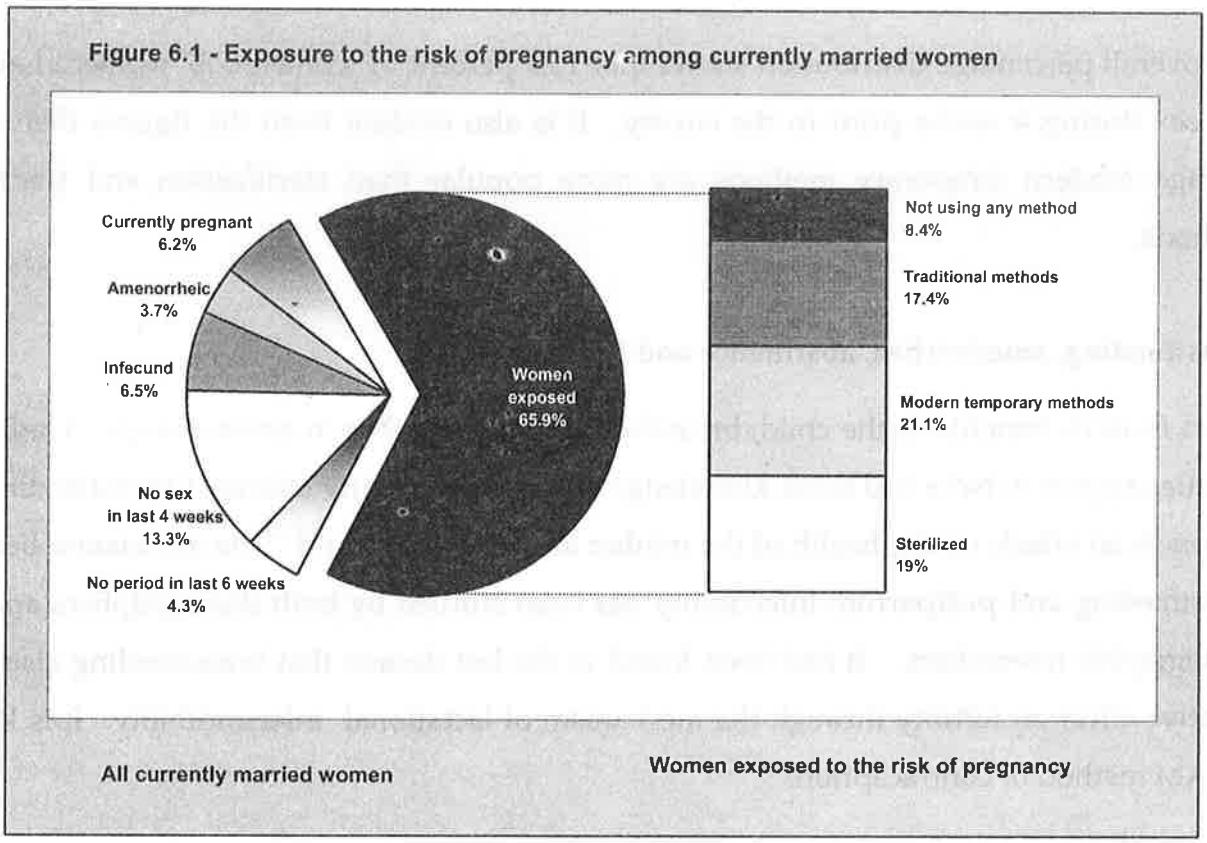
Note: An exposed woman is defined as a woman who has
- menstruated in last six weeks and
- had sex in last four weeks.

* Has a non contraceptive open birth interval of at least five years.

** Exposed to the risk of pregnancy is the sum of the percent using sterilization, modern temporary methods, traditional methods or not using any method.

It is important to bear in mind that the categories in this table are presented in hierarchical order. That is, in the first step pregnant women are selected from currently married women aged 15-49. Then non pregnant women are checked to see whether they are amenorrheic. Those not amenorrheic are then investigated to see if they are infecund (i.e. whether they have had a non-contraceptive open birth interval of atleast 5 years). Women who are found to be fecund are then checked to see if they report having sexual intercourse in the last month, a category that will include postpartum abstinence. All women who have had sex in the last month,then checked to see whether they have reported having a menstrual period in the last 6

weeks, a group that could include some menopausal women not already classified in the preceding categories as well as premenarchial women, and who have just become pregnant but do not recognize their condition. All remaining women are regarded as exposed.



Status of exposure considered here as a theoretical concept. Many of these exposed women are protected through the use of some contraception except non users. Because of this, Table 6.5 checks the contraceptive status of the group and lists those using either male or female sterilization, modern temporary methods, traditional methods or no methods.

Women in the youngest age groups (15-19), (20-24) and (25-29) show similar behaviour. For instance percentage of currently pregnant women is comparatively high in these age groups. There is a considerable percentage of women who had no sex in last 4 weeks in this youngest age group. For instance, on the average nearly 9 percent of women in (15-29) age group reported that they did not have sexual relationships during 4 weeks prior to the survey.

It is also evident that young women prefer modern temporary methods while older women prefer permanent methods such as sterilization to control births. The highest percentage that use sterilization is among women in the age group (35-39). Considerable number of women in the young age groups of (15-29) do not use any permanent contraceptive method according to the statistics given in this table.

The overall percentage distribution shows that 13.3 percent of women (787 women) have not had sex during 4 weeks prior to the survey. It is also evident from the figures that on the average modern temporary methods are more popular than sterilization and traditional methods.

6.3 Breastfeeding, amenorrhea, abstinence and insusceptibility

Apart from its benefits to the child, breastfeeding helps mother in several ways. Traditional societies appear to have had some knowledge about the fecundity effects of breastfeeding and its beneficial effects on the health of the mother and new born child. The association between breastfeeding and postpartum infecundity has been studied by both demographers and bio-demographic researchers. It had been found in the last decade that breastfeeding also has a negative effect on fertility through the mechanism of lactational infecundibility. It is known as LAM method of contraception.

Researchers have found that there is a natural process for a women after a childbirth called postpartum non susceptible period during which she does not ovulate. It has been found out that breastfeeding helps to extend the ovulation period and it is expected that for women who breastfed their children for fairly long periods of time would have natural control of fertility. Shorter the period of lactation would lead to shorter the birth intervals and increase the chances of conception unless other factors such as use of contraceptives compensate for this. Breastfeeding for longer periods naturally prevent the women being pregnant and help them to increase the space between births. Women who are insusceptible are defined as those who are either amenorrheic or abstaining following a birth and thus not exposed to the risk of pregnancy.

The estimates shown in Table 6.6 are based on youngest children who are under 36 months of age. The data in this table shows the proportions of births, whose mothers are currently breastfeeding, amenorrheic, abstaining from sexual relations and insusceptible. The data reveals that more than 90 percent of infants who are below 1 year of age are being breastfed at the time of the survey. More than 60 percent of children who are below 2 years of age are being breastfed during the survey period. Nearly 37 percent of children just below 3 years of age are still being breastfed. The proportion of currently breastfeeding children decreases with advancing age of the child. On the average 76.4 percent of youngest children below 36 months are being breastfed during the survey.

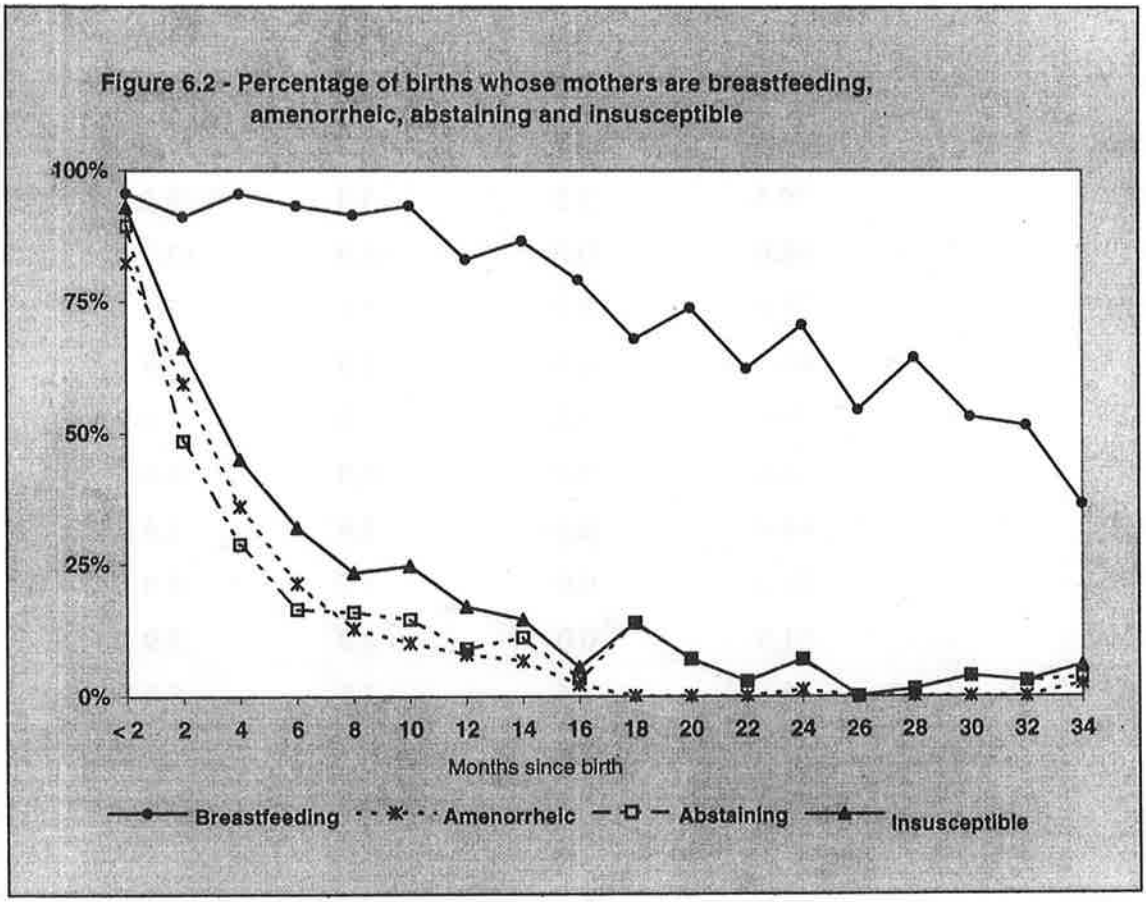


Table 6.6 Breastfeeding, postpartum amenorrheic, abstinence and insusceptibility

Proportion of births in the last 36 months* who are being breastfed or whose mothers are still amenorrheic, abstaining and insusceptible by number of months since birth.

Months since birth	Breastfeeding	Amenorrheic	Abstaining	Insusceptible	Number of births
< 2	95.6	82.3	89.4	92.9	113
2-3	91.1	59.4	48.5	66.3	101
4-5	95.5	36.0	28.8	45.0	111
6-7	93.2	21.4	16.5	32.0	103
8-9	91.5	12.8	16.0	23.4	94
10-11	93.2	10.1	14.6	24.7	89
12-13	83.0	8.0	9.0	17.0	100
14-15	86.5	6.7	11.2	14.6	89
16-17	79.1	2.2	3.3	5.5	91
18-19	68.0	0.0	13.9	13.9	72
20-21	73.8	0.0	7.1	7.1	84
22-23	62.3	0.0	2.8	2.8	106
24-25	70.6	1.2	7.0	7.0	85
26-27	54.5	0.0	0.0	0.0	77
28-29	64.4	0.0	1.4	1.4	74
30-31	53.2	0.0	3.9	3.9	77
32-33	51.5	0.0	2.9	2.9	68
34-35	36.5	2.4	3.5	5.9	85
Total	**76.4**	**15.8**	**17.9**	**23.2**	**1,619**
Median (months)	12.9	3.1	4.7	4.3	

*Only the last births in the 36 months prior to the survey were considered for computations

As described earlier, amenorrheic is the period following a birth prior to return of menses. In Sri Lanka nearly 59 percent of women remains amenorrheic for 2-3 months after a birth. The proportion of women who were amenorrheic has decreased with the increasing the age of the child with adhoc fluctuations in some age groups. Majority of couples do not wait long to resume sexual relations after a birth. Postpartum amenorrhea combined with postpartum abstinence from sex leads to a relatively high proportion of women who are insusceptible to conception. The data shows that more than 23 percent of the mothers who delivered 8-9 months prior to the survey are insuceptible to conception because of amenorrhea or abstinance. On an average 23.2 percent of women were insusceptible to conception at the time of the survey. Median months of breastfeeding, amenorrheic, abstaining and insusceptible statuses indicate that 50 percent of women breastfed their children for 13 months, 50 percent of them return menstruation after 3 months after a birth, 50 percent of them abstain nearly 5 months from sex after a delivery, and 50 percent of women insusceptible for 4.3 months.

6.4 Termination of exposure

The three events menopause, removal of the womb and long term abstinence are considered as important indicators of termination of exposure. All three events increases with the increase of age of the women. The proportion of non-pregnant non amenorrheic currently married women whose last menstrual period occurred six or more months preceding the survey or who reported that they have reached menopause were considered as menopaused women. Figures in the Table 6.7 shows that , the proportion of menopause women have rapidly increased after 45 years.

Survey revealed that only one percent of women in the age group 30-49 who are currently married had to remove their wombs due to some problems in their reproductive system. The highest proportion of women who had removed womb is reported in the age group (48-49) which is 3.8 percent.

Table 6.7 Indicators of termination of exposure

Indicators of menopause, removal of womb and long term abstinence among currently married women of (30-49) yrs. by age group.

Age group	Menopause[1] %	Removal of the womb %	Long term abstinence[2] %
30-34	0.1	0.2	0.8
35-39	0.3	0.2	1.2
40-41	0.7	0.5	1.9
42-43	1.0	1.0	1.8
44-45	4.9	1.8	6.5
46-47	19.5	2.7	5.6
48-49	44.4	3.8	8.0
Women (30-49) yrs.	**6.3**	**1.0**	**2.7**

Note : 1. Percentage of non-pregnant, non amenorrheic currently married women whose last menstrual period occurred six or more months preceding the survey, or who report that they are menopausal.

2. Percentage of currently married women who did not have intercourse in the three years preceding the survey.

Long term abstinence is also an indicator of terminal infertility. Long term abstinence which is the proportion of currently married women who did not have sexual intercourse in the three years prior to the survey. The proportion of women who had fallen in to this category has increased with increasing age except in age group (46-47).

6.5 Pregnancies by nature of outcome

It is important to analyse the percentage distribution of pregnancy outcome by various background characteristics namely sector, educational level, work status and parity. Pregnancy outcome could result in live births, still births, spontaneous abortions or induced abortions. Table 6.8 shows the percent distribution of pregnancies to ever-married women by sector, education level, work status and parity according to the pregnancy outcome.

Table 6.8 Pregnancies by nature of outcome

Percent distribution of pregnancies to ever-married women by sector, educational level, work status and parity according to the pregnancy outcome.

Background characteristic	Live births	Still births	Spontaneous abortions	Induced abortions	Total
Sector					
Colombo metro	86.1	1.6	10.1	2.2	100
Other urban	86.6	1.3	11.8	0.1	100
Rural	90.0	1.3	8.1	0.6	100
Estate	88.6	3.7	7.6	0.1	100
Educational level					
No schooling	90.5	2.6	6.9	0.0	100
Primary	90.4	1.8	7.4	0.3	100
Secondary	90.1	1.7	7.6	0.6	100
G.C.E. (O/L)	86.0	0.7	12.1	1.2	100
G.C.E. (A/L) & Higher	85.4	1.0	12.0	1.6	100
Work status					
Never worked	93.8	0.6	4.9	0.7	100
Worked before	75.0	4.0	19.7	1.2	100
Currently working	91.7	1.2	6.7	0.4	100
Parity					
0	0.0	6.4	91.5	2.1	100
1	80.4	2.0	16.7	0.8	100
2	87.9	1.9	8.9	1.3	100
3	91.1	1.7	6.7	0.5	100
4+	94.9	0.8	4.1	0.2	100
Total	**89.2**	**1.5**	**8.6**	**0.7**	**100**

On an average, percentage of live births (89.2%) are the highest outcome of all pregnancies followed by percentage of spontaneous abortions (8.6%), still births (1.5%) and induced abortions (0.7%). Practically it is very difficult to collect information other than live births. However, due to the increasing demand for statistics for other types of pregnancy outcomes such as abortions an attempt was made to collect these information.

In all sectors, spontaneous abortions are higher than still births and induced abortions. The percentage of still births that have occurred to women in estate sector is high compared to women in other sectors.

By level of education, percentage of still births are highest among women with no schooling. However, spontaneous abortions are higher for women with higher education (i.e G.C.E. (O/L) and above) and women in the urban sectors. Induced abortions are highest among women with highest educational levels (i.e G.C.E. (A/L) & higher).

When analyzed by work status of women, the women who have worked before shows a different pattern than women in other two categories (never worked & currently working). For instance, the percentage of spontaneous abortions and percentage of still births are higher for women who worked before than the other working categories.

Most interesting feature could be observed when it is compared by parity of women. For example, 91.5 percent of pregnancy outcome resulted with spontaneous abortions for women with zero parity, while the corresponding figure decreases with increasing parity of women. Similarly still births and induced abortions are higher for zero parity women.

6.6 Induced abortions

Induced abortion is an important proximate determinant of fertility, since it gives an indication of unwanted pregnancies. In Sri Lanka induced abortion is legally prohibited unless there is a threat to mother's life. Hence, the number of reported induced abortions may have been affected by under reporting. For example, the reported number of induced abortion for other urban & estate sectors are very low. This may be due to women's reluctance to give information on induced abortions. There were only 76 reported cases of abortions in DHS 2000 which is much lower than the value reported in DHS 93 (152 abortions).

Table 6.9 shows the percent distribution of pregnancies resulted in induced abortion to ever-married women by sector, zone, age group, educational level and parity.

Table 6.9 Induced abortions

Percent distribution of pregnancies resulted in induced abortion to ever-married women by sector, zone, age group, educational level and parity.

Background characteristic	Induced abortion		Number of women
	No.	%	
Sector			
Colombo metro	22	29.7	762
Other urban	02	2.2	542
Rural	51	67.3	4,658
Estate	01	0.8	423
Zone			
Zone 1	22	29.7	762
Zone 2	14	19.0	1,047
Zone 3	06	8.1	928
Zone 4	22	26.3	1,447
Zone 5	07	9.6	1,446
Zone 6	02	2.9	256
Zone 7	03	4.4	499
Age group			
< 30	12	16.0	1,738
>=30	64	84.0	4,647
Educational level			
No schooling	00	0.0	338
Primary	09	12.0	1,151
Secondary	35	45.3	2,877
G.C.E. (O/L)	18	24.0	1,205
G.C.E. (A/L) & higher	14	18.7	813
Parity			
0	04	5.3	608
1	12	16.0	1,546
2	33	42.7	1,842
3	17	22.7	1,293
4+	10	13.3	1,096
Total	**76**	**100**	**6,385**

Note: Missing information on educational level is not presented separately.

By zone, the highest percentage is reported for zone 1 (i.e 29.7%). The induced abortion by age shows that the number of abortions undergone by the women aged 30 or more years is higher (84.0%), than younger women (16%).

By level of education, the data show that not a single induced abortion is reported for women without any formal education, whereas the highest percentage is reported for women with secondary educational level. Parity wise induced abortions are higher for women with parity two, than other parties.

Chapter 7 : Fertility Preferences

Indu Bandara

This chapter provides information on attitudes on fertility intentions and preferences. To analyze the attitudes of desired number of children, the survey respondents were asked questions concerning whether they wanted more children, if so how long they would prefer to wait before the next child and if they could start their reproductive life afresh, how many children in all they want and whether there is any sex preferences for children. It also examines the extent of unwanted and mistimed pregnancies and the effect of the prevention of such births on the fertility rate.

The collection of information on fertility preferences is difficult when women are at different stages of their reproductive life span. For instance, majority of women who had become pregnant for first time refused to answer about their attitudes on having another birth after the current pregnancy because they believe that it is not good for the baby who is in the womb. Therefore they were asked about the ideal number of children they would like to have and coded accordingly. In this analysis the current pregnancy status was added to the number of living children of that particular women. There were few (151 women) newly married women who could not have any idea of children that they would like to have. Therefore for those newly married women, since they were not sure about whether to have children or not, or when to have them were excluded from the analysis.

Women who have been sterilized for contraceptive purposes need special mention. In general, those women who are sterilized were considered as 'want no more children'. However, there were cases who had reported that they regret of being sterilized and would like to have more children.

7.1 Desire for more children

Table 7.1 shows the desire for more children for all currently married women except 151 newly married women. The current pregnancy status is accounted for the number of living children in this analysis. The figures shows that for zero parity women 88.9 percent reported that they definitely wanted to have another child. It is important to mention here that those women who have not given birth before, but pregnant for the first time at the time of the survey were considered as women with one living child. It is also important to note that 3.1 percent of zero parity women reported that they definitely don't want any more children.

Table 7.1 Fertility preferences by number of living children

Percent distribution of currently married women aged (15-49) yrs. by decision to have more children and certainty of their decision, according to number of living children.

Desire for more and certainty of preference	Number of living children*							Total
	0	1	2	3	4	5	6+	
Have another								
Definitely	88.9	64.0	20.7	5.0	1.7	0.0	0.1	29.2
Not sure	0.0	2.1	2.6	0.5	0.5	0.0	0.1	1.6
Undecided	0.0	14.6	5.5	1.0	1.1	1.1	0.8	6.0
Wants no more								
Definitely	3.1	15.3	50.4	42.1	42.4	35.0	46.2	35.8
Not sure	0.0	2.7	5.0	2.4	0.4	2.2	0.1	2.9
Sterilized								
Regret, want more	0.0	0.2	3.1	4.3	3.5	1.3	0.0	2.4
Regret, want no more	0.0	0.0	0.3	0.9	1.2	1.0	1.6	0.5
Regret, undecided	0.0	0.0	0.2	0.9	0.7	0.3	0.0	0.3
No regret	0.0	0.7	11.5	42.0	48.1	58.9	48.0	20.4
Declared infecund	0.0	0.3	0.3	0.7	0.4	0.1	0.0	0.4
Not stated	8.0	0.1	0.3	0.2	0.0	0.0	3.0	0.6
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of women	289**	1,511	1,878	1,204	571	191	120	5,764**

* Current pregnancies are accounted.
** Excluding 151 newly married women

Of the women with one child, 64.0 percent reported that they definitely wanted to have another child and 15.3 percent of women were satisfied with one child. It is important to state that 0.9 percent of women with one living child had undergone sterilization.

The desire for additional children declines rapidly for those having more than two children. On the average 36 percent of women have stated that they definitely do not want another child.

Out of the total 23.6 percent of sterilized women, 2.4 percent stated that they regret being sterilized and want more children. Another 0.5 percent regret being sterilized but they do not want more children and 0.3 percent of sterilized were not sure whether they want more children. Not surprisingly, the percentage of sterilized women who do not regret of being sterilized, rise significantly for women with three or more children, except slight decline in women with six or more living children.

Table 7.2 Desire for children

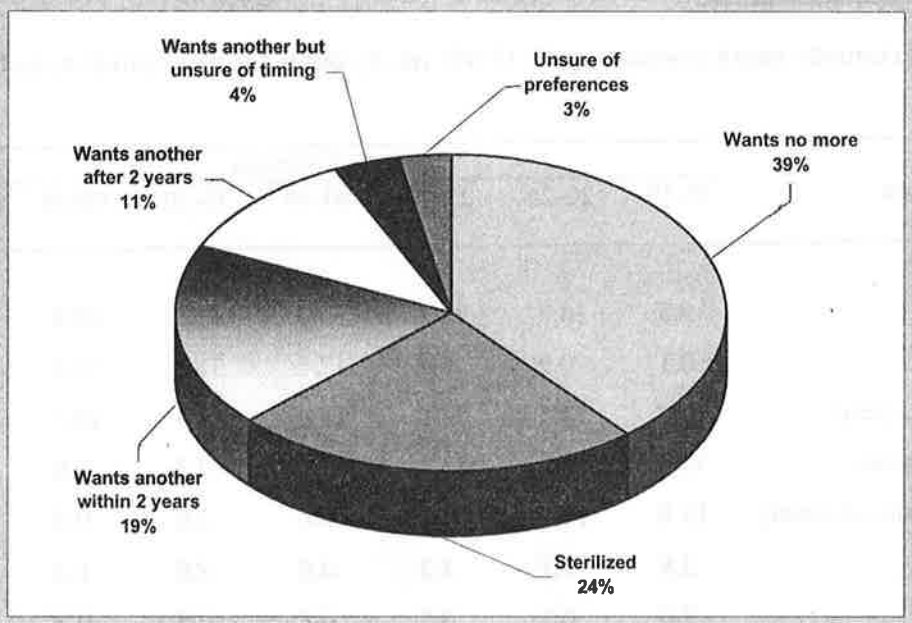
Percent distribution of currently married women aged (15-49) yrs. by desire for more children, according to number of living children.

Desire for more children	Number of living children*							Total
	0	1	2	3	4	5	6+	
Wants no more	3.1	18.0	55.4	44.5	42.8	37.2	46.3	38.7
Sterilized	0.0	0.9	15.1	48.1	53.5	61.5	49.6	23.6
Wants another within 2 years	88.1	34.7	13.6	2.6	2.1	0.5	0.1	18.7
Wants another after 2 years	0.0	28.7	9.1	2.3	0.3	0.0	0.0	11.0
Wants another but unsure of timing	0.7	13.3	2.2	0.6	0.0	0.0	0.1	4.4
Unsure of preferences	0.0	4.0	3.9	1.0	0.9	0.6	0.8	2.6
Desire not stated	7.9	0.1	0.3	0.2	0.0	0.0	3.0	0.6
Declared infecund	0.1	0.3	0.3	0.7	0.4	0.1	0.0	0.4
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of women	289**	1,511	1,878	1,204	571	191	120	5,764**

* Current pregnancies are accounted.
** Excluding 151 newly married women

Table 7.2 gives the percentages of mothers who want no more children as well as timing of desired children, for those who want children. The figures give an indication of the potential users of family planning services. About 39 percent of currently married women want no more children. These could be regarded as potential clients for permanent family planning methods. 11 percent of all currently married women who want a child after two or more years are the potential clients for temporary contraceptive methods. Data also indicate that women with low parity prefer to have another child within two years.

Figure 7.1 - Fertility preferences among all currently married women aged 15-49



Above figure 7.1 shows the fertility preferences among all currently married women in the age group 15-49 except 151 newly married women.

The desire for children by the age of the women gives a better understanding of timing and spacing of births. It is clear from Table 7.3 that, when age of the women increases, proportion of women who want no more children increases gradually. The proportion of women who had been sterilized also increases with the increase of age. Proportions of women who want children within two years and after two years also decrease with increasing age of the woman. It is interesting to note that 32.8 percent of women in the age group 25-29 prefer to have another child within two years whereas 40 percent of women in the age group 20-24 prefer to delay their next pregnancy for two more years.

Table 7.3 Fertility preferences by age

Percent distribution of currently married women aged (15-49) yrs. by desire for more children, according to age of women.

Desire for more children	Age of women							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Wants no more	9.5	16.8	26.1	35.9	43.0	48.9	53.2	38.7
Sterilized	0.1	0.9	6.4	17.8	31.2	37.4	38.2	23.6
Wants another within 2 years	22.0	24.5	32.8	24.4	17.3	10.3	6.4	18.7
Wants another after 2 years	35.8	40.0	23.7	11.5	2.3	1.0	0.2	11.0
Wants another but unsure of timing	19.8	13.3	7.1	5.0	2.6	0.5	0.4	4.4
Unsure of preferences	5.8	3.7	3.2	4.6	3.0	1.3	0.0	2.6
Desire not stated	7.0	0.8	0.7	0.8	0.5	0.3	0.0	0.6
Declared infecund	0.0	0.0	0.0	0.0	0.1	0.3	1.7	0.4
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of women*	127	533	891	1,102	1,120	1,010	981	5,764

* Excluding 151 newly married women

7.2 Preferences for children

Table 7.4 examines the currently married women who want no more children by sector, zone and educational level according to number of living children. This includes sterilized women and currently pregnant women as well.

It is also important to bear in mind that the current pregnancy status is also accounted in the number of living children. The overall percentage of women who want no more children increases rapidly from 18.9 percent to 70.5 percent at parity two and thereafter reaches a peak level of 97 percent at parity four or more. When compared with 1993 data, the present survey shows a similar pattern with slight increase in the percentage values in 2000, except for zero parity total, and the grand total. The total percentage has dropped to 61 percent in 2000 from 65 percent in 1993.

Table 7.4 Preference for no more children

Percentage of currently married women (including sterilized women and currently pregnant women) who want no more children by sector, zone and educational level, according to number of living children.

Background characteristic	Number of living children*					Total
	0	1	2	3	4+	
Sector						
Colombo metro	3.5	31.0	75.7	90.9	100.0	62.2
Other urban	0.0	11.8	62.5	84.8	93.3	52.9
Rural	2.6	17.8	70.3	93.3	96.4	60.4
Estate	0.0	17.6	72.0	94.3	100.0	70.3
Zone						
Zone 1	3.5	31.0	75.7	90.9	100.0	62.2
Zone 2	2.2	24.7	74.4	95.2	97.5	59.5
Zone 3	1.4	17.2	68.8	91.9	97.7	59.4
Zone 4	4.4	18.1	71.1	94.4	95.1	60.6
Zone 5	0.0	13.4	67.5	92.2	97.8	62.3
Zone 6	0.0	8.6	59.7	90.9	95.6	57.2
Zone 7	3.2	11.9	64.2	88.4	95.3	60.7
Educational level						
No schooling	0.0	41.2	90.2	95.6	98.8	81.5
Primary	13.9	24.4	74.3	93.3	97.5	78.5
Secondary	1.7	16.0	64.9	92.4	96.3	58.3
G.C.E. (O/L)	0.0	20.9	72.4	90.6	96.6	54.2
G.C.E. (A/L) & higher	2.3	19.4	75.1	93.3	90.9	47.9
Total	**2.3**	**18.9**	**70.5**	**92.7**	**96.8**	**60.6**

* Current pregnancies are accounted

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3.5 percent of women with zero parity in Colombo metro area reported that they do not want more children. It is also evident that 13.9 percent of women with primary educational level who had no living children at the time of the survey also stated that they do not want any more children.

When analyzed by sector, highest proportion of women who stated that they do not want more children is reported in estate sector (70.3%) followed by Colombo metro (62.2%), rural (60.4%) and other urban areas (52.9%).

It is of interest to note that women who have no schooling represent the highest percentage who do not want any more children (81.5%) whereas women with higher education reported the lowest percentage (47.9%).

7.3 Preferences for son and daughter

It is important to examine whether there is any sex preferences among Sri Lankan women. To analyze this, the data collected for the question 'ideal number of children' was further analyzed for ever married women with living children and for ever married women without living children separately by sector, educational level and desired number of children.

Table 7.5(a) gives sex preference for women with living children by selected background characteristics. Similarly Table 7.5(b) shows sex preferences for women without living children.

On an average 55 percent of women with living children reported that they have equal preference for sons and daughters.

Table 7.5 Preferences for son and daughter

(a) Percent distribution of **ever married women with living children** by sector, educational level and desired number of children, according to their preferences for son and daughter.

Background characteristic	Total women		Women with living children					
			Do not want children/ Undecided	Need children and would like to have				Not stated
				More boys	More girls	Equal preference	No preference	
	No:	%						
Sector								
Colombo metro	683	100	1.4	15.6	8.3	55.9	18.5	0.1
Other urban	479	100	1.9	18.5	7.4	56.9	14.9	0.4
Rural	4,198	100	1.2	20.4	7.3	54.6	16.3	0.2
Estate	392	100	0.5	30.2	7.8	51.1	10.1	0.2
Educational level								
No schooling	310	100	2.3	26.6	7.8	51.9	11.4	0.0
Primary	1,096	100	2.1	25.7	8.3	48.6	15.0	0.3
Secondary	2,612	100	1.1	20.7	7.2	55.0	15.8	0.2
G.C.E (O/L)	1,043	100	0.4	14.4	7.3	59.7	18.1	0.2
G.C.E (A/L) & higher	691	100	1.2	16.8	7.4	57.2	17.4	0.0
Desired number of children								
0	72	100	100.0	0.0	0.0	0.0	0.0	0.0
1	170	100	0.0	50.0	22.9	0.0	27.0	0.0
2	2,688	100	0.0	2.0	1.3	86.5	10.2	0.0
3	1,554	100	0.0	50.4	18.4	0.0	31.2	0.0
4+	1,258	100	0.0	19.7	5.6	56.2	18.4	0.0
Total	**5,752**	**100**	**1.2**	**20.3**	**7.5**	**54.7**	**16.0**	**0.2**

Note: Missing information on desired number of children is not presented separately.

However, it is evident from this analysis that 20.3 percent of women on an average prefer to have more sons than to have more daughters. 16 percent of women reported that they would like to have either sons or daughters (no preference). Only 7.5 percent of women prefer to have more girls. This overall preference are purely based on the attitudes of women and shows that the majority are unbiased but, there are differences among certain segments of the population.

When analyzed by sector, son preference is relatively high in estate sector (30.2%) than other sectors followed by rural sector (20.4%), other urban sector (18.5%) and Colombo metro (15.6%) area.

There is no difference in preference for daughters by sector and educational level. Majority of women would have equal preferences for children by sector and educational level.

When examined by desired number of children, son preference is higher for those who desire one or three children than others. However, women who desire two or four or more children have equal preference for sons and daughters.

The percentage having no preference for sex of the child is highest among women in Colombo metro area (18.5%). When examined by educational level, no preference is highest among women with G.C.E. (O/L) level, (18.1%).

It is important to check whether there is any biasness torwards the sex of the children these women already had when answering the questions regarding sex of ideal number of children they would like to have. Data shows that there is a slight bias towards the sex of the children they already had. For instance women prefer more boys when they had more sons and women prefer more girls when they have more daughters.

It is useful to examine the preferences for sons and daughters of women without children by sector, educational level and desired number of children (Table 7.5(b)).

On an average, more than 75 percent of women either have equal preference or no preference for sex of the children. However, there are 15.5 percent of women with son preference while only 4.3 percent stated that they would like to have more girls. By comparing women with living children with women without living children, the percentage of equal preferences has increased to 60.2 for women without living children verses 54.7 for women with living children. Preference for more boys and more girls have slightly decreased for women without living children as compared to women with living children.

When analyzed by sector, nearly one third of women in the estate sector prefer more boys. Women with secondary or education up to G.C.E. (O/L) have less preference for sons than women with primary level or no schooling level of education.

It is interesting to observe that if a woman desired to have three children, they prefer more boys in their families.

Table 7.5 Preferences for son and daughter

(b) Percent distribution of **ever married women without living children** by sector, educational level and desired number of children, according to their preferences for son and daughter.

Background characteristic	Total women		Women without living children					
			Do not want children/ Undecided	Need children and would like to have				Not stated
				More boys	More girls	Equal preference	No preference	
	No.	%						
Sector								
Colombo metro	79	100	2.5	10.1	7.6	50.6	27.8	1.3
Other urban	63	100	3.1	15.6	4.7	70.3	6.2	0.0
Rural	460	100	1.5	15.4	3.7	60.6	18.0	0.6
Estate	31	100	0.0	31.2	3.1	53.1	9.4	3.1
Educational level								
No schooling	28	100	7.1	32.1	10.7	46.4	3.6	0.0
Primary	55	100	3.6	18.2	7.3	47.3	21.8	1.8
Secondary	265	100	0.8	11.3	4.5	63.4	18.9	1.1
G.C.E (O/L)	162	100	0.0	15.4	2.5	64.8	17.3	0.0
G.C.E.(A/L) & higher	122	100	3.2	18.7	3.2	56.9	17.9	0.0
Desired number of children								
0	10	100	100.0	0.0	0.0	0.0	0.0	0.0
1	58	100	0.0	39.6	12.1	0.0	48.3	0.0
2	408	100	0.0	1.2	0.7	85.2	12.8	0.0
3	108	100	0.0	56.0	14.8	0.0	29.3	0.0
4+	44	100	0.0	22.7	2.3	56.8	18.2	0.0
Total	**633**	**100**	**1.6**	**15.5**	**4.3**	**60.2**	**17.7**	**0.8**

Note: Missing information on educational level and desired number of children are not presented separately.

7.4 Potential use of family planning

Table 7.6 examines the need of family planning services among currently married women who are fecund and not using contraceptives at the time of the survey, including pregnant women at the time of the survey. Therefore the women who fall into this category could be considered as in need of family planning services. This non-contracepting women who were pregnant at the time of the survey, could be regarded as future users of contraceptive services even though they may not need these services immediately.

Therefore, the analysis could be done for two groups

i) The women who is in need of family planning

ii) In need of family planning and intends to use in future

Table 7.6 Potential users of family planning

Among currently married women, the percent who are in need of family planning* and the percent who are in need and plan to use a contraceptive method in the future, by sector, zone and educational level.

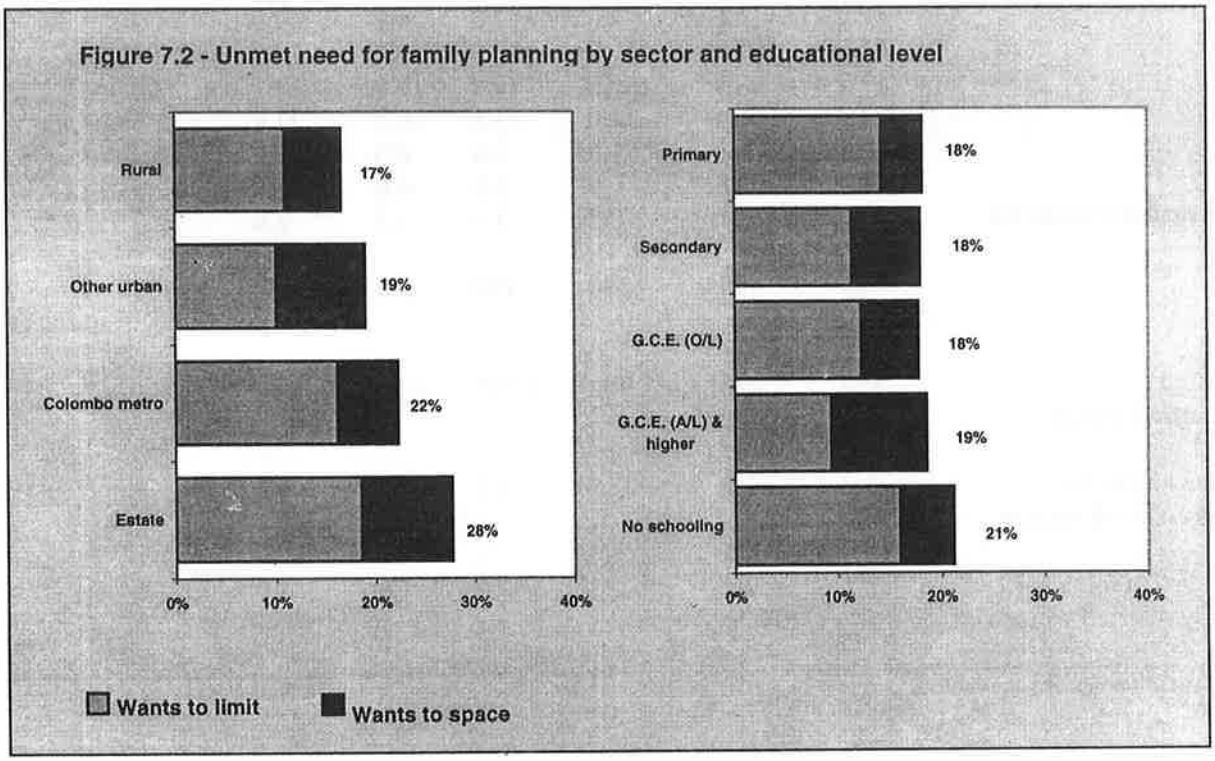
Background characteristic	In need of family planning			In need and intends to use contraception		
	Wants no more children	Wants to postpone / undecided**	Total in need	Wants no more children	Wants to postpone / undecided**	Total in need
Sector						
Colombo metro	16.2	6.1	22.3	5.5	3.0	8.5
Other urban	10.1	8.9	19.0	2.4	3.8	6.2
Rural	11.0	5.6	16.6	3.5	2.9	6.4
Estate	18.6	9.1	27.7	5.0	4.5	9.5
Zone						
Zone 1	16.2	6.1	22.3	5.5	3.0	8.5
Zone 2	12.2	6.2	18.4	2.6	3.2	5.8
Zone 3	14.2	5.6	19.8	4.0	1.8	5.8
Zone 4	10.0	5.8	15.8	3.6	3.4	7.0
Zone 5	10.5	7.1	17.6	3.8	3.6	7.4
Zone 6	6.8	4.7	11.5	2.5	3.0	5.5
Zone 7	14.6	7.1	21.7	3.8	3.8	7.6
Educational level						
No schooling	16.0	5.2	21.2	2.4	1.4	3.8
Primary	14.3	3.9	18.2	4.4	1.7	6.1
Secondary	11.4	6.6	18.0	3.3	3.5	6.8
G.C.E. (O/L)	12.3	5.5	17.8	4.4	3.0	7.4
G.C.E. (A/L) & higher	9.4	9.2	18.6	3.8	4.7	8.5
Total	**12.0**	**6.2**	**18.2**	**3.7**	**3.1**	**6.8**

* Women in need are defined as fecund, not currently contracepting and who want no more births, or want to postpone next birth for at least two or more years.

** Includes undecided about whether to have another birth or timing for the next birth.

As seen in Table 7.6, nearly 18 percent of currently married women are in need of family planning services. Out of this about 12 percent do not want any more children while nearly 6 percent want to postpone or undecided whether to have another birth or timing their next birth. However, only about 7 percent have stated their willingness to use family planning. Out of this about 4 percent want to stop child bearing while only 3.1 percent want to have space between births. When compared with 1993 DHS data, the total proportion of women in

need of family planning has decreased to 18.2 percent in 2000 from 24.7 percent in 1993. However, all women who do not want any more children may not be in need for family planning. Therefore the total need of family planning of 18.2 percent is higher than the conventional unmet need for family planning.



7.5 Ideal number of children

It is important to analyze the ideal number of children that ever married women would like to have by the number of living children. Table 7.7 shows the percent distribution of ever married women by the ideal number of children according to number of living children (Including current pregnancy). It is seen that the mean ideal number of children for both ever married and currently married women is 2.7. This is 0.1 decrease compared to the DHS 1993. Mean ideal number for women with two living children is 2.5. This figure has not changed from DHS 1993.

Table 7.7 Ideal number of children

Percent distribution of ever-married women by ideal number of children, according to number of living children.

Ideal number of children	Number of living children*							Total
	0	1	2	3	4	5	6+	
0	1.0	0.5	0.1	0.4	0.3	0.0	0.0	0.5
1	11.0	7.1	2.2	1.0	0.2	0.0	1.3	3.6
2	62.2	69.6	57.2	25.9	22.6	15.4	7.1	48.5
3	17.2	16.0	26.5	44.9	19.1	23.1	23.6	26.0
4	4.7	4.9	11.0	21.5	46.4	27.4	22.5	15.4
5	1.4	0.7	1.8	3.8	6.0	20.5	3.9	3.0
6+	0.3	0.5	0.4	1.5	4.0	10.8	32.6	2.0
Not stated/Undecided	2.2	0.7	0.7	1.0	1.3	2.8	9.0	1.1
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number of ever married women	463	1,646	1,992	1,315	620	208	141	6,385
Mean ideal number for ever-married women	2.2	2.2	2.5	3.1	3.5	3.9	5.5	2.7
Mean ideal number for currently married women	2.2	2.2	2.5	3.1	3.5	3.9	5.7	2.7

*Current pregnancies are accounted

It is interesting to note that the women with zero, one and two parities prefer to have two children as their ideal family size. With the increase of number of living children most women are satisfied with their actual family sizes, except for women with 5 living children.

Another important analysis on ideal family size is presented in Table 7.8 which is given the mean ideal number of children by sector, zone and educational level of women according to current age of the women.

Data reveals that mean ideal number of children for younger women in the age group (15-29) is lesser than that of older women with age 30 or more. This implies that younger women prefer lesser number of children than older women.

Table 7.8 Mean ideal number of children

Mean ideal number of children for ever-married women by sector, zone and educational level, according to age of woman.

Background characteristic	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Sector								
Colombo metro	2.0	2.4	2.4	2.5	2.7	2.6	2.9	2.6
Other urban	2.2	2.4	2.5	2.5	2.7	2.9	3.0	2.7
Rural	2.2	2.2	2.4	2.5	2.7	2.9	3.0	2.7
Estate	2.4	2.5	3.1	3.1	3.1	3.4	3.3	3.0
Zone								
Zone 1	2.0	2.4	2.4	2.5	2.7	2.6	2.9	2.6
Zone 2	2.3	2.1	2.2	2.4	2.5	2.6	2.6	2.4
Zone 3	2.0	2.3	2.4	2.5	2.6	2.6	3.0	2.6
Zone 4	2.3	2.2	2.4	2.5	2.7	2.8	3.2	2.7
Zone 5	2.0	2.2	2.6	2.7	2.9	3.3	3.2	2.8
Zone 6	2.2	2.2	2.5	2.6	2.9	2.9	3.3	2.8
Zone 7	2.2	2.5	2.8	2.8	3.1	3.1	3.6	3.0
Educational level								
No schooling	2.4	2.8	2.7	3.1	2.9	3.2	3.3	3.0
Primary	2.2	2.4	2.9	2.8	3.0	3.2	3.4	3.0
Secondary	2.1	2.3	2.4	2.6	2.8	2.9	3.0	2.7
G.C.E. (O/L)	2.3	2.2	2.4	2.4	2.5	2.6	2.9	2.5
G.C.E. (A/L) & higher	0.0	2.0	2.3	2.4	2.4	2.4	2.5	2.4
Total	**2.2**	**2.3**	**2.5**	**2.6**	**2.7**	**2.9**	**3.0**	**2.7**

Note: Missing information on educational level is not presented separately.

On an average, mean ideal number for estate women is higher than that of the other sectors. It is also seen that there is an association between the mean ideal number and the educational level of women. For instance, when the educational level of women increases, the mean ideal number of children they would like to have shows a decline.

7.6 Fertility planning and the status of birth

One of the objective of this survey is to find out the degree to which couples successfully control their fertility levels. To find this out women were asked a series of questions to determine the status of pregnancy, whether it was planned, unplanned, wanted a birth later or did not want. These questions were asked from women who had children in the preceding five years including the pregnant women at the time of the survey.

Even though the questions were targeted to women who had children in the preceding five years, there can be errors due to recall lapse. Also some one reluctant to give correct answers to questions that are too personal.

There are women who have not used contraceptives before becoming pregnant and some who may have used contraceptives before becoming pregnant. If a birth falls into the categories either 'wanted birth later' or 'did not want birth' that represents a contraceptive failure.

Table 7.9 reveals that out of 3,211 births in the last five years, 81 percent were wanted birth then, 13 percent wanted later and 6 percent were not wanted. The highest percentage of women reported unwanted birth were using contraceptives and they had more than four children. It is important to notice that nearly 12 percent of women who used contraceptives had become pregnant while using that method. Out of this 12 percent, 41 percent were using traditional methods while they becoming pregnant. The rest 59 percent were using modern methods and out of this pills (24.9%) ranking in the first place followed by injections (21.1%).

Table 7.9 Planning status of births

Percent distribution of all births (including current pregnancy) in last five years by contraceptive practice of mother and whether birth was wanted , according to birth order.

Contraceptive practice and desire for birth	Birth order				Total
	1	2	3	4+	
Non contraceptive interval					
Wanted birth then	59.1	39.3	27.6	22.1	45.3
Wanted birth later	5.3	3.4	4.6	5.2	4.6
Did not want birth	1.0	1.6	2.3	10.7	2.2
Contraceptive interval					
Wanted birth then	27.0	44.8	45.9	36.4	36.0
Wanted birth later	6.6	7.8	13.0	9.3	8.1
Did not want birth	0.6	2.7	6.4	15.9	3.4
Desire not stated	0.3	0.5	0.2	0.3	0.3
Total	**100**	**100**	**100**	**100**	**100**
Number of births	1,479	1,005	438	289	3,211

Since this is subjected to memory lapses, analysis was limited to births that occurred during the 12 months prior to the survey and results are given in Table 7.10. It is expected that due to the reduction of reference time, the memory lapses may have been reduced and the estimates would be more accurate.

Table 7.10 Planning status of births in the last 12 months

Among women having a birth in the last 12 months, the percentage wanting a child then, later, or wanting no more children, by birth order.

Desire for last birth	Birth order of child		Total
	1-2	3+	
Wanted then	85.1	69.6	83.2
Wanted later	10.5	13.9	11.1
Not wanted	3.9	16.4	5.2
Not stated	0.5	0.0	0.4
Total	**100**	**100**	**100**
Number of births	590	79	669

Table 7.10 shows that nearly 83 percent of women wanted a birth then, 11 percent wanted later and 5 percent did not want at all. It is evident that third or higher order births are more likely to be unwanted than first or second order births. However, since there is mistimed and unwanted pregnancies, there is a need for more extensive family planning services.

7.7 Wanted fertility rates

Wanted fertility rate is another indicator on desired fertility levels. This had been calculated by excluding unwanted births from the numerator. Therefore the total wanted fertility rate could be expressed as the total number of births a woman would bear during her reproductive age if she experience only the wanted age specific fertility rates.

Table 7.11 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the five years preceding the survey, by sector and zone.

Background characteristic	Total wanted fertility rate	Total fertility rate
Sector		
Colombo metro	1.8	1.9
Other urban	1.8	2.1
Rural	1.8	1.8
Estate	2.4	2.4
Zone		
Zone 1	1.8	1.9
Zone 2	1.8	1.8
Zone 3	1.9	2.0
Zone 4	1.7	1.9
Zone 5	1.8	1.9
Zone 6	1.7	1.7
Zone 7	2.1	2.3
Total	**1.8**	**1.9**

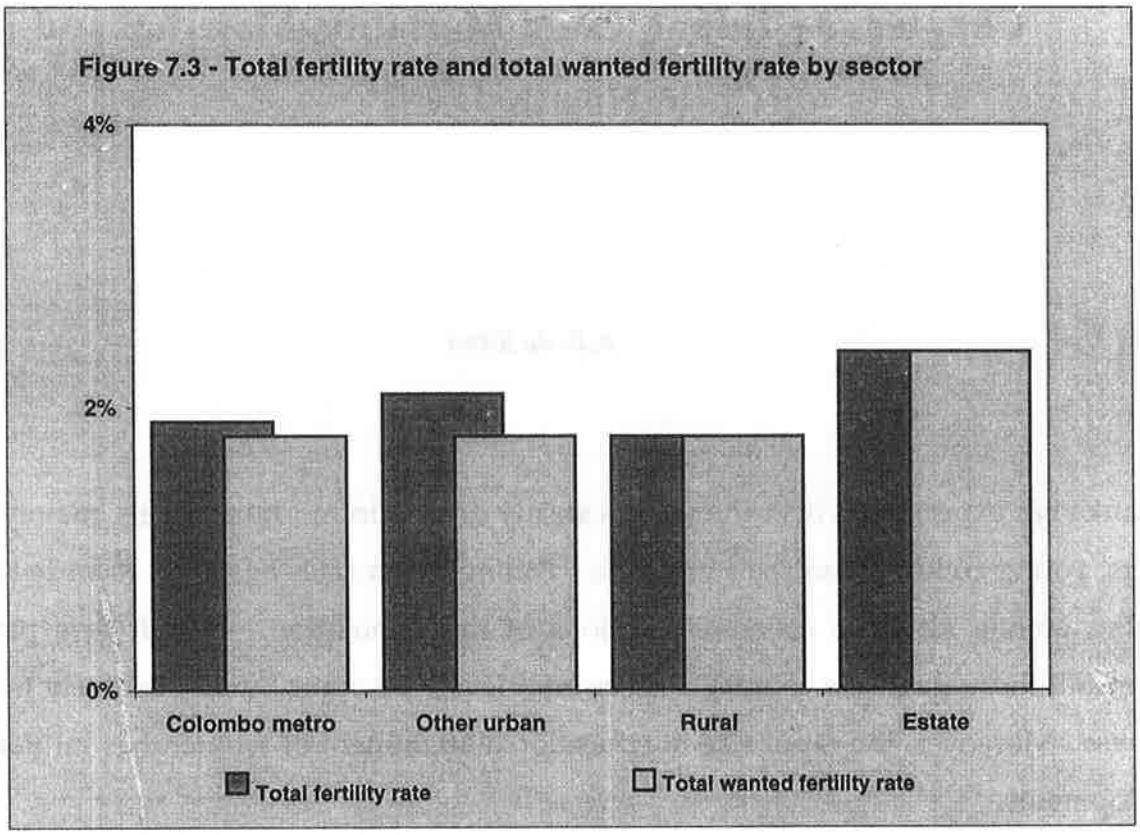


Table 7.11 gives the total wanted fertility rate and the real total fertility rate. It shows that the difference between these two for the total is negligible.

When compared by sector, it is seen that Colombo metro area the difference is 0.1 point, where as difference between other urban area is 0.3 points. However there is no difference in rural and estate areas.

When comparing these figures with DHS 1993 figures, there is a remarkable decrease in total fertility rate during 1993 to 2000 from 2.3 to 1.9 respectively. However, total wanted fertility rate has not changed from 1993 to 2000. The potential for further reduction in fertility is evident in other urban areas and in zone 4 and 7. It is also striking to note that the total wanted fertility rate is either below or very closer to replacement level.

Chapter 8 : Infant, Child Mortality, Maternal and Child Health

A.P. de Silva

Sri Lanka has experienced over the years a steady decline in mortality levels, mainly related to infants, young children and their mothers. Falling death rates has been recorded across the country, among all socio economic sections of the population. Health care programmes carried out throughout the country at grass root level, has contributed positively towards this progress. Moreover, the rapid rise in educational attainment of women has influenced these developments.

This chapter reports mortality levels of infants and children under five years of age, and the prevalence of diarrhoea and immunization coverage of the same target group of children. It also discusses important aspects related to maternal health such as antenatal care and assistance during delivery. Differentials related to the key indicators are discussed whenever it is deemed necessary.

Information presented in this chapter is vital for the assessment of health status of preschool children and their mothers. The statistical indicators presented here are a valuable guide in formulating future health policies and an essential tool to evaluate health programmes already conducted, for the improvement of child and maternal health. Furthermore, the data identifies vulnerable groups of the population who are at a higher risk of morbidity and mortality.

8.1 Infant and child mortality

Levels of infant and child mortality and their trends reflect the state of public health, environment sanitation and general socio-economic conditions. These basic indicators will serve to portray the prevailing mortality levels of children relative to two time periods in the recent past.

The following mortality rates are discussed in this section.

Neonatal mortality	:	The probability of dying within the first month of life
Post neonatal mortality	:	The probability of dying after the first month of life, but before reaching the first birthday
Child mortality	:	The probability of dying between the first and fifth birthday
Under-five mortality	:	The probability of dying between birth and the fifth birthday

All rates are calculated per 1,000 live births that occurred in the reference period.

8.2 Limitations in data

Information on children ever born, surviving and dead were collected from mothers through a number of probing questions. Furthermore, a retrospective birth history was collected from the respondents which included the sex, date of birth, whether a birth certificate is available, whether the birth was single or multiple, whether child is living and if dead, age at death, in respect of each of her children.

Accuracy of differentials and trends in infant and child mortality computed from survey data depends largely on the coverage of deaths, and the quality of information with regard to reporting of the event and exact timing of such occurrences. Errors may creep in with omissions of deaths, misreporting of dates of birth if the birth certificate was not available, and misreporting of exact age at death. Missing data on age at death, which accounted to 3 percent of deaths reported at the survey, were not used in estimating the probabilities of dying. Problems of under reporting and misreporting are likely to be more common with respondents having a number of children and whose children have died several years back. Even though interviewers could help mothers get out of confusing situations with leading questions and useful hints, they may not ask too many details about dead children from a respondent, in order to keep her amicable throughout the lengthy interview.

The distribution of reported deaths of children under two years is illustrated in Figure 8.1. No substantial heaping pattern is visible for the recent years except at only one point of age which is at 6 months from birth. For the other two distant time periods heaping of deaths is apparent for 18 months of age. But such occurrences will not pose serious problems in the calculations of mortality rates.

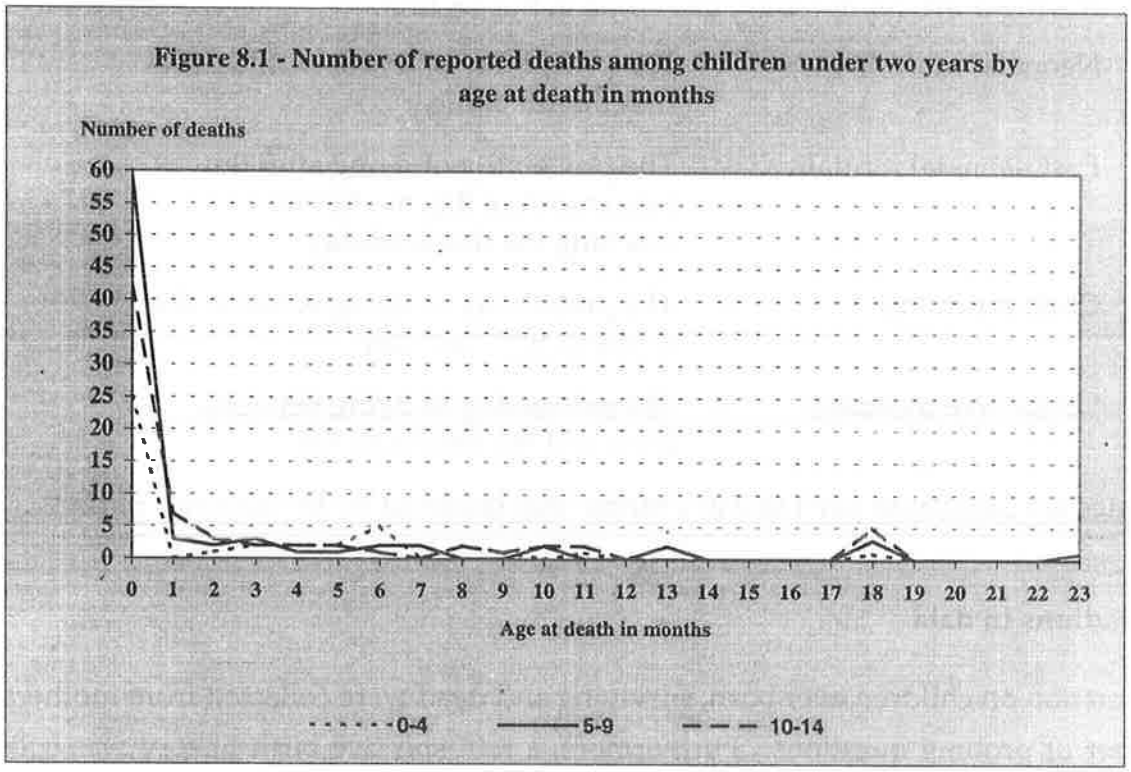


Table 8.1 clearly show that neonatal deaths are most likely to occur at child birth and if not, during the first week after birth. The proportion of neonatal deaths at birth is high, and accounts for one third of such deaths for any given five year period under review. Percent early neonatal is as high as 76 percent for the recent period from 1995 to 2000. This gives an indication that there has not been any serious misreporting of deaths, as a ratio less than 25 percent is often used as a guideline to indicate underreporting of early neonatal deaths.

Table 8.2 show the distribution of deaths in months with respect to children under two years. It appears that, deaths of children under two years are mainly confined to the first month. A rapid decline is observed from the second month onwards and is noted as a very rare occurrence after reaching the first birthday. A tendency to report age at death of toddlers at certain round ages, related to child development milestones is visible, as heaping of figures is seen at 6 months and 18 months.

Table 8.1 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days, for five year periods of birth preceding the survey.

Age at death (days)	Years preceding survey			
	0-4	5-9	10-14	0-14
0	7	21	13	41
1	4	13	9	26
2	2	5	4	11
3	3	9	7	19
4	2	4	1	7
5	1	1	4	6
6	0	0	0	0
7	2	3	1	6
8	0	0	0	0
9	0	1	2	3
10	0	0	1	1
11	0	0	0	0
12	1	0	0	1
13	0	0	0	0
14	0	0	0	0
15	2	0	0	2
16	0	0	0	0
17	0	0	0	0
18	0	0	0	0
19	0	0	0	0
20	0	0	0	0
21	1	2	0	3
22	0	0	0	0
23	0	0	0	0
24	0	0	0	0
25	0	0	0	0
26	0	0	0	0
27	0	0	0	0
28	0	0	0	0
29	0	0	0	0
30	0	0	0	0
Total (0-30)	**25**	**59**	**42**	**126**
Percent early Neonatal[1]	76.0	89.8	90.5	87.3

[1] (0-6 days / 0-30 days) *100

0-4: From 1995.05.01 to 2000.04.30

5-9: From 1990.05.01 to 1995.04.30

10-14: From 1985.05.01 to 1990.04.30

15. S.P.C. 020541

Table 8.2 Reporting of age at death in months

Distribution of reported deaths under 2 years of age by age at death in months, for five year periods of birth preceding the survey.

Age at death (months)	Years preceding survey			
	0-4	5-9	10-14	0-14
0	25	59	42	126
1	0	3	7	10
2	1	2	3	6
3	2	3	2	7
4	2	1	2	5
5	2	1	2	5
6	5	2	1	8
7	0	2	0	2
8	2	0	2	4
9	1	0	1	2
10	0	2	2	4
11	1	0	2	3
12	0	0	0	0
13	0	2	0	2
14	0	0	0	0
15	0	0	0	0
16	0	0	0	0
17	0	0	0	0
18	1	3	5	9
19	0	0	0	0
20	0	0	0	0
21	0	0	0	0
22	0	0	0	0
23	0	1	0	1
Total (0-23)	**42**	**81**	**71**	**194**
Percent Neonatal[1]	61.0	78.7	63.6	69.2

[1] (under 1 month / under 1 year) *100
0-4: From 1995.05.01 to 2000.04.30
5-9: From 1990.05.01 to 1995.04.30
10-14: From 1985.05.01 to 1990.04.30

8.3 Mortality trends

Table 8.3 presents trends in infant and child mortality levels for three consecutive five year periods prior to the survey.

Table 8.3 Infant and child mortality

Infant and child mortality rates by five-year periods preceding the survey.

Years preceding survey	Approximate calendar periods	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under five mortality ($_5q_0$)
0-4	1995/05/01 - 2000/04/30	8.3	5.3	13.6	1.0	14.6
5-9	1990/05/01 - 1995/04/30	19.4	5.2	24.6	2.6	27.2
10-14	1985/05/01 - 1990/04/30	13.8	8.2	22.0	3.3	25.3

Infant and child mortality levels have dropped to half during the past decade, from 25 deaths per 1,000 live births to 14 deaths per 1,000 live births with respect to children in their first year of life, and from 3 deaths per 1,000 live births to a single death per 1,000 live births for children between one year and five years of age. A substantial reduction in all components of early childhood mortality is visible, the most prominent being neonatal mortality, the probability of dying in the first month of life. The reported neonatal deaths is fewer than 9 for every 1,000 live births in the five year period preceding the survey, from mid 1995 to mid 2000, as opposed to 20 per 1,000 live births, during the period prior to that, from mid 1990 to mid 1995.

Neonatal deaths reported for the furthermost five year time period from mid 1985 to mid 1990 is lower than that of the five year period that followed, and is far less than could be expected. Some salient points of the dataset would explain the underlying causes for the lower mortality levels reported for reference periods in the distant past. As the survey covered ever married women who happened to be in the reproductive age group at the time of the survey taking, exclusion of older women over 49 years of age who would have been eligible respondents in the earlier time periods, is inevitable, thus limiting child deaths to a smaller group of mothers

within the target group at the time of interview. Moreover, as mentioned before, recall lapses and omissions in reporting child deaths as well as misreporting the exact age at death occurs more frequently with the passage of time, and affects distant reference periods more than the recent ones.

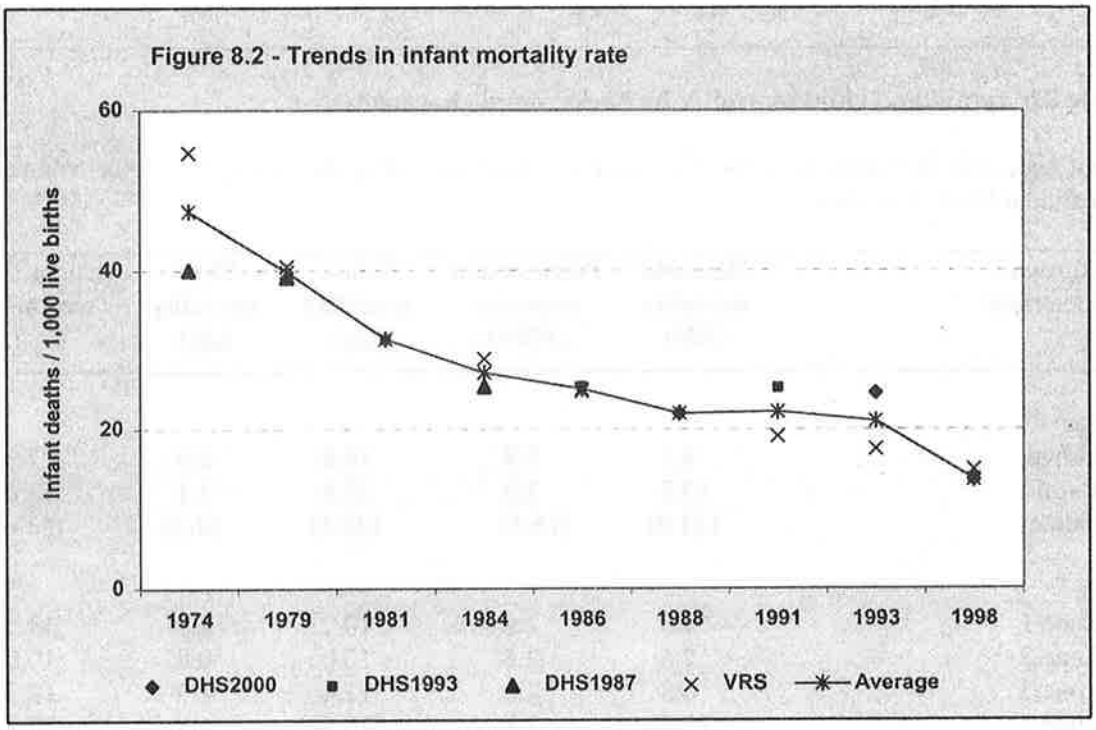
Table 8.4 Trends in infant mortality rate

Infant mortality rates from various sources by approximate mid point.

Approximate mid point	DHS 2000	DHS 1993	DHS 1987	Vital registration system (VRS)[1]
1998	13.6	-	-	14.9
1993	24.6	-	-	17.5
1991	-	25.3	-	19.1
1988	22.0	-	-	-
1986	-	25.4	-	24.8
1984	-	-	25.4	28.9
1981	-	31.4	-	31.4
1979	-	-	39.2	40.5
1974	-	-	40.1	54.7

[1] Excluding northern and eastern provinces

Table 8.4 presents the changing pattern of infant mortality rates during the last quarter of the 20th century as estimated by DHS surveys of 1987, 1993 and 2000, and Registrar General's department through the vital registration system. Both the sources have certain limitations. Lapses in recalling the exact year of death of infants, especially when the painful occurrence had taken place years ago, which the mother is reluctant to bring back to her mind and relive the agony, is a major drawback in DHS surveys. In the case of vital registration statistics, it is no secret that the accuracy is questionable. Omissions in the registration of births as well as deaths when infants die immediately after birth, has been identified as an issue needing a remedy, by many investigators.



However, all the sources highlight a declining trend over the two and half decades (Figure 8.2). Figure 8.2 also highlights the fact that there is a greater convergence of survey and registration rates for the more recent periods. Mortality rates registered a sharp drop, the reduction reflecting more than a 50 percent improvement favouring survival status in the decisive years, in the first half of the period under review. From mid eighties onwards, mortality rates had settled down to a slower rate of decline, to reach the level of 14 deaths for every 1,000 live births, in respect of children in their first year of life, at the end of the 20th century.

Socio economic background of parents especially the educational attainment of mother, affect infant and childhood mortality to a great extent. Living environment and accessibility to primary health care facilities, are also key factors that influence mortality levels. Table 8.5 presents infant and childhood mortality measures for the ten year period preceding the survey, according to place of residence and mother's education.

Table 8.5 Infant and child mortality by background characteristics

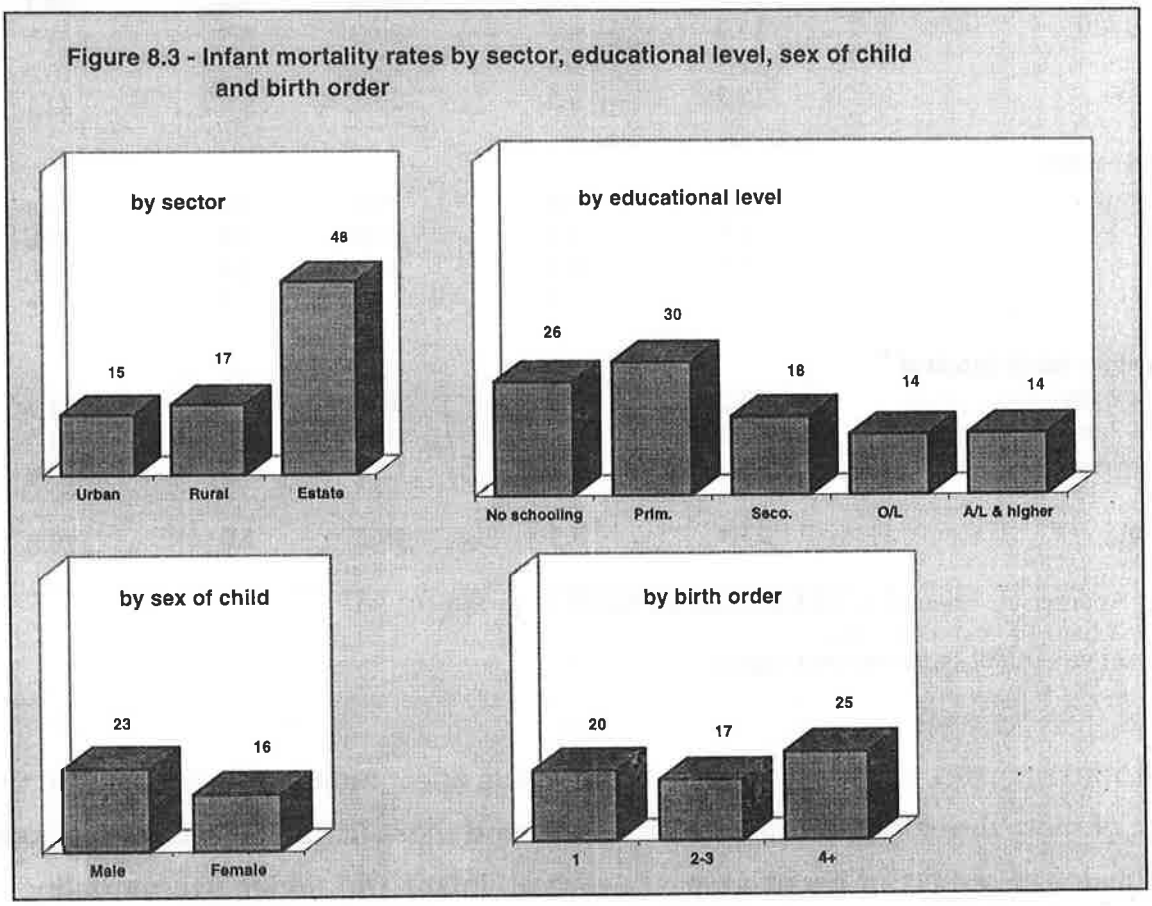
Infant and child mortality rates for the ten-year period preceding the survey by sector, zone and educational level of mother.

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under five mortality ($_5q_0$)
Sector					
Urban	9.1	5.8	14.9	2.5	17.3
Rural	13.5	3.9	17.4	1.1	18.6
Estate	(31.0)	(16.5)	(47.5)	(4.1)	(51.6)
Zone					
Zone 1	7.3	2.9	10.2	2.9	13.1
Zone 2	7.5	2.5	10.0	0.0	10.0
Zone 3	6.8	4.6	11.4	2.3	13.7
Zone 4	23.2	3.1	26.3	1.5	27.9
Zone 5	12.4	8.0	20.5	2.2	22.7
Zone 6	(22.7)	(4.5)	(27.3)	(0.0)	(27.3)
Zone 7	18.3	11.0	29.3	1.2	30.5
Educational level of mother					
No schooling	(15.9)	(9.6)	(25.5)	(6.4)	(31.8)
Primary	21.3	8.5	29.9	3.4	33.3
Secondary	14.6	3.0	17.6	1.1	18.8
G.C.E. (O/L)	9.0	4.5	13.6	0.9	14.5
G.C.E. (A/L) & higher	6.3	7.5	13.8	0.0	13.8
Total	**13.9**	**5.3**	**19.2**	**1.6**	**20.8**

Note: 1. Appropriate calendar period covered is 1990.05.01 to 2000.04.30.
2. Figures within parentheses are based on fewer than 500 cases.

Mortality levels are relatively high in the estate sector, where nearly one out of every 20 babies have died in the first year of life. Infant mortality is lowest in the urban sector (14.9 / 1,000 live births). Child mortality is also highest in the estates while it is lowest in the rural sector. Rural sector seems to have lower levels than the other two sectors in respect of post neonatal and child mortality.

A positive relationship is noted between mothers educational attainment with the probability of survival of her children. Infant mortality rates of children born to mothers with primary education or no formal education, are twice as high as that of children whose mothers are G.C.E. (O/L) qualified or at higher levels. The gap between the two groups are even wider in the case of child mortality, thus confirming the fact that mother's educational attainment has a strong impact on child survival in the early years of life.



Mortality in terms of geographic areas show that zones 4 and 5 have relatively high rates where many estates are located. In addition, zone 6 and 7 show relatively high rates of infant and under five mortality.

Table 8.6 Infant and child mortality by demographic characteristics

Infant and child mortality rates for the ten-year period preceding the survey by sex of child, mother's age at birth, birth order and previous birth interval.

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under five mortality ($_5q_0$)
Sex of child					
Male	17.1	5.6	22.6	1.6	24.3
Female	10.6	5.0	15.6	1.7	17.3
Mother's age at birth					
< 20	17.9	3.6	21.5	3.6	25.1
20-29	13.9	6.1	20.0	1.4	21.5
30-34	11.3	3.8	15.0	1.5	16.6
35+	15.2	5.5	20.7	1.4	22.1
Birth order					
1	15.9	4.0	19.8	1.6	21.4
2-3	11.6	5.4	17.0	1.8	18.8
4-6	16.6	8.3	24.8	2.8	27.6
7+	*	*	*	*	*
Previous birth interval[1]					
< 2 yrs	18.2	16.3	34.5	10.2	44.7
2-3 yrs	7.4	1.9	9.3	0.0	9.3
4 years or more	9.0	4.5	13.4	4.5	17.9
Total	**13.9**	**5.3**	**19.2**	**1.6**	**20.8**

Note: Appropriate calendar period covered is 1990.05.01 to 2000.04.30.
* Fewer than 100 exposed cases.
(1) Based on birth of order two and higher.

Table 8.6 investigates how demographic differentials affect infant and child mortality. As in the case of more developed countries, early childhood mortality among females is lower than that of males in respect of neonatal, post neonatal, infant and under five mortality. Survey findings indicate that children born to women below 20 years or over 35 years of age, are at a higher risk of dying within the first month of life. Child mortality levels are also highest (3.6 / 1,000 live births) in respect of young mothers below 20 years. Evidently mother's age is an important factor associated with mortality levels from infancy upto early childhood. Mortality measures are certainly higher among children with birth order 4 or above, while neonatal mortality is markedly high for the first birth. A distinct pattern is visible between infant mortality levels and the length of previous birth interval. Apparently, the risk of death is higher for both infants and children if the birth interval is less than two years.

8.4 Prenatal care

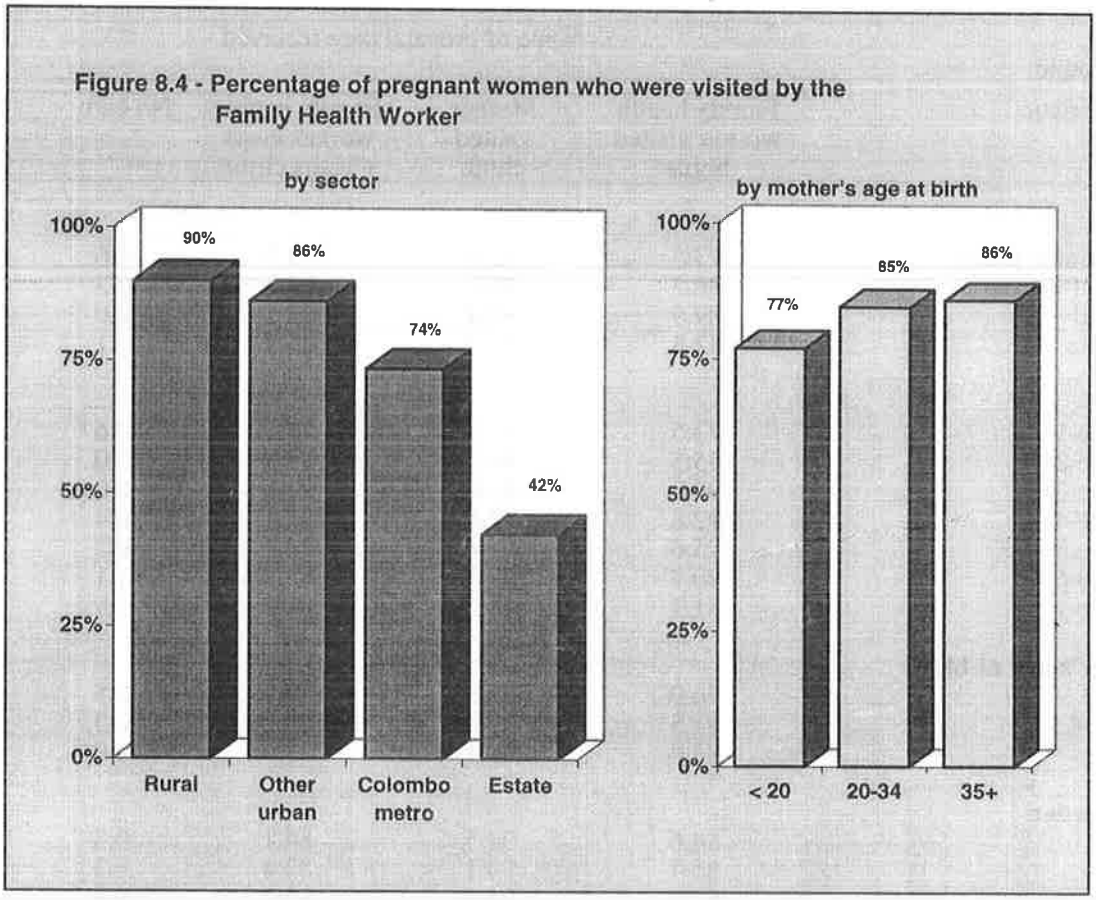
Prenatal care is an important determinant in ensuring a safe delivery, while it contributes immensely in reducing infant and maternal mortality. In Sri Lanka, a pregnant woman could receive prenatal care either by paying regular visits to a maternity clinic, or by receiving home visits from the family health worker assigned to the area of her residence. The survey inquired about the use of both these sources as shown in Table 8.7.

Table 8.7 Prenatal care received

Percentage of last births in the past 5 years by sector, zone, mother's age at birth, birth order and educational level of mother, according to type of prenatal care received by mother.

Background characteristic	Type of prenatal care received				
	Family health worker visited home	Mother visited clinic	Family health worker visits + visits clinic	No care	Number of births
Sector					
Colombo metro	73.5	92.9	73.5	0.6	309
Other urban	86.2	95.2	85.2	0.5	210
Rural	89.9	95.4	89.5	0.0	1,748
Estate	42.3	88.0	41.7	1.1	176
Zone					
Zone 1	73.5	92.9	73.5	0.6	309
Zone 2	85.5	90.2	85.5	0.0	359
Zone 3	93.8	93.0	93.0	0.0	372
Zone 4	92.8	97.4	92.1	0.4	542
Zone 5	75.6	94.4	75.2	0.2	557
Zone 6	80.7	97.7	80.7	1.1	88
Zone 7	81.1	98.2	81.1	0.9	216
Mother's age at birth					
< 20	76.9	95.3	75.9	0.5	212
20-34	84.5	95.3	84.2	0.3	1,920
35+	85.8	89.1	85.5	0.0	311
Birth order					
1	84.6	94.5	84.1	0.3	1,058
2-3	83.7	94.1	83.4	0.3	1,143
4-5	82.9	96.5	82.9	0.5	199
6+	83.7	95.3	81.4	0.0	43
Educational level of mother					
No schooling	56.5	85.9	55.3	2.4	85
Primary	74.4	93.0	73.2	0.3	328
Secondary	87.9	95.5	87.8	0.2	1,150
G.C.E. (O/L)	86.3	94.7	85.9	0.2	476
G.C.E. (A/L) & higher	83.2	94.0	82.9	0.0	404
Total	**84.0**	**94.5**	**83.7**	**0.3**	**2,443**

Recipients of prenatal care is widespread as 94 percent of children are born to mothers who have visited maternity clinics during pregnancy, while 84 percent of cases were visited by the family health worker. Survey results show that mothers in the estate sector and mothers with no formal education, are the least likely to receive home visits from the family health worker, although they are definitely the most needy of such services. However, it is interesting to note that more than 85 percent of mothers in these two disadvantaged groups, have realized the importance of medical advice and had visited maternity clinics for that purpose. A very small proportion in the above two groups have reported to have not received prenatal care, from either source.



Overall level of antenatal check-ups are high and exceed 90 percent for a number of important medical checks including the measurement of height and weight, urine test, blood test to identify the blood group and blood pressure check. It is interesting to note that pregnant women across sectors and educational levels, young women and the not so young alike, have received antenatal check-ups from a health provider (Table 8.8).

Table 8.8 Antenatal check-ups

Percentage of mothers who have undergone a medical checkup during last pregnancy within the past 5 years by sector, zone, mother's age at birth, birth order and educational level of mother.

Background characteristic	Measurement of height	Measurement of weight	Urine test	Blood test to identify group.	Blood test to check VDRL	Blood pressure checked	Number of mothers
Sector							
Colombo metro	90.3	99.0	99.0	96.4	70.6	99.4	309
Other urban	98.1	99.0	98.6	96.2	55.7	98.6	210
Rural	98.1	98.9	99.1	93.2	46.3	98.6	1,748
Estate	97.2	98.9	96.6	79.0	26.1	97.2	176
Zone							
Zone 1	90.3	99.0	99.0	96.4	70.6	99.4	309
Zone 2	98.6	100.0	100.0	96.4	72.4	98.9	359
Zone 3	98.1	98.9	98.9	93.5	51.6	97.8	372
Zone 4	98.7	99.1	98.3	93.0	37.4	99.1	542
Zone 5	97.7	98.2	98.6	89.6	28.9	97.8	557
Zone 6	96.6	98.9	97.7	87.5	48.9	97.7	88
Zone 7	97.2	99.1	99.1	90.3	52.3	99.5	216
Mother's age at birth							
< 20	99.0	99.5	98.6	95.3	53.8	99.0	212
20-34	97.0	99.0	99.0	92.3	48.4	98.6	1,920
35+	96.1	98.7	98.1	94.2	46.9	98.4	311
Birth order							
1	98.2	99.5	99.4	97.0	54.2	99.2	1,058
2-3	96.0	98.3	98.3	89.9	44.9	98.0	1,143
4-5	96.0	99.0	98.5	87.9	44.7	98.0	199
6+	100.0	100.0	100.0	88.4	32.6	100.0	43
Educational level of mother							
No schooling	94.1	97.6	97.6	83.5	34.1	97.6	85
Primary	96.6	98.5	97.9	85.7	38.7	98.2	328
Secondary	98.2	99.4	99.3	93.4	46.2	98.5	1,150
G.C.E. (O/L)	96.6	98.7	98.5	95.4	55.2	98.5	476
G.C.E. (A/L) & higher	94.8	98.5	98.8	95.8	59.2	99.2	404
Total	**97.0**	**98.9**	**98.9**	**92.8**	**48.7**	**98.6**	**2,443**

The check for venereal diseases is not conducted as a routine test on pregnant women in many parts of the country. It is as high as 71 percent in Colombo metropolitan area, has declined to 56 percent in other urban areas, dropped to 46 percent in the rural sector and is a low 26 percent in the estates. A marginal increase of recipients for VDRL is observed among young women below 20 years of age as compared to older women, while a distinct variation is visible between different educational groups, the proportion of recipients increasing with the rise in educational level.

Tetanus toxoid vaccination for pregnant women has almost reached the universal point and has covered virtually women in every nook and corner, as reflected by the high proportion of rural women (98%) and estate women (96%) immunized against neonatal tetanus (Table 8.9). Mothers over 35 years of age, and associated with birth orders of 4 and above have reported relatively lower coverage. However, it should be born in mind that only the vaccinations received by mothers, in connection to births that occurred during the 12 months preceding the survey were taken into consideration for the preparation of this estimate, and a fair proportion of older women may have been fully immunized, before this last pregnancy.

Malaria was no longer considered as a life threatening disease in Sri Lanka. But an increase in the morbidity and mortality figures was observed in the recent past, the victims mostly concentrated in the war stricken areas in the North and East. Even though the threat is relatively low in other areas of the country, health authorities thought it opportune to immunize pregnant women against this disease. However, the survey found that on the whole less than one fourth of mothers have received vaccination for Malaria. Relatively higher proportions of estate mothers, younger mothers, mothers with lower educational levels and mothers associated with lower order births, and those living in Malaria endemic areas have attempted to protect themselves from Malaria.

Table 8.9 Vaccination for Tetanus and Malaria

Percentage of births in the 12 months preceding the survey, whose mothers received vaccination for tetanus toxoid and malaria, by sector, zone, mother's age at birth, birth order and educational level of mother.

Background characteristic	Tetanus toxoid	Malaria	Total number of births
Sector			
Colombo metro	91.4	6.2	81
Other urban	95.2	17.5	63
Rural	98.0	24.8	493
Estate	96.3	34.1	82
Zone			
Zone 1	91.4	6.2	81
Zone 2	97.8	5.6	90
Zone 3	97.3	9.7	113
Zone 4	97.9	34.5	145
Zone 5	97.5	12.7	197
Zone 6	96.0	80.0	25
Zone 7	97.0	76.5	68
Mother's age at birth			
< 20	100.0	31.1	61
20-34	97.4	23.6	581
35+	88.3	13.0	77
Birth order			
1	99.4	25.0	345
2-3	96.5	21.8	312
4+	85.5	19.4	62
Educational level of mother			
No schooling	92.3	26.9	26
Primary	92.4	30.2	106
Secondary	98.5	25.5	326
G.C.E. (O/L)	96.3	19.3	135
G.C.E. (A/L) & higher	97.6	13.5	126
Total	**96.8**	**23.1**	**719**

8.5 Place of delivery

Having delivery at a health facility is a common practice among Sri Lankan women who are recipients of an extensive and widespread system of prenatal care. Women who register at a health facility or with a private doctor for antenatal checkups, usually get registered at a medical institution for her delivery.

Table 8.10 Place of delivery

Percent distribution of births in the 5 years* preceding the survey by sector, zone, mother's age at birth, birth order and educational level of mother according to place of delivery.

Background characteristic	Place of delivery				Total	Number of births
	Govt. hospital / Maternity home	Private nursing home	At home	Other		
Sector						
Colombo metro	86.3	13.7	0.0	0.0	100	372
Other urban	75.8	22.7	0.8	0.8	100	260
Rural	95.9	2.4	0.8	0.8	100	2,042
Estate	81.3	0.4	12.6	5.7	100	261
Zone						
Zone 1	86.3	13.7	0.0	0.0	100	372
Zone 2	92.6	7.4	0.0	0.0	100	422
Zone 3	94.2	4.2	0.2	1.3	100	449
Zone 4	92.8	4.0	2.2	1.0	100	624
Zone 5	90.7	3.7	2.7	2.8	100	698
Zone 6	98.0	0.0	1.0	1.0	100	101
Zone 7	90.3	3.0	6.3	0.4	100	269
Mother's age at birth						
< 20	94.5	1.4	3.6	0.4	100	274
20-34	91.6	5.6	1.5	1.2	100	2,327
35+	89.2	8.1	1.8	0.9	100	334
Birth order						
1	92.7	5.5	0.8	0.9	100	1,336
2-3	90.8	6.1	1.7	1.4	100	1,323
4-5	91.6	2.6	4.0	1.8	100	226
6+	79.6	2.0	18.4	0.0	100	50
Educational level of mother						
No schooling	81.2	1.7	12.8	4.3	100	116
Primary	90.9	0.7	6.4	2.0	100	440
Secondary	96.3	2.2	0.6	0.9	100	1,369
G.C.E. (O/L)	91.0	8.6	0.0	0.4	100	545
G.C.E. (A/L) & higher	82.0	17.0	0.0	1.1	100	465
Total	**91.6**	**5.5**	**1.8**	**1.1**	**100**	**2,935**

* Includes births in the period (0-60) months prior to the survey.

Government health facilities have served 92 percent of deliveries that had occurred during the five year period preceding the survey. In contrast, a relatively small percentage of births (6%) have taken place at private nursing homes, while a still lower number accounted by 2 percent of births have taken place at home (Table 8.10).

Mothers in the rural sector, young mothers below 20 years of age, mothers-to-be for the first time, and mothers with secondary education have shown higher preferences for government health institutions. Of those who have opted for private nursing homes, higher proportions are found among urban women, older women over 35 years of age, women who are associated with lower birth orders and women with post secondary education. Home deliveries are relatively high among mothers with the sixth birth or higher order births (18%), residing in estates (13%), and those with no formal education (13%).

8.6 Assistance during delivery

As in the case of institutional deliveries, the proportion of births attended by a professional health provider is also very high and exceeds 95 percent. Virtually all births were delivered with some assistance. An insignificant proportion of women accounted by 2 percent and 1 percent, have been reported to have received assistance from a traditional birth attendant, relative or neighbour respectively.

Medical doctors have attended to deliveries of a higher proportion of urban women, older women over 35 years of age, women with higher educational levels and women preparing for their first birth. A higher proportion of rural women, young mothers, mothers who have not received more than secondary education and mothers with higher order births, have seeked the assistance of government nurses and family health workers, during deliveries. A small group of estate women and women with no formal education have been assisted by traditional birth attendants or relatives.

Table 8.11 Assistance during delivery

Percent distribution of births in the 5 years* preceding the survey by sector, zone, mother's age at birth, birth order and educational level of mother according to type of assistance mother received during delivery.

Background characteristic	Attendant assisting during delivery**							Total	Number of births
	Doctor	Govt. nurse/ family health worker	Traditional birth attendant	Relative / Neighbour	Other	Not stated	No one		
Sector									
Colombo metro	57.8	41.1	0.8	0.3	0.0	0.0	0.0	100	372
Other urban	49.6	48.5	0.8	0.0	0.4	0.8	0.0	100	260
Rural	37.6	59.2	2.0	0.3	0.1	0.7	0.0	100	2,042
Estate	44.1	39.5	3.8	6.1	3.1	3.4	0.0	100	261
Zone									
Zone 1	57.8	41.1	0.8	0.3	0.0	0.0	0.0	100	372
Zone 2	50.4	48.4	1.2	0.0	0.0	0.0	0.0	100	422
Zone 3	36.3	61.2	0.9	0.2	0.0	1.3	0.0	100	449
Zone 4	33.9	61.4	2.9	1.1	0.0	0.6	0.0	100	624
Zone 5	44.5	49.1	2.9	1.3	0.3	2.0	0.0	100	698
Zone 6	49.0	49.0	0.0	1.0	0.0	1.0	0.0	100	101
Zone 7	24.9	67.3	2.6	1.5	3.0	0.4	0.4	100	269
Mother's age at birth									
< 20	31.4	64.2	1.1	2.2	0.4	0.4	0.4	100	274
20-34	41.4	54.6	2.2	0.6	0.3	0.8	0.0	100	2,327
35+	53.7	43.0	0.6	0.9	0.6	1.2	0.0	100	334
Birth order									
1	48.0	49.5	1.3	0.5	0.1	0.5	0.1	100	1,336
2-3	39.3	56.0	2.3	0.7	0.4	1.3	0.0	100	1,323
4-5	24.0	69.3	3.1	1.3	1.3	0.9	0.0	100	226
6+	24.0	64.0	6.0	4.0	2.0	0.0	0.0	100	50
Educational level of mother									
No schooling	33.0	49.6	6.1	5.2	4.3	1.7	0.0	100	116
Primary	33.8	56.9	3.8	2.5	1.1	1.8	0.0	100	440
Secondary	36.5	60.7	1.6	0.3	0.1	0.7	0.1	100	1,369
G.C.E. (O/L)	47.0	51.4	0.9	0.2	0.0	0.6	0.0	100	545
G.C.E. (A/L) & higher	61.1	37.2	1.1	0.0	0.0	0.6	0.0	100	465
Total	**41.8**	**54.2**	**1.9**	**0.7**	**0.4**	**0.9**	**0.0**	**100**	**2,935**

* Includes births in the period (0-60) months prior to the survey.

** If the respondent mentioned more than one attendant, only the most qualified attendant is considered.

8.7 Immunization coverage

Sri Lankan mothers are issued with a Child Health Development Record (CHDR) by the health authorities, at the time of birth of their child. Information related to the child's health and development are recorded in it including the regular vaccinations they receive. The survey found that 86 percent of children under five years of age were having a CHDR. The data collected in respect of immunization coverage at the survey, are from health cards provided by the mothers, and Table 8.12 presents estimates based on that category of the target group only.

The coverage for BCG is universal as in 1993. In the case of DPT, complete immunization cover has risen to 88 percent from 87 percent in 1993, the pattern remaining virtually the same in respect of sectors and the level of education of mother. Full immunization coverage from Polio and Measles are 88 percent and 81 percent, as against 86 percent and 80 percent respectively, in 1993.

Overall situation of vaccination received by under five children having a CHDR is noteworthy, with nearly 81 percent found to be fully immunized. It marks a rise of 2 percentage points compared to 1993. However, the percentage of children fully immunized show a decline for estate children and whose mothers have had no education.

It should be noted that complete immunization coverage is much higher and stands at 97 percent when infants are excluded from this cohort of under five children. Infants do not qualify for complete immunization coverage before they reach the ninth month, at which age the measles vaccination is prescribed. It is observed that 98 percent and 99 percent of children are fully covered against BCG, DPT and Polio before they complete their second year and third year in the lifecycle. However in the case of measles, the proportion immunized increases sharply, from 38 percent for infants under one year to 94 percent for children under two years, and rises gradually thereafter.

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Table 8.12 Vaccinations of children under 5 years of age

Percentage of children under 5 years of age with a health card seen by the interviewer, and among children with a health card seen, percent who have received specific immunizations and percent who are fully immunized by sector, zone, child's age in months and educational level of mother.

Background characteristic		Children with a card		Out of the children under 5 years of age with a health card and % immunized								Full coverage
				BCG	DPT			Polio			Measles	
		No.	%		1	2	3/4	1	2	3/4		
Sector												
Colombo metro	1993	337	80.3	100.0	3.2	4.0	87.0	3.2	4.0	87.0	79.9	79.4
	2000	**308**	**86.8**	**100.0**	**5.2**	**3.9**	**87.7**	**5.2**	**3.9**	**88.0**	**80.5**	**79.9**
Other Urban	1993	251	88.8	100.0	6.5	3.3	82.1	8.3	3.3	79.5	75.8	72.6
	2000	**214**	**86.5**	**100.0**	**2.8**	**3.7**	**88.8**	**2.8**	**6.1**	**86.9**	**82.2**	**82.2**
Rural	1993	2,317	84.2	100.0	3.4	4.0	87.0	3.4	4.0	86.9	80.1	79.6
	2000	**1,690**	**87.4**	**99.9**	**3.7**	**3.1**	**88.6**	**4.0**	**3.2**	**88.2**	**81.7**	**81.5**
Estate	1993	105	51.1	100.0	2.8	6.4	88.2	2.8	6.4	87.7	83.0	80.4
	2000	**161**	**66.3**	**99.4**	**3.1**	**6.2**	**85.7**	**5.6**	**6.8**	**82.0**	**75.8**	**71.4**
Zone												
Zone 1	1993	337	80.3	100.0	3.2	4.0	87.0	3.2	4.0	87.0	79.9	79.4
	2000	**308**	**86.8**	**100.0**	**5.2**	**3.9**	**87.7**	**5.2**	**3.9**	**88.0**	**80.5**	**79.9**
Zone 2	1993	488	91.7	100.0	3.6	3.9	86.0	3.6	4.2	85.7	78.9	78.3
	2000	**360**	**88.5**	**100.0**	**3.6**	**2.2**	**90.0**	**3.6**	**2.2**	**90.0**	**83.9**	**83.3**
Zone 3	1993	431	84.8	100.0	1.8	3.4	88.2	1.8	3.7	87.9	81.0	81.0
	2000	**366**	**87.1**	**99.7**	**4.4**	**3.6**	**87.4**	**4.4**	**4.1**	**87.4**	**82.2**	**82.2**
Zone 4	1993	614	82.7	100.0	3.0	4.6	87.0	3.0	4.4	87.2	80.2	79.1
	2000	**497**	**85.2**	**100.0**	**3.6**	**3.2**	**88.3**	**4.0**	**3.2**	**88.5**	**81.7**	**80.5**
Zone 5	1993	557	74.3	100.0	5.6	3.5	85.5	6.5	3.5	84.2	77.9	76.2
	2000	**534**	**82.9**	**100.0**	**3.8**	**3.4**	**86.9**	**3.8**	**4.5**	**85.7**	**78.4**	**78.0**
Zone 6	1993	221	83.3	100.0	4.5	5.0	84.4	4.2	5.0	84.4	80.1	79.3
	2000	**85**	**88.5**	**100.0**	**5.9**	**3.5**	**87.1**	**5.9**	**3.5**	**87.1**	**80.0**	**80.0**
Zone 7	1993	362	82.0	100.0	3.5	3.7	87.6	3.5	4.0	87.2	82.2	81.4
	2000	**223**	**87.5**	**100.0**	**3.6**	**5.8**	**87.4**	**3.6**	**6.3**	**87.4**	**82.1**	**81.6**

Recommended age for vaccinations :

BCG – Soon after birth
Measles – 9 months

DPT 1 / Polio 1 – 3 months
DPT 2 / Polio 2 – 5 months
DPT 3 / Polio 3 – 7 months
DPT 4 / Polio 4 – 18 months

Table 8.12 Vaccinations of children under 5 years of age(continued)

Percentage of children under 5 years of age with a health card seen by the interviewer, and among children with a health card seen, percent who have received specific immunizations and percent who are fully immunized by sector, zone, child's age in months and educational level of mother.

Background characteristic		Children with a health card		Out of the children under 5 years of age with a health card and % immunized								Full coverage
				BCG	DPT			Polio			Measles	
		No.	%		1	2	3/4	1	2	3/4		
Child's age in months												
01 – 05	1993	284	87.7	100.0	32.1	9.6	0.4	31.9	10.0	0.0	0.0	0.0
	2000	**235**	**88.0**	**100.0**	**38.7**	**19.1**	**0.0**	**40.0**	**17.9**	**0.0**	**0.0**	**0.0**
06 – 11	1993	349	86.4	100.0	4.3	24.2	71.2	4.3	24.9	70.5	25.6	25.6
	2000	**259**	**90.9**	**100.0**	**0.4**	**13.1**	**86.6**	**0.4**	**15.1**	**84.6**	**37.8**	**37.8**
12 – 23	1993	653	84.6	100.0	0.2	0.6	99.3	0.2	0.6	99.3	95.5	95.0
	2000	**504**	**88.6**	**99.8**	**0.6**	**0.4**	**98.0**	**0.2**	**1.4**	**98.2**	**94.2**	**93.5**
24 – 35	1993	566	81.6	100.0	0.0	0.2	99.0	0.3	0.2	98.6	97.5	95.9
	2000	**468**	**84.6**	**100.0**	**0.2**	**0.0**	**99.8**	**0.2**	**0.4**	**99.1**	**99.1**	**98.7**
36 - 59	1993	1,157	79.0	100.0	0.0	0.3	99.3	0.3	0.2	99.0	98.4	97.3
	2000	**907**	**83.7**	**99.9**	**0.0**	**0.1**	**99.1**	**0.0**	**0.1**	**99.3**	**97.8**	**97.2**
Educational level of mother												
No Schooling	1993	180	67.7	100.0	3.3	5.7	86.9	3.3	5.7	86.6	83.0	81.5
	2000	**79**	**71.2**	**100.0**	**3.8**	**5.1**	**86.1**	**3.8**	**5.1**	**88.6**	**75.9**	**75.9**
Primary	1993	658	81.2	100.0	3.4	3.4	86.9	3.3	3.5	86.7	82.1	81.3
	2000	**339**	**85.0**	**99.7**	**3.2**	**3.5**	**87.9**	**2.9**	**4.1**	**85.8**	**83.8**	**81.4**
Secondary	1993	1,212	84.7	100.0	3.4	3.5	87.6	3.8	3.8	86.8	79.6	78.6
	2000	**1,128**	**86.9**	**100.0**	**4.0**	**2.8**	**88.9**	**4.2**	**3.1**	**89.1**	**81.2**	**81.1**
G.C.E. (O/L)	**2000**	**448**	**87.2**	**100.0**	**3.8**	**4.7**	**88.8**	**4.0**	**4.5**	**88.4**	**82.8**	**82.4**
G.C.E. (A/L) & higher	**2000**	**379**	**86.5**	**99.7**	**5.3**	**3.4**	**85.0**	**5.3**	**4.5**	**84.2**	**77.6**	**77.3**
More than secondary	1993	959	83.3	100.0	4.1	4.6	85.2	4.1	4.5	85.3	78.0	77.5
Total	**1993**	**3,009**	**82.3**	**100.0**	**3.6**	**4.0**	**86.6**	**3.7**	**4.0**	**86.3**	**79.9**	**79.0**
	2000	**2,373**	**86.0**	**99.9**	**4.0**	**3.5**	**87.9**	**4.1**	**3.8**	**87.7**	**81.2**	**80.7**

Recommended age for vaccinations :

BCG – Soon after birth
Measles – 9 months

DPT 1 / Polio 1 – 3 months
DPT 2 / Polio 2 – 5 months
DPT 3 / Polio 3 – 7 months
DPT 4 / Polio 4 – 18 months

Table 8.13 presents immunization cover in respect of children in their second year of life, having a CHDR. 94 percent of children in their second year of life, have been fully covered against six communicable diseases. Full immunization cover is lowest in the estate sector (86%) and among children whose mothers have never attended school (81%) and in zone 5 (86.8%).

Table 8.13 Vaccinations of children aged (12-23) months

Among all children (12-23) months of age, the percentage with a health card and among children with a health card, the percentage who have received specific immunizations, and the percentage fully immunized (BCG, DPT, Polio and Measles) by sector, zone and educational level of mother.

Background characteristic		Children with a health card		Percent immunized with								
				BCG	DPT			Polio			Measles	Full coverage
		No.	%		1	2	3+4	1	2	3+4		
Sector												
Colombo metro	1993	79	85.5	100.0	1.1	0.0	98.9	1.1	0.0	98.9	94.4	94.4
	2000	**57**	**93.4**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**91.2**	**91.2**
Other urban	1993	44	80.6	100.0	0.0	0.0	100.0	0.0	0.0	100.0	96.3	96.3
	2000	**56**	**90.3**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**1.8**	**98.2**	**94.6**	**94.6**
Rural	1993	508	87.0	100.0	0.0	0.5	99.5	0.0	0.5	99.4	96.1	95.5
	2000	**355**	**90.8**	**99.7**	**0.0**	**0.3**	**99.4**	**0.0**	**1.4**	**98.3**	**95.5**	**94.4**
Estate	1993	22	53.5	100.0	0.0	4.9	95.2	0.0	4.9	95.1	84.7	82.3
	2000	**36**	**78.3**	**100.0**	**0.0**	**2.8**	**97.2**	**2.8**	**0.0**	**94.4**	**86.1**	**86.1**
Zone												
Zone 1	1993	79	85.5	100.0	1.1	0.0	98.9	1.1	0.0	98.9	94.4	94.4
	2000	**57**	**93.4**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**91.2**	**91.2**
Zone 2	1993	94	95.5	100.0	0.0	0.0	100.0	0.0	0.0	100.0	98.4	96.9
	2000	**72**	**90.0**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**100.0**	**100.0**
Zone 3	1993	100	88.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	97.7	97.7
	2000	**89**	**90.8**	**97.8**	**0.0**	**0.0**	**97.8**	**0.0**	**0.0**	**97.8**	**97.8**	**97.8**
Zone 4	1993	120	80.9	100.0	0.0	1.4	98.6	0.0	1.4	98.6	94.4	94.4
	2000	**124**	**96.1**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**91.1**	**91.1**
Zone 5	1993	123	78.9	100.0	0.0	0.9	99.1	0.0	0.9	99.1	93.6	93.1
	2000	**106**	**83.5**	**100.0**	**0.0**	**0.9**	**99.0**	**0.9**	**2.8**	**95.3**	**90.6**	**86.8**
Zone 6	1993	42	82.4	100.0	0.0	0.4	99.6	0.0	0.4	99.7	95.5	92.6
	2000	**15**	**88.2**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**100.0**	**100.0**
Zone 7	1993	94	84.6	100.0	0.2	0.9	98.9	0.2	0.9	98.8	94.9	94.8
	2000	**41**	**83.7**	**100.0**	**0.0**	**2.4**	**97.6**	**0.0**	**4.9**	**95.1**	**97.6**	**95.1**
Educational level of mother												
No schooling	1993	43	78.3	100.0	0.3	3.6	96.0	0.3	3.6	96.0	90.0	88.7
	2000	**16**	**69.6**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**81.2**	**81.2**
Primary	1993	129	84.3	100.0	0.7	1.7	97.6	0.7	1.7	97.6	94.6	94.2
	2000	**58**	**96.7**	**100.0**	**0.0**	**1.7**	**98.3**	**0.0**	**3.4**	**94.8**	**93.1**	**91.4**
Secondary	1993	257	84.8	100.0	0.0	0.0	100.0	0.0	0.0	100.0	95.6	95.3
	2000	**247**	**90.8**	**100.0**	**0.4**	**0.4**	**99.2**	**0.4**	**1.6**	**98.0**	**94.3**	**92.7**
G.C.E. (O/L)	**2000**	**94**	**87.2**	**100.0**	**0.0**	**0.0**	**100.0**	**0.0**	**0.0**	**100.0**	**94.6**	**94.6**
G.C.E. (A/L) & higher	**2000**	**89**	**88.9**	**98.9**	**0.0**	**0.0**	**98.9**	**0.0**	**0.0**	**98.9**	**96.6**	**96.6**
More than secondary	1993	223	85.9	100.0	0.0	0.0	100.0	0.0	0.0	100.0	97.0	96.3
Total	**1993**	**653**	**84.6**	**100.0**	**0.2**	**0.6**	**99.3**	**0.2**	**0.6**	**99.3**	**95.5**	**95.0**
	2000	**504**	**88.6**	**99.8**	**0.6**	**0.4**	**98.0**	**0.2**	**1.4**	**98.2**	**94.2**	**93.5**

Similar to the pattern observed for under five children, the coverage for BCG is universal for babies below 2 years. Complete cover for DPT is higher for this younger age group (98%) compared to children below five years (88%), but has dropped by one percentage point against the estimate of 99 percent in 1993. Full immunization cover from Polio and Measles also follow the same trend, depicting a marked improvement in the younger age group of children, but at the same time showing a marginal drop of one percentage point compared to 1993.

8.8 Prevalence of diarrhoea

Diarrhoeal diseases are still very common among children, and has been recognized as one of the main factors affecting the growth and development in early childhood years. Mothers with children under five years of age at the time of survey, were inquired about the prevalence of this disease within the last 24 hours, and within the past fortnight, in respect of each eligible child. The results are presented in Table 8.14.

The survey data indicates that 3 percent of children under 5 years of age, had suffered from diarrhoeal diseases, during the 24 hours prior to the interviews, and 6.7 percent in the past 2 weeks. Both these proportions are much higher than the corresponding figures reported in 1993. It should be mentioned that questions were modified in the present survey in order to capture all cases of diarrhoea. Accordingly, mothers were asked whether the child had watery motions several times a day in an unusual manner, instead of asking whether the child had suffered from dysentery in the two reference periods, as was done in 1993. As expected more mothers reported cases of abnormal bowel movements, although many would not have liked to identify them as dysentery cases.

Table 8.14 Diarrhoeal diseases

Among all children under 5 years of age*, the percent having an episode of diarrhoea in the 24 hours or two weeks preceding the survey by sector, zone, child's age in months, sex and educational level of mother.

Background characteristic	Percent of children with diarrhoea in past				Number of children
	24 hours		2 weeks**		
	2000	1993	2000	1993	2000
Sector					
Colombo metro	2.5	0.6	5.4	3.3	355
Other urban	4.1	1.9	4.9	4.3	243
Rural	2.7	1.9	7.1	5.2	1,923
Estate	4.7	3.7	6.7	7.2	239
Zone					
Zone 1	2.5	0.6	5.4	3.3	355
Zone 2	3.2	1.9	9.3	5.8	407
Zone 3	2.2	1.6	4.6	5.4	420
Zone 4	4.0	1.1	9.3	4.0	583
Zone 5	2.8	2.5	5.0	4.1	644
Zone 6	5.3	2.7	9.4	6.3	96
Zone 7	2.4	2.7	4.7	7.6	255
Child's age in months					
01-05	3.4	4.4	4.2	7.1	267
06-11	7.4	4.3	12.6	10.8	285
12-23	3.2	2.6	8.0	7.9	569
24-35	2.7	0.5	6.3	3.4	553
36-59	1.7	0.8	5.2	2.2	1,086
Sex					
Male	2.7	1.7	7.0	5.5	1,432
Female	3.3	1.9	6.4	4.4	1,328
Educational level of mother					
No schooling	2.7	4.0	6.4	6.8	111
Primary	5.3	1.6	7.6	5.2	399
Secondary	2.3	1.3	6.4	4.6	1,295
G.C.E. (O/L)	3.9	2.2	8.2	4.9	512
G.C.E. (A/L) & higher	2.3		5.0		440
Total	**3.0**	**1.8**	**6.7**	**5.0**	**2,760**

Note: Missing information on educational level of mother is not presented separately.
* Includes births in the period (1-59) months preceding the survey.
** Includes cases reported for 24 hours period.

Prevalence of diarrhoea is highest among children in the (6-11) months age group, when solids are introduced to the daily diet. It is estimated as 7.4 percent and 12.6 percent for the 24 hour reference period and 2 weeks reference period respectively. Prevalence rates decline with increasing age, similar to the trend seen in the survey results of 1987 and 1993. However, it is worthwhile noting that the incidence of diarrhoeal diseases has dropped remarkably from 4.4 percent to 3.4 percent for the 24 hour reference period, and from 7.1 percent to 4.2 percent for the 2 weeks reference period, in respect of infants below 6 months. Probably, the promotion of exclusive breastfeeding may have been a contributory factor in this achievement.

Disaggregation by sector indicates that children in rural areas and the estates, are more vulnerable to the disease than those in the urban sector. No discernible pattern is observed between the education of mother, and prevalence of diarrhoea in children under 5 years of age.

8.9 Treatment for diarrhoea

Diarrhoeal diseases could be life threatening if the victim is not administered with proper treatment to avoid the risk of dehydration. The survey inquired about the many types of treatment provided to children below five years of age, suffering from diarrhoeal diseases and Table 8.15 presents the information collected from mothers.

Overall, 72 percent of children below 5 years of age, suffering from diarrhoea in the two weeks prior to the survey, have been taken to a medical facility. A little more than one third of diarrhoeal cases (36 percent) were provided with oral rehydration salt preparation. These two categories are not mutually exclusive and both types of treatment may have been provided to many a patient. Survey findings reveal that one out of every four children sick with diarrhoea in the two weeks preceding the survey, had not been given either treatment, while relatively lower proportions are noted in the rural sector.

Table 8.15 Treatment for diarrhoea

Among children under 5 yrs. of age* who had diarrhoea in the past two weeks, the percentage consulting a medical facility and the percentage treated with ORS packets, as reported by the mother, according to sector, zone, child's age in months, sex and educational level of mother.

Background characteristic	Consulted a medical facility	Use ORS packets	Neither treatment given		Number of cases
			Total	Offered more fluids	
Sector					
Colombo metro	63.2	36.8	36.8	-	19
Other urban	66.7	50.0	25.0	-	12
Rural	76.6	36.5	20.6	3.7	136
Estate	43.8	25.0	43.8	-	16
Zone					
Zone 1	63.2	36.8	36.8	-	19
Zone 2	78.9	42.1	21.0	5.3	38
Zone 3	63.2	31.6	31.6	5.3	19
Zone 4	70.4	33.3	25.9	-	54
Zone 5	81.2	40.6	12.5	-	32
Zone 6	(55.6)	(11.1)	(33.3)	(11.1)	9
Zone 7	66.7	41.7	16.7	8.3	12
Child's age in months					
01-05	72.7	9.1	18.2	9.1	11
06-11	61.1	25.0	27.8	-	36
12-23	82.2	46.7	17.8	0.0	45
24-35	54.3	34.3	42.8	5.7	35
36-59	80.4	41.1	14.3	3.6	56
Sex					
Male	71.0	32.0	26.3	0.0	99
Female	71.4	40.5	21.4	4.8	84
Educational level of mother					
No schooling	(57.1)	(14.3)	(42.8)	-	7
Primary	56.7	20.0	30.0	3.3	30
Secondary	78.0	46.3	20.7	1.2	82
G.C.E (O/L)	76.2	33.3	21.4	2.4	42
G.C.E (A/L) & higher	63.6	27.3	27.3	9.1	22
Total	**71.6**	**36.1**	**24.0**	**2.7**	**183**

Note: Figures within parentheses are based on fewer than 10 cases
* Includes births in the period (1-59) months preceding the survey.

8.10 Feeding practices during diarrhoea

No significant change in the breastfeeding pattern is observed, for children who were reported to be still breastfeeding at the time of the survey, and who had been suffering from an episode of diarrhoea within the fortnight preceding the interview (Table 8.16). The vast majority of 88 percent of the victims were continued with breastfeeding without any change, while 6 percent of children were given reduced quantities. Only 4 percent were not given breast milk at all while they were sick.

Table 8.16 Breastfeeding in children with diarrhoea

Pattern of breastfeeding in children with diarrhoea, (for children who had diarrhoea 2 weeks preceding the survey) by sector, age of mother and educational level of mother.

Background characteristic	Number of children with diarrhoea	Pattern of breastfeeding			
		Stopped completely	Continued	Reduced	Not stated
Sector					
Colombo metro	11	8.3	83.3	8.3	0.0
Other urban	7	0.0	(100.0)	0.0	0.0
Rural	90	3.3	87.8	6.7	2.2
Estate	5	0.0	(100.0)	0.0	0.0
Age of mother					
15-19	5	0.0	(100.0)	0.0	0.0
20-24	31	0.0	93.5	6.4	0.0
25-29	30	6.7	76.7	10.0	6.7
30-34	33	0.0	90.9	6.1	3.0
35+	14	14.3	85.7	0.0	0.0
Educational level of mother					
Primary	1	0.0	(100.0)	0.0	0.0
Secondary	13	7.7	69.2	15.4	7.7
G.C.E. (O/L)	46	2.2	89.1	8.7	0.0
G.C.E. (A/L) & higher	53	3.7	88.9	3.7	3.7
Total	**113**	**3.5**	**88.5**	**6.2**	**1.8**

Note: 1. Figures within parentheses are based on fewer than 10 cases.
2. Only the last birth below 5 yrs. were considered for the computation of this table.

The number of sample cases are not sufficient to draw any reasonable conclusion about sectoral differentials, or affect of other related variables.

According to Table 8.17, one third of mothers knew that they should give more liquid food to their young children below five years, when they are sick with diarrhoeal diseases. This practice is least likely among mothers in the estate sector (6%), and most evident among older mothers over 35 years of age (57%). Nearly 40 percent of mothers believe in not making any changes to the liquid quantities normally given to their children. 16 percent of mothers are likely to make a slight reduction in the quantities offered.

Table 8.17 Supply of liquid food to children with diarrhoea

Pattern of supply of liquid food to children (< 5yrs.) with diarrhoea 2 weeks preceding the survey by sector, age of mother and educational level of mother.

Background characteristic	Substantial reduction	Slight reduction	No change	More than usual	Not given at all	Not stated	Total	Number of cases
Sector								
Colombo metro	0.0	35.0	35.0	20.0	*	5.0	100	19
Other urban	0.0	27.3	45.4	27.3	0.0	0.0	100	12
Rural	0.0	12.4	38.0	39.4	4.4	5.8	100	136
Estate	0.0	23.5	41.2	5.9	0.0	29.4	100	16
Age of mother								
15-19	(0.0)	(16.7)	(16.7)	(66.7)	(0.0)	(0.0)	100	6
20-24	0.0	23.9	34.8	28.3	8.7	4.3	100	45
25-29	0.0	12.5	41.7	33.3	6.2	6.2	100	47
30-34	0.0	17.8	48.2	23.2	0.0	10.7	100	57
35+	0.0	10.7	21.4	57.1	0.0	10.7	100	28
Educational level of mother								
No schooling	(0.0)	(57.1)	(28.6)	(14.3)	(0.0)	(0.0)	100	7
Primary	0.0	6.9	55.2	17.2	0.0	20.7	100	30
Secondary	0.0	20.2	28.6	41.7	4.8	4.8	100	82
G.C.E.(O/L)	0.0	11.9	40.5	40.5	4.8	2.4	100	42
G.C.E.(A/L) & higher	0.0	13.0	52.2	21.7	*	8.7	100	22
Total	**0.0**	**16.4**	**38.8**	**33.3**	**3.8**	**7.6**	**100**	**183**

Note: Figures within parentheses are based on fewer than 10 cases.
* Only 1 case.

Nearly 4 percent of mothers have reported to have not offered liquid food to their sick children. Further investigation of this category has revealed that the sick children had been given breast milk instead.

Table 8.18 provides views of mothers on the requirement of solid food for diarrhoea cases. One fourth of mothers of children suffering from diarrhoea, do not believe that it is necessary to change the usual intake of solid food, during the period of illness. Estate mothers and older mothers are more inclined towards this view.

Table 8.18 Supply of solid food to children with diarrhoea

Pattern of supply of solid food to children (< 5yrs.) with diarrhoea 2 weeks preceding the survey by sector, age of mother and educational level of mother.

Background characteristic	Substantial reduction	Slight reduction	No change	More than usual	Not given at all	Not stated	Total	Number of cases
Sector								
Colombo metro	15.0	40.0	30.0	0.0	10.0	5.0	100	19
Other urban	50.0	25.0	25.0	0.0	0.0	0.0	100	12
Rural	14.1	39.2	23.7	3.0	14.1	5.9	100	136
Estate	6.7	13.3	33.3	0.0	20.0	26.7	100	16
Age of mother								
15-19	(33.3)	(33.3)	(16.7)	(0.0)	(16.7)	(0.0)	100	6
20-24	15.6	51.1	15.6	0.0	13.3	4.4	100	45
25-29	16.7	35.4	25.0	0.0	18.8	4.2	100	47
30-34	19.3	31.6	28.1	0.0	10.5	10.5	100	57
35+	4.0	28.0	36.0	12.0	8.0	12.0	100	28
Educational level of mother								
No schooling	(14.3)	(57.1)	(28.6)	(0.0)	(0.0)	(0.0)	100	7
Primary	6.4	19.4	38.7	0.0	16.1	19.4	100	30
Secondary	14.6	43.9	19.5	2.4	14.6	4.9	100	82
G.C.E.(O/L)	22.5	40.0	20.0	5.0	10.0	2.5	100	42
G.C.E.(A/L) & higher	18.2	18.2	40.9	0.0	13.6	9.1	100	22
Total	**16.0**	**36.5**	**24.9**	**2.2**	**13.2**	**7.2**	**100**	**183**

Note: Figures within parentheses are based on fewer than 10 cases.

Apparently, half of the mothers are of the opinion that children sick with diarrhoea should be given lesser amounts of solid food, while 30 percent of mothers in this group feel that a substantial reduction of solid food is advisable until the child recovers. More urban mothers and young mothers believe in cutting down the food intake. Another 13 percent of mothers have very rigid notions about the supply of solids to diarrhoea cases, because they do not believe in giving solid food at all. This view is most prominent among estate mothers, younger mothers and mothers with lower educational attainment. A mere 2 percent of mothers are likely to offer more solid food to their sick children below five years of age, the numbers are mainly confined to mothers over 35 years of age.

Chapter 9 : Breast-feeding Patterns and Nutrition

Gamini de Silva

It has become evident over the years that the most important period for a child in its growth is the few months immediately after birth. Nutrition intake at the first two years virtually determines the future growth of the child. Breast-feeding frequencies, levels and patterns are the crucial determinants of the nutritional level of the children. Exclusive breast-feeding in the first four months after the birth of a child has been identified as the utmost factor contributing to the health and well being of a child. It is interesting to notice that the mothers of Sri Lanka have realized the importance of exclusive breast-feeding of their children and acted accordingly. Continued breast-feeding for a longer period will not only improve the nutritional status of the child but also prevent the mother from being exposed to the risk of unwanted pregnancies. Supplementation of food after four month of age of the child is also an important step towards improving the nutritional level of the child.

In the survey conducted in the year 2000, breast-feeding patterns and nutritional levels were obtained from children who were less than five years old. The main variables of interest were the extent and the degree of breast-feeding, type of supplementation given to child, demographic characteristics of the mother and other variables indicating health service and regional disparities. This chapter also provides information on the nutritional status of children based on the mean birth weight, weight for height, weight for age and height for age compared by the characteristics of the mother. Total number of children in the under five-year age group was 2,576 and the children under three year age group was 1,743.

9.1 Nature and extent of breast-feeding

Table 9.1 shows that the percentage ever breastfed among the children under five years for 2000 was 98.0 percent which equals the figure for 1993. There are no considerable differences in the percentage value ever breastfed across many variables such as sector, zone, education of mother, assistance at and place of delivery except for a few cases where place and assistance of delivery were not stated. 13 children out of a 26 whose place of delivery were not stated, had never been breastfed (50%).

Since nearly 97 percent of the births have taken place in locations with health facilities and by medically trained personnel, a comparison between other places of delivery or other assistance at delivery is neither warranted nor significant.

The comparison between the years 1993 and 2000 on percentages of youngest living children who were exclusively breastfed according to different age groups are as follows:

	1993	*2000*
Less than 1 year	34.5	83.9
1 – 3 years	17.4	65.0
3 – 5 years	5.0	8.4

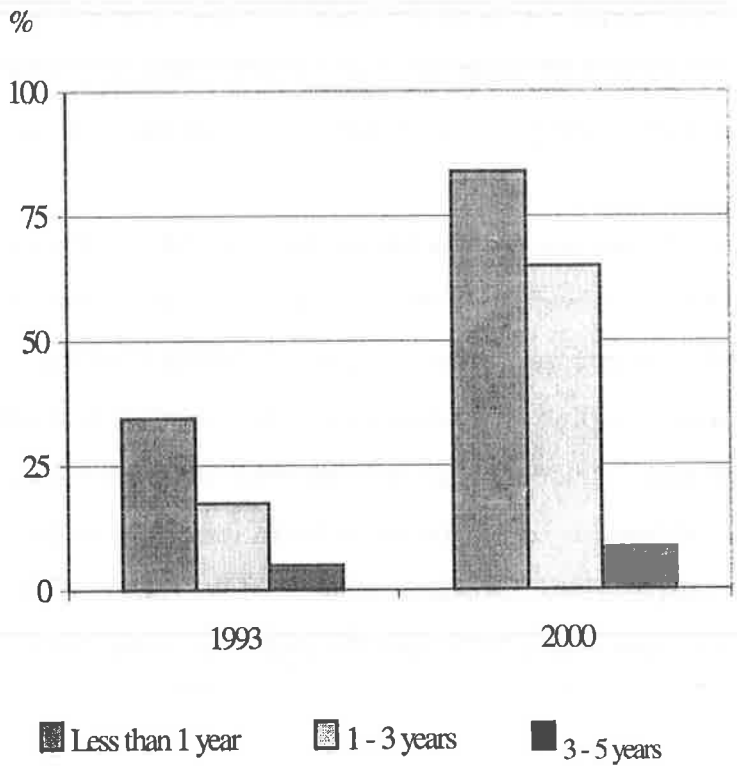

Table 9.1 Initial breast-feeding

Percentage of all children born in the last five years who were ever breastfed and children who received colostrum by sector, zone, sex of child, educational level of mother, assistance at delivery and place of delivery.

Background characteristic	Among all children below 5 yrs. of age		
	Percent ever breastfed	Percent received colostrum	Number of births
Sector			
Colombo metro	98.9	83.1	362
Other urban	96.8	78.1	251
Rural	98.1	77.0	1,968
Estate	96.4	65.7	251
Zone			
Zone 1	98.9	83.1	362
Zone 2	96.8	83.6	414
Zone 3	97.7	70.9	433
Zone 4	98.2	78.4	596
Zone 5	98.0	75.1	669
Zone 6	98.0	70.4	98
Zone 7	98.5	71.2	260
Sex of child			
Male	98.3	78.6	1,480
Female	97.6	75.0	1,352
Educational level of mother			
No schooling	95.5	65.8	111
Primary	98.0	65.8	412
Secondary	98.7	74.0	1,326
G.C.E. (O/L)	97.0	82.6	529
G.C.E. (A/L) & higher	97.8	91.8	451
Assistance at delivery			
Medically trained	98.4	77.8	2,727
Traditional midwife	98.1	56.6	53
Other or none	97.0	51.5	33
Not stated	(31.6)	(31.6)	19
Place of delivery			
Health facility	98.4	77.6	2,760
At home	95.6	47.8	46
Not stated	50.0	46.2	26
Total	**98.0**	**76.8**	**2,832**

Note: 1. Figures within parentheses indicate that less than 10 cases are used for the computations.
2. Missing information on educational level is not presented separately.

9.2 Colostrum

Colostrum is the first breast milk of the mother after a delivery of a child. It is believed that colostrum is beneficial to infants due to its high content of antibodies which could prevent children from several infectious diseases.

Percent colostrum received has risen upto a level of 76.8 percent in the year 2000 as given in Table 9.1 from a level of 54.9 percent in 1993. The most improvement in the level is recorded in the estate sector (from 19.7% in 1993 to 65.7% in 2000). Increase in the category of children of mothers with no schooling also agrees with the above fact which represented an increase from 33.7 percent in 1993 to 65.8 percent in 2000. It varies across all above variables. The percentage is highest in the Colombo metro sector with a figure of 83.1 percent while the lowest is for the estate sector with a figure of 65.7 percent. The two values for other urban and rural sectors are 78.1 percent and 77 percent respectively. The variable has also shown a similar correlation with the level of education of the mother, ranging from a highest value of 91.8 percent for the mothers with A/L and higher qualifications, to a value of 65.8 percent for the mothers with either no education or with primary education only.

Information on breast-feeding were collected from the youngest child only in respective families. Though there were elder children being breastfed concurrently with the youngest child, the information collected was restricted to the youngest child only. The following sections and tables refer to the 'youngest' child according to the above identification.

9.3 Exclusive breast-feeding

It can be seen that there has been a remarkable improvement in exclusive breast-feeding over the years. It is promising to notice that the mothers have realized the importance of breast-feeding exclusively.

Table 9.2 Breast-feeding Status

Percent distribution of youngest living children (< 3yrs. of age) by child's age in months, according to breast-feeding status.

Age in months	Percentage of living children who are				Total	Unweighted number of youngest living children below 3yrs.
	Currently not breast-feeding	Exclusively breastfed	Breast-feeding and given			
			Plain water only	Supplements*		
0-1	1.8	83.9	5.4	8.9	100	115
2-3	2.0	65.0	8.0	24.9	100	102
4-5	3.7	8.4	5.6	82.2	100	110
6-7	3.0	0.0	0.0	97.0	100	96
8-9	6.6	0.0	1.1	92.3	100	102
10-11	6.7	0.0	0.0	93.2	100	87
12-13	13.0	0.0	1.0	86.0	100	100
14-15	9.3	0.0	2.3	88.4	100	88
16-17	18.9	0.0	0.0	81.1	100	93
18-19	27.1	0.0	0.0	72.8	100	70
20-21	24.4	0.0	1.2	74.4	100	76
22-23	29.1	0.0	0.0	70.9	100	92
24-25	23.8	0.0	0.0	76.2	100	90
26-27	46.0	0.0	0.0	53.9	100	76
28-29	32.9	0.0	0.0	67.1	100	84
30-31	43.4	0.0	0.0	56.6	100	86
32-33	47.8	0.0	0.0	52.2	100	66
34-35	61.9	0.0	0.0	38.1	100	89

Note: 1. Breast-feeding status refers to the preceding 24 hours
2. Only the last child was considered for the computations
* Milk powder and other animal milk included.

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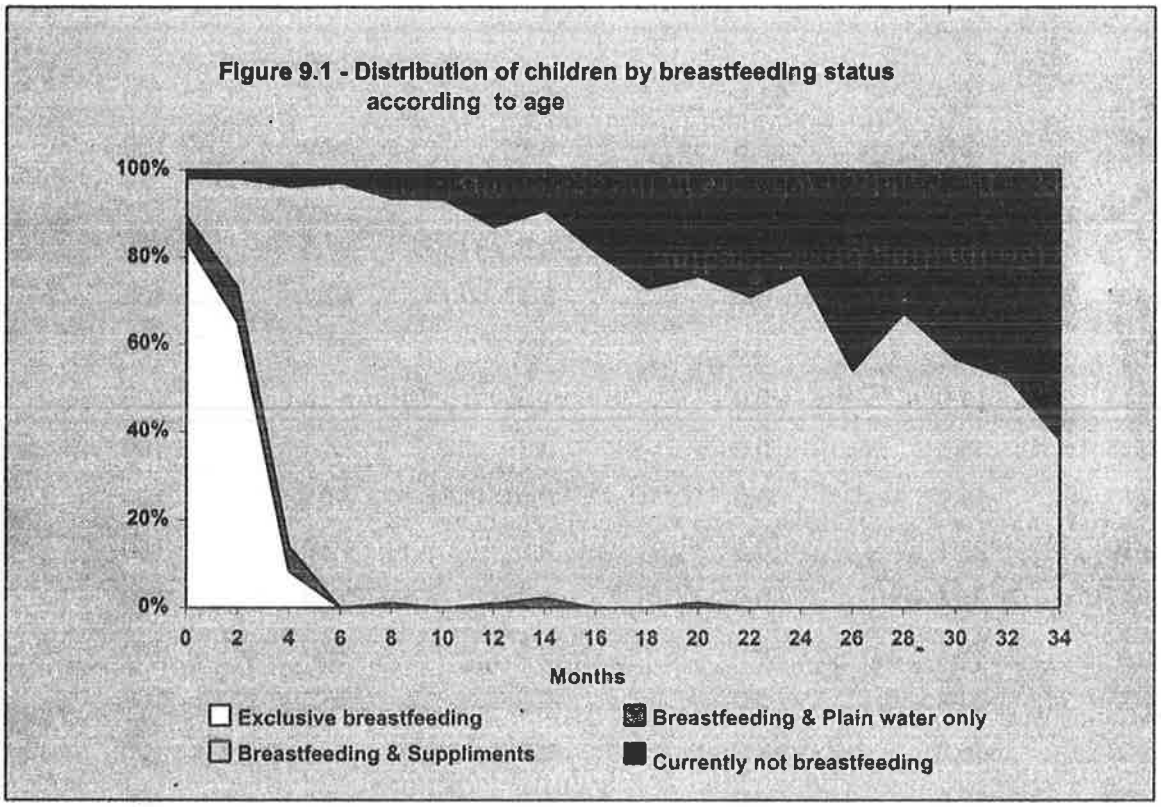
Others were breastfed either with water only or with other supplements. As seen in Table 9.2, gradual increase in the non-breast-feeding category can be observed over the ages until 36 months where nearly 62 percent are not breastfed. The mean percentage of currently not breast-feeding in the age group (0-36) months stands at 20.5 percent (see Figure 9.1). The sample distribution of 1,623 children at two year age groups was close to a uniform distribution, slightly skewed to the right.



9.4 Type of supplementation

Information on three type of supplements were collected in the survey. Other milk, other liquids and solids (marshy foods) were those supplements. An increase in the percentages of children under 3 months of age on supplementation with solids can be observed according to Table 9.3. In 1993, the percentage was negligible, however, in 2000 percentage of 2.7 and 5.7 have been recorded for age groups (0-1) and (2-3) respectively. No other significant differences can be observed between the two years.

Table 9.3 Type of supplementation

Percentage of youngest breast-feeding children who are receiving specific types of food supplementation, and the percentage who are using a bottle with a nipple by age in months.

Age in months	Percentage of breast-feeding children who are: Receiving supplement: Other milk	Other Liquid*	Solid / mushy food	Using a bottle with a nipple	Unweighted number of children currently breast-feeding
0-1	8.2	10.9	2.7	5.4	114
2-3	17.3	20.4	5.1	11.2	99
4-5	20.4	89.3	73.8	19.4	105
6-7	36.4	97.0	93.9	40.4	93
8-9	36.5	100.0	97.6	38.8	95
10-11	47.0	96.4	96.4	45.8	83
12-13	64.4	98.8	95.4	52.9	86
14-15	60.2	100.0	97.4	42.3	79
16-17	68.9	100.0	100.0	43.2	75
18-19	68.6	96.1	100.0	43.1	54
20-21	67.7	100.0	98.4	38.7	57
22-23	83.3	98.6	100.0	23.6	66
24-25	69.8	96.8	100.0	27.0	69
26-27	71.4	100.0	100.0	35.7	45
28-29	59.2	100.0	100.0	20.4	56
30-31	76.7	100.0	100.0	23.2	51
32-33	74.3	100.0	100.0	22.8	34
34-35	71.0	100.0	100.0	16.1	39

Note: 1. Breast-feeding status refers to the preceding 24 hours.
2. Only the last child was considered for the computations.
* Including plain water.

After 3 month of age nearly 90 percent of children received other liquids while nearly 97 percent received solids. Supplementation with milk at (4-5) months group was only 20.4 percent. The maximum percentage who received milk supplement stands at 75 percent at the ages close to 36 months. The mean percentage values of the use of supplements for youngest children currently breast-feeding are as follows.

Receiving other milk as supplement	49.7 percent
Receiving other liquid as supplement	84.2 percent
Receiving solid/marshy food as supplement	80.6 percent

The information on type of supplements given a day before the interview was recorded in the survey. The results as given in Table 9.4 show that the lowest value for supplement given in the form of liquid food was cow/goat milk (3.7%) and the highest value for supplement given was water (83%).

Among the cereal group, rice, bread and wheat products lead with a percentage of 65.0. At early ages upto 9 months, bread and wheat products are popular while after 9 months, rice has become the most popular item. 14.8 percent were given pulses. Use of vegetables was 55.9 percent, fruits 53.9 percent, fish/meat 34.4 percent, eggs 15.3 percent and other solid foods 7.2 percent. After 1 month until 24 months 10-15 percent of the children were given vitamins

Table 9.5 gives information on type of supplementation given to non breast-feeding children according to the age of the child. Among the 'youngest' children who are non breastfed, 83.4 percent were given powdered milk as against that of 48.9 percent in the breast-feeding category. Over 97 percent of the children in the non breast-feeding category are above 12 months of age. There are only 22 children in the (0-11) age group who are not breastfed. This is only 22 out of 611 youngest children in the (0-11) age group in the sample.

Table 9.4 Nutritional intake of breast-feeding children

Percentage of youngest breast-feeding children given various liquids and food items the day before the interview, by type of liquid or food item, according to age of child.

Liquid or food item	Age of child (months)								Total
	0-1	2-3	4-6	7-8	9-11	12-17	18-23	24-59	
Liquid food									
Plain water	10.8	20.6	87.3	94.0	95.8	95.0	91.9	96.5	83.0
Cow/ Goat milk	0.0	0.0	0.7	1.0	0.0	3.8	10.2	5.3	3.7
Powdered milk	8.1	16.5	23.3	32.7	45.8	58.3	65.0	67.3	48.9
Fruit juice	0.0	3.1	30.7	21.8	22.5	14.6	24.2	18.2	17.9
Cunjee/ Soup	0.9	5.2	58.0	58.4	45.8	33.3	30.1	18.8	29.3
Other liquids	0.0	0.0	4.7	6.9	4.2	7.9	4.8	9.4	6.2
Cereals and cereal products									
Rice	0.9	1.0	11.3	40.6	75.0	90.0	92.5	91.9	65.6
Bread and wheat products	0.9	1.0	43.3	71.3	73.3	81.7	79.0	81.6	64.5
Cereal products	0.0	3.1	40.0	37.6	37.5	39.6	32.2	20.0	27.0
Pulses	0.0	0.0	4.0	8.9	15.8	20.0	18.3	22.4	14.8
Vegetables	0.0	1.0	21.3	54.4	67.5	69.6	74.2	75.0	55.9
Fruits	0.0	3.1	43.3	59.4	64.2	65.8	66.1	65.8	53.9
Fish/ Meat	0.0	0.0	6.7	25.7	29.2	34.2	47.3	57.2	34.4
Eggs	0.0	0.0	0.7	6.9	15.8	21.2	19.9	23.9	15.3
Other food items									
Fat and oil	0.0	0.0	7.3	11.9	18.3	12.5	14.5	17.1	12.3
Sweets & desserts	0.0	0.0	3.3	12.9	25.0	35.4	55.4	57.9	34.2
Other solid food	0.0	0.0	3.3	2.0	6.7	6.2	14.0	10.3	7.2
Vitamin & Iron									
Vitamin only	3.6	14.4	11.3	12.9	9.2	10.0	7.5	5.9	8.5
Iron only	1.8	1.0	1.3	2.0	0.8	1.7	2.2	0.9	1.4
Vitamin and iron supplements	2.7	3.1	5.3	3.0	1.7	1.2	2.7	1.8	2.4
Number of unweighted (youngest) children currently breast-feeding	**114**	**99**	**147**	**106**	**123**	**240**	**177**	**506**	**1,512**

Note: Vegetables – Pumpkins, carrot, yellow sweet potatoes, green leafy vegetables, green vegetables and potatoes, manioc & other yams.

Fruits – Bananas, apples, grapes, avocados, tomatoes, yellow fleshy fruits such as mango, papaya or mandarin.

Table 9.5 Nutritional intake of non breast-feeding children

Percentage of youngest non-breast-feeding children given various liquids and food items the day before the interview, by type of liquid or food item, according to age of child.

Liquid or food item	Age of child (months)				Total
	0-11	12-17	18-23	24-59	
Liquid food					
Plain water	81.0	91.9	100.0	96.2	96.1
Cow or goat milk	14.3	(8.1)	(7.9)	5.8	6.3
Powdered milk	90.5	89.2	92.1	82.3	83.4
Fruit juice	19.0	29.7	23.8	19.0	19.9
Cunjee / Soup	0.0	27.0	31.7	19.6	20.8
Other liquids	0.0	(8.1)	15.9	12.2	12.1
Cereals and cereal products					
Rice	61.9	86.5	95.2	91.9	91.1
Bread and wheat products	66.7	78.4	90.5	84.0	83.8
Cereal products	33.3	51.4	36.5	22.2	24.9
Pulses	14.3	29.7	23.8	23.6	23.6
Vegetables	38.1	75.7	82.5	77.7	77.1
Fruits	47.6	62.2	74.6	67.4	67.3
Fish / Meat	4.8	37.8	58.7	59.9	57.6
Eggs	4.8	(24.3)	23.8	27.8	26.9
Other food items					
Fat and oil	4.8	37.8	23.8	23.9	23.9
Sweets & desserts	19.0	48.6	61.9	59.9	58.6
Other solid food	0.0	(5.4)	20.6	9.3	9.8
Vitamin and Iron					
Vitamin only	19.0	(10.8)	15.9	6.2	7.4
Iron only	0.0	(5.4)	(1.6)	1.4	1.5
Vitamin and iron supplements	0.0	(5.4)	(1.6)	1.8	1.9
Number of unweighted (youngest) children currently non breast-feeding	**22**	**39**	**57**	**729**	**847**

Note: 1. Vegetables – Pumpkins, carrot, yellow sweet potatoes, green leafy vegetables, green vegetables and potatoes, manioc & other yams.

Fruits – Bananas, apples, grapes, avocados, tomatoes, yellow fleshy fruits such as mango, papaya or mandarin.

2. Figures within parentheses indicate that less than 10 cases are used for the computations.

9.5 Use of bottle feeding

Use of bottles with nipples has shown a remarkable decline over the years for youngest children under 3 months of age. The percentage mean value as given in Table 9.3 has dropped up to a level of 12 percent in year 2000 from a high level of 41.8 percent in 1993 for the same age group. This can be seen as a very positive improvement on the health conditions of children on diarrhoea and related diseases. In considering the exposure to risk for pregnancy by mothers of children with less than 3 months age, the development in this front is very much welcome. Decrease in the percentage in all age groups can be observed except in the age groups of (12-13) and (18-19) where the values for 2000 are slightly higher. However, the mean value for the age group (12-24) shows a decline from 41.5 to 40.6 between the two years under review. The mean percentage for the age group 0-36 is 30.8 percent.

The use of a bottle with a nipple is popular in the age group (6-21) months, the percentage being in the range (40-53). It tails off to both sides of the other age groups.

9.6 Reasons for terminating breast-feeding

Information for the children who are in the age group (2-5) years were collected on the reasons for stopping breast-feeding. The historical information was obtained from the mothers of their children on reasons for stopping breast-feeding within the first two years of their lives and the age at which breast-feeding was stopped. As given in Table 9.5, the main reasons for stopping has been the refusal of the child (24.7%), condition of insufficient or no milk (20.3%) and mother became pregnant (14.1%). It can be seen that the pregnancy factor increases with the age of the child. Substitution with other milk/food has progressively contributed to the stopping of breast-feeding as the child gets older. The two major reasons for stopping breast-feeding at ages (0-5) months has been the refusal of the child (28.6%) and condition of insufficient or no milk (33.1%). Mothers illness has also caused the stopping for 9.7 percent of the times in the same age group.

When comparing with year 1993 it can be seen that there is a decrease in percentage value for the two categories in year 2000: mothers became pregnant (22%) and insufficient or no milk (25.7%).

Table 9.6 Reasons for stopping breast-feeding

Percent distribution of reasons for stopping breast-feeding, among children born (24-59) months preceding the survey, who stopped breast-feeding within the first two years of life.

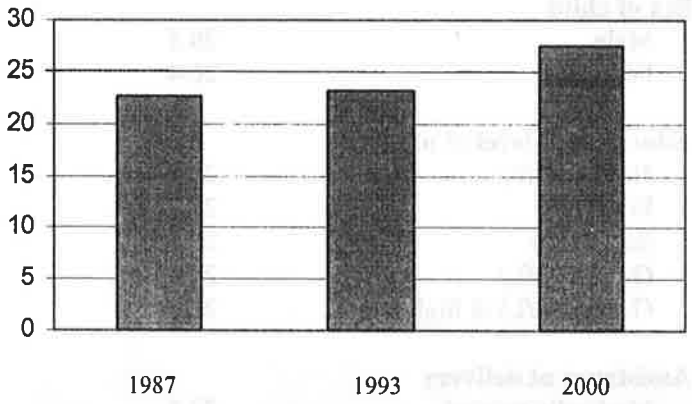
Reason for stopping breast-feeding	Age breast-feeding stopped (months)				
	0-5	6-11	12-17	18-23	Total
Mother ill	7.4	8.0	6.7	5.2	6.7
Child ill	2.2	0.0	0.7	0.6	0.8
Child died	4.4	2.4	0.0	0.6	1.7
Nipple injured	2.9	0.8	0.7	2.9	1.9
No milk	15.4	12.0	8.7	6.4	10.3
Insufficient milk	17.6	9.6	10.7	10.4	12.0
Mother busy	3.7	9.6	7.4	0.6	5.0
Child refused	28.7	32.8	24.8	24.8	27.4
Other milk / food better for child	1.5	1.6	8.7	14.4	7.2
Became pregnant	4.4	14.4	22.1	21.4	16.1
Other	5.9	4.0	8.1	7.5	6.5
Not reported	5.9	4.8	1.3	5.2	4.3
Total	**100**	**100**	**100**	**100**	**100**
Number of children who were stopped breast-feeding	136	125	149	173	583
Percentage of children who were stopped breast-feeding	23.3	21.4	25.6	29.7	100

9.7 Duration of breast-feeding

Youngest children in the families in the (0-36) month age group were considered in this analysis. Table 9.7 gives the information on duration of breast-feeding by mothers. Mean duration of exclusive breast-feeding has risen from a value of 1.2 months in year 1993 to a value of 3.7 months in year 2000. Rural sector shows the highest incidence of exclusive breast-feeding of 4.0 months as against the lowest 2.7 months in the estate sector. The correlation between the mean duration exclusively breastfed and the education of the mother can be observed. Slight decrease in the mean for mothers with O/L education can also be noted. The same correlation pattern can be observed in the case of any form of breast-feeding too.

Mean duration of breast-feeding among under three year children was 27.5 (any breast-feeding), 4.6 (breast-feeding with water only) and 3.7 (exclusive breast-feeding). In comparison with 1987 and 1993, an increasing trend can be observed in the mean values for the ever breastfed category. Respective mean values, in months, are as follows.

1987	22.7
1993	23.2
2000	27.5



Comparing sector wise, it can be seen that the rural children were breastfed 7.5 months longer than that of Colombo metro children. The respective figures for all sectors are as follows:

Colombo metro	21.6
Other urban	24.1
Rural	29.1
Estate	26.7

Table 9.7 Mean duration of breast-feeding

Mean duration of any breast-feeding, exclusive breast-feeding and full breast-feeding* by sector, zone, sex of child, educational level of mother and assistance at delivery. (The means are prevalence – incidence means based on current status related to youngest child)

Background characteristic	Mean duration in months			Number of children under 3 years
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding *	
Sector				
Colombo metro	21.6	3.0	3.9	211
Other urban	24.1	3.6	4.8	158
Rural	29.1	4.0	4.8	1,204
Estate	26.7	2.3	3.4	170
Zone				
Zone 1	21.6	3.0	3.9	211
Zone 2	25.3	3.1	4.3	247
Zone 3	29.0	4.9	5.6	284
Zone 4	27.9	3.4	4.1	368
Zone 5	29.6	4.1	4.8	421
Zone 6	32.0	4.0	4.7	56
Zone 7	28.4	2.7	4.5	156
Sex of child				
Male	28.5	3.5	4.2	919
Female	26.4	3.9	5.0	824
Educational level of mother				
No schooling	24.8	1.2	1.9	68
Primary	27.2	3.7	5.1	232
Secondary	28.5	3.8	4.8	821
G.C.E. (O/L)	27.1	3.1	3.8	321
G.C.E. (A/L) & higher	26.1	4.5	4.9	300
Assistance at delivery				
Medically trained	27.6	3.7	4.6	1,682
Traditional midwife	21.7	2.9	4.3	28
Other or none	28.8	5.8	5.8	23
Total	**27.5**	**3.7**	**4.6**	**1,743**

Note: 1. Prevalence is defined as the number of children below 3 yrs. of age, who were being breastfed at the time of the survey.
2. Incidence is the average number of births per month.
3. Missing information on educational level of mother and assistance at delivery are not presented separately.

* Full breast-feeding is exclusive breast-feeding or breast-feeding plus water only.

9.8 Birth weight

Birth weight is an important information which acts as a determinant of the survival chances of a newborn infant. Incidence of low birth weight also acts as an indicator of the well being of neonates and mothers of reproductive age. Information relating to children below 5 years of age were obtained from the survey. Available health cards were used in gathering data wherever possible. Table 9.8 gives the information on children of low birth weight according to selected demographic variables.

Mean birth weight for the reference children population of the survey is 2.9 kg. Mean birth weight is highest in Colombo metro sector while it is lowest in estate sector. No significant differences are shown across many variables under study except in the case of twins. The mean birth weight for twins is 2.2 kg., which is lower than the 2.5 kg value indicated for a low birth weight. Mothers education shows a correlation to the mean birth weight. Higher the level of education of the mother, higher the mean birth weight of the child.

Percentage low birth weight for the total reference children population stands at 16.7 percent in year 2000 which is 2 percentage points below that of 1993. The drop in percentage for lower birth weight is appreciable. In contrast to the mean birth weight, there are very significant differences across all the variables in the percentage lower birth weight. Sector wise, the highest incidence recorded was for the estate sector (20.8%) and the lowest incidence was for the other urban sector (11.6%). In the 1993 survey no differences were noted between the incidence of low birth weight and the birth order. However, it is interesting to note that it has changed over the years and in year 2000 the highest incidence was recorded on the first birth of a child (20.3%). Up to fifth child, the percentage drops down to a level of 12.6 percent which rises again for the 6+ category. The latter can be attributed to deterioration of the health condition of the mother due to increased number of births possibly at regular short intervals. When considering the previous birth interval, it is clearly seen that the percentage decreases with the increase of the interval between births. Four year interval is seen as the best in considering the lowering of incidence for low birth weight. In case of twins, a very high percentage of low birth weight of 62.5 percent has been recorded. Obvious reason is that the fetus in the womb as well as the mother herself shares the nutrition supplied by the mother. High correlation can also be noted between the education of the mother and the incidence of low birth weight.

Table 9.8 Birth weight

Mean birth weight and incidence of low birth weight (less than 2.5 kg), estimated from data from health cards among children born five years preceding the survey, by sector, zone, sex of child, birth order, previous birth interval and educational level of mother.

Background characteristic	Mean birth weight (kg)	Percentage low birth weight (< 2.5 kg)
Sector		
Colombo metro	3.0	14.9
Other urban	2.9	11.6
Rural	2.9	17.0
Estate	2.7	20.8
Zone		
Zone 1	3.0	14.9
Zone 2	3.0	9.4
Zone 3	2.9	20.8
Zone 4	2.9	12.7
Zone 5	2.8	22.2
Zone 6	2.8	20.2
Zone 7	2.9	15.5
Sex of child		
Male	2.9	15.5
Female	2.8	17.7
Birth order		
First birth	2.8	20.3
2-3	2.9	13.3
4-5	2.9	12.6
6+	2.9	16.7
Previous birth interval		
< 2 years	2.9	19.0
2-3 years	2.9	16.6
4 years or more	2.9	9.5
First birth	2.8	20.3
Twins	2.2	62.5
Educational level of mother		
No schooling	2.6	27.4
Primary	2.8	19.0
Secondary	2.9	17.7
G.C.E. (O/L)	2.9	13.8
G.C.E. (A/L) & higher	3.0	11.5
Total	**2.9**	**16.7**

9.9 Nutritional status of children

Three anthropometric measures have been used to ascertain the level of nutrition amongst the children in the country. Height for age, weight for height and weight for age were the three indicators used to obtain the extent of stunting, wasting and underweight among children. Distribution of each of the paired variables were first plotted and the children who are below 2 standard deviations from the median value were identified as malnourished according to each of the above three anthropometric measures.

9.10 Height for age

Colombo metro sector recorded the lowest value of stunting at 7.4 percent. Stunting is highest in the estate sector (33.5%). Though it shows a decline from 1993 value for estate sector (53.7%), the present level too is not satisfactory. It is nearly two and a half times that of the national average level. Stunting shows a high correlation with the age of the child. Acute level of stunting is recorded for children over 12 months of age. There is also a very high correlation between the mothers education and the percentage stunted. Percentage stunted varies from 35.7 percent to 5.4 percent for mothers with no education to mothers with A/L or above education respectively.

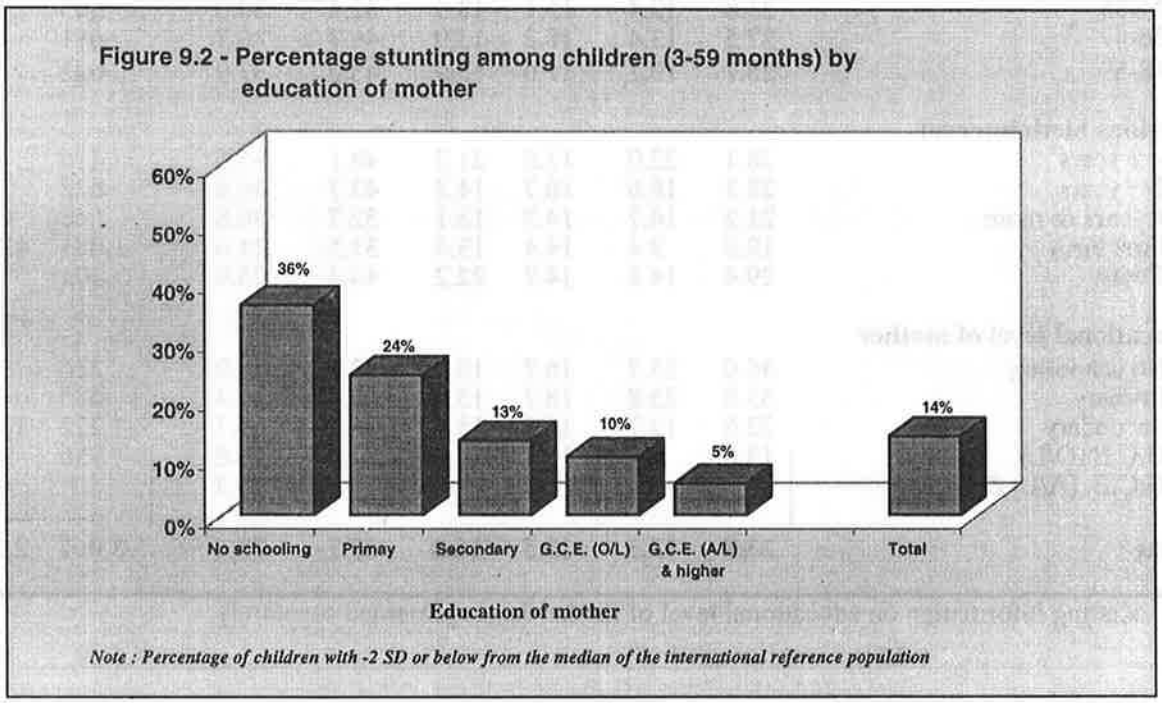


Table 9.9 Nutritional status of children

Percentage of children (3-59) months classified as undernourished (below-2 standard deviations from the median of the reference population)by sector, zone, sex, child's age in months, previous birth interval and educational level of mother according to three anthropometric indices; height-for-age, weight-for-height and weight-for-age, from DHS 1993 and DHS 2000.

Background characteristic	Height-for-age (stunted)		Weight-for-height (wasted)		Weight-for-age (underweight)		Number of children measured	
	1993	2000	1993	2000	1993	2000	1993	2000
Sector								
Colombo metro	19.7	7.4	12.2	10.1	31.2	18.2	349	336
Other urban	16.8	8.6	16.8	6.3	29.9	21.3	223	221
Rural	22.9	12.8	16.4	15.9	38.3	30.8	2,321	1,770
Estate	53.7	33.8	9.5	11.8	52.1	44.1	175	204
Zone								
Zone 1	19.7	7.4	12.2	10.1	31.2	18.2	349	336
Zone 2	14.5	10.8	11.0	13.1	25.2	20.2	457	381
Zone 3	18.1	14.4	17.8	11.8	34.6	28.9	446	381
Zone 4	25.2	12.0	17.5	16.0	38.1	30.6	609	549
Zone 5	32.2	19.0	12.6	13.1	43.7	37.8	589	564
Zone 6	24.4	13.8	20.5	19.5	44.9	32.2	233	87
Zone 7	30.2	15.0	19.6	19.3	48.0	36.9	385	233
Sex								
Male	22.7	11.9	15.6	15.1	34.8	29.0	1,610	1.321
Female	25.1	15.3	15.4	12.6	40.9	29.8	1,458	1,210
Child's age in months								
3-5	4.9	3.9	3.1	1.3	5.8	0.7	117	152
6-11	11.8	5.7	6.8	10.3	17.9	20.2	375	282
12-23	25.7	16.2	18.2	18.2	36.3	28.8	686	549
24-35	23.8	12.4	15.1	13.3	42.4	34.0	585	526
36-47	27.5	13.4	18.2	13.9	46.7	30.7	681	531
48-59	28.7	19.1	17.6	15.9	43.0	37.9	622	491
Previous birth interval								
< 2 years	28.1	22.0	17.8	21.2	48.1	35.6	416	118
2-3 years	28.3	18.6	16.7	14.2	43.7	36.8	822	521
4 years or more	21.2	14.7	14.7	13.1	32.7	30.8	648	712
First birth	19.9	9.4	14.4	13.4	31.5	24.6	1,081	1,153
Twins	29.4	14.8	14.7	22.2	44.4	25.9	101	27
Educational level of mother								
No schooling	46.0	35.7	16.7	18.4	53.9	48.0	226	98
Primary	33.6	23.8	18.7	15.9	47.8	41.4	683	345
Secondary	22.6	12.7	16.8	15.0	39.1	31.7	1,222	1,195
G.C.E (O/L)	13.0	9.9	11.3	14.7	24.6	24.8	936	484
G.C.E. (A/L) & higher		5.4		7.6		13.3		407
Total	**23.8**	**13.5**	**15.5**	**14.0**	**37.7**	**29.4**	**3,067**	**2,531**

Note: Missing information on educational level of mother is not presented separately.

Table 9.10 Comparison of nutritional status of children

Percentage of children aged (3 –36) months classified as undernourished (below-2 standard deviations from the median of the reference population) by sector, zone, sex, child's age in months, previous birth interval and educational level of mother according to three anthropometric indices; height-for-age, weight-for-height and weight-for-age, from DHS 1993 and DHS 2000.

Background characteristic	Height-for-age (stunted)		Weight-for-height (wasted)		Weight-for-age (underweight)		Number of children measured	
	1993	2000	1993	2000	1993	2000	1993	2000
Sector								
Colombo metro	18.5	7.2	10.8	10.3	25.8	17.0	206	194
Other urban	13.8	6.0	12.9	8.2	28.8	22.4	143	134
Rural	19.6	10.8	14.8	15.2	32.5	26.9	1,376	1,082
Estate	51.1	30.9	10.1	13.7	53.2	43.2	106	139
Zone								
Zone 1	18.5	7.2	10.8	10.3	25.8	17.0	206	194
Zone 2	11.4	8.8	8.0	13.2	20.6	20.2	258	228
Zone 3	14.9	14.3	16.6	10.2	30.3	26.2	273	244
Zone 4	22.3	10.4	14.2	17.0	31.3	26.3	352	346
Zone 5	29.8	15.2	12.0	11.2	39.2	33.0	361	349
Zone 6	21.4	12.2	19.1	18.4	40.7	28.6	138	49
Zone 7	23.7	12.2	19.2	23.7	41.4	36.7	243	139
Sex								
Male	18.9	9.3	13.8	15.9	30.7	26.7	921	816
Female	22.7	14.3	14.0	11.6	34.6	26.6	910	733
Child's age in months								
3-5	4.9	3.9	3.1	1.3	5.8	0.6	117	152
6-11	11.8	5.7	6.8	10.3	17.9	20.2	375	282
12-23	25.7	16.2	18.2	18.2	36.3	28.8	686	549
24-36	23.7	12.5	15.4	14.8	42.1	34.8	653	566
Previous birth interval								
< 2 years	25.9	24.3	20.0	22.8	41.4	38.6	219	70
2-3 years	26.2	15.5	14.5	13.0	40.9	33.9	466	316
4 years or more	18.9	13.5	12.2	12.1	27.5	27.4	403	430
First birth	15.9	7.9	12.8	14.2	26.0	21.9	665	713
Twins	25.9	10.0	11.0	25.0	42.7	25.0	78	20
Educational level of mother								
No schooling	40.8	34.9	18.3	19.0	50.0	46.0	124	63
Primary	29.1	18.8	18.5	15.2	43.6	39.3	386	191
Secondary	20.0	10.5	13.9	14.4	31.6	28.0	730	735
G.C.E.(O/L)	12.1	12.0	9.9	16.1	23.1	24.3	591	292
G.C.E (A/L) & higher		4.5		7.5		12.3		268
Total	**20.8**	**11.7**	**13.9**	**13.9**	**32.6**	**26.7**	**1,831**	**1,549**

9.11 Weight for height

In contrast to stunting, the lowest percentage wasted is recorded for the Urban sector. There has been a remarkable decrease of the percentage wasted in this sector from a figure of 16.8 percent in 1993 to figure of 6.3 percent in 2000. The highest percentage is recorded in rural sector which is 15.0 percent. The estate sector value shows a slight increase from the value of 9.5 percent in 1993 to a level of 11.8 percent in 2000. In respect to the age of the child, the highest percentage wasted of 18.2 percent is recorded in the (12-23) month age group. Only a moderate 1.3 percent of the children in the age group (3-5) months is reported, which is a very healthy improvement. As in the case of many other instances, a direct correlation between education of the mother and the variable, percentage wasted can be noted.

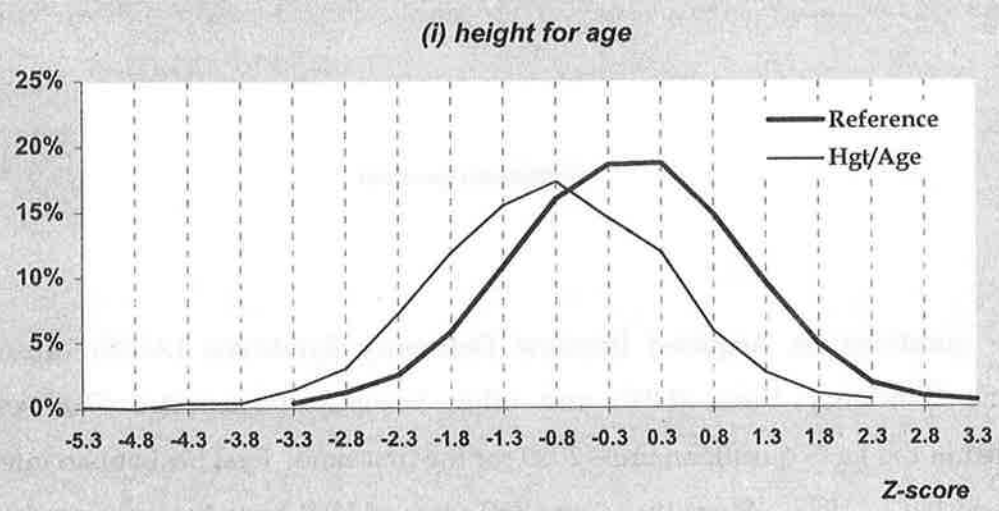
9.12 Weight for age

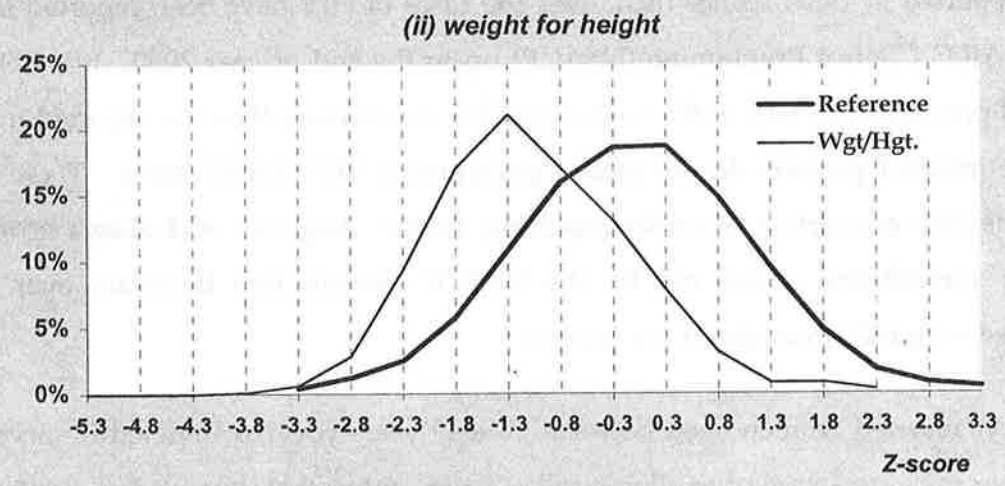
There is a significant decline in the percentage underweight from the year 1993 for the children (0-59) months. The respective percentages recorded for 1993 and 2000 has been 37.7 percent and 29.4 percent. Sector wise, Colombo metro shows the lowest value of 18.2 percent while estate sector shows the highest value of 44.1 percent. However, consistent decline for each sector can be seen from the year 1993 to year 2000. The high value recorded in respect of estate sector is undoubtedly a matter for concern. Again, as in the case of wasting, the percentage recorded in the (3-5) month age group is negligible which is commendable. Correlation can be observed between the age group and the percentage underweight. Similar correlation can also be observed between the level of education of the mother and the percentage children underweight.

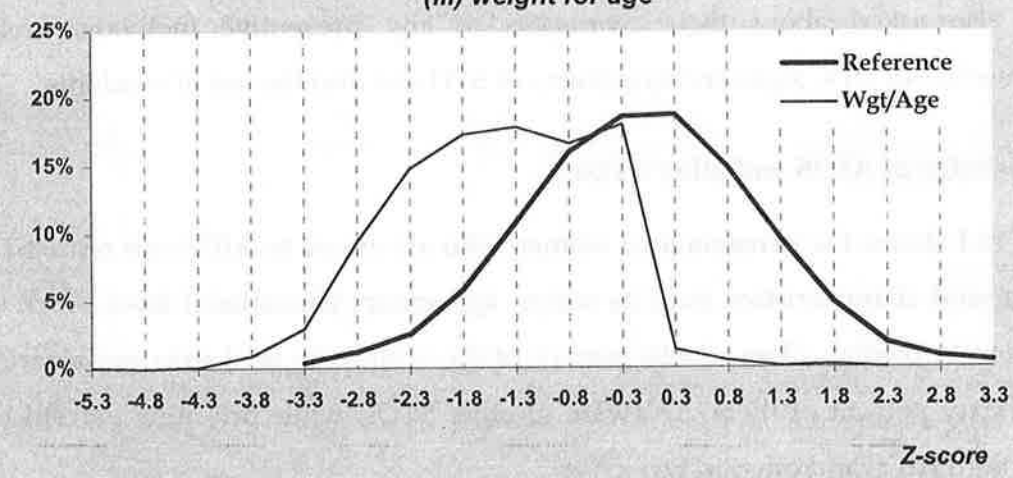
9.13 Comparison with DHS 1993

Results of the year 2000 DHS revealed that there had been remarkable improvements in respect of two out of three anthropometric measured used. Table 9.9 shows that stunting has been reduced from value of 23.8 percent (1993) to a value of 13.5 percent (2000). Underweight also showed a decrease from a value of 37.7 percent (1993) to a value of 29.4 percent (2000). However, the percentage of children wasted does not seem to change significantly between the two years. The respective figures being 15.5 percent in 1993 and 14 percent in 2000.

Figure 9.3 - Comparison with international references







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Chapter 10 : Aids and Other Sexually Transmitted Diseases

S. Madurapperuma

A few questions on Acquired Immune Deficiency Syndrome (AIDS) caused by Human Immune Deficiency Virus (HIV) and other Sexually Transmitted Diseases (STD) were included in the DHS questionnaire – 2000 for the first time. First Sri Lankan infected with HIV was reported in 1987. Since then, over 350 cases of HIV have been reported to the National STD/AIDS Control Programme (NSACP) up to the end of year 2000. It is believed that the actual prevalence of HIV in the Island could be much more than the reported number as most of the infected persons do not attend government STD/AIDS clinics. There can also be a considerable proportion of under reporting, under diagnosis and delays in reporting. The recent surveillance carried out by the NSACP reveals that there are over 8,500 persons infected with HIV throughout the country.

All ever married women aged between 15 – 49 years covered under this survey were asked whether they are aware of an illness called AIDS and of their knowledge of other STDs. They were also asked about their awareness of any preventive methods, mother to child transmission of HIV, signs and symptoms of STD and also the use of condoms.

10.1 Knowledge of AIDS and other STDs

Table 10.1 shows the percentage of women who are aware to AIDS and other STDs by chosen background characteristics, such as sector, age group, educational level, work status and by exposure to media. Over ninety percent of the women in Sri Lanka are aware of AIDS and about sixty percent of them are aware of other STDs, while fifty nine percent of them knew about both AIDS and other STDs.

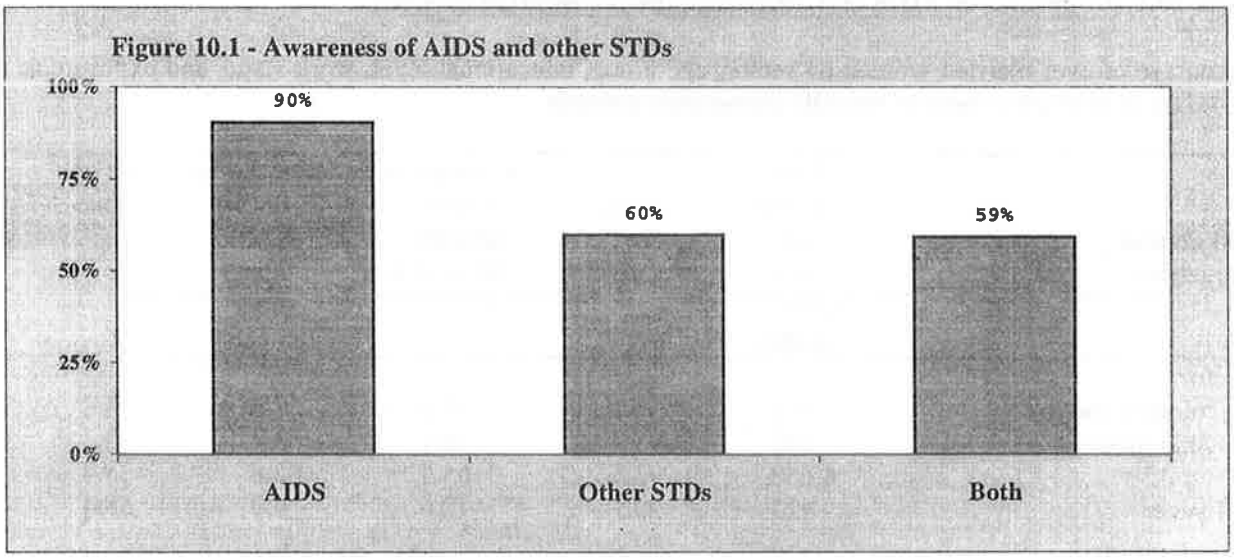
Table 10.1 Awareness of AIDS and other sexually transmitted diseases

Percentage of ever married women by sector, age group, educational level, work status and exposure to media, according to their awareness of sexually transmitted diseases.

Background characteristic	Total number of ever married women	Percentage of women who are aware of				
		AIDS	Other sexually transmitted diseases	Both AIDS and other STD	None	Not stated
Sector						
Colombo metro	762	94.9	57.5	57.3	4.8	0.1
Other urban	542	95.9	70.1	69.7	3.7	0.2
Rural	4,658	93.5	63.5	62.8	5.7	0.0
Estate	423	39.7	10.6	9.0	58.4	0.2
Age group						
15-19	163	79.1	33.1	31.9	19.6	0.6
20-24	603	92.4	53.9	53.7	7.1	-
25-29	971	93.0	60.9	60.4	6.4	0.1
30-34	1,151	92.4	62.1	61.4	6.9	0.1
35-39	1,203	91.6	63.6	63.1	7.9	-
40-44	1,134	90.2	60.0	59.0	8.7	0.1
45-49	1,160	85.2	59.5	58.8	13.6	0.2
Educational level						
No schooling	338	47.6	13.9	12.7	50.9	-
Primary	1,151	74.0	33.0	31.2	23.9	0.3
Secondary	2,877	95.4	59.4	58.9	3.9	0.1
G.C.E. (O/L)	1,205	99.2	77.7	77.7	0.7	-
G.C.E. (A/L) & higher	813	99.9	91.9	91.8	-	-
Work status						
Never worked	2,379	93.6	57.5	57.3	6.0	0.1
Worked before	1,214	93.3	63.5	62.9	6.1	-
Currently working	2,733	86.6	60.4	59.4	12.5	0.0
Exposure to media*						
Newspaper	2,591	97.7	75.3	75.1	2.0	0.0
Radio	4,296	92.4	63.8	63.3	7.0	0.0
TV	4,306	94.2	65.6	65.2	5.4	0.1
None	885	75.7	38.2	36.5	22.0	0.2
Total	**6,385**	**90.3**	**59.8**	**59.2**	**8.9**	**0.1**

Note: Missing information on educational level and work status are not presented separately.

* Number of women in this category add up to more than the total, as some women have been exposed to more than one media.

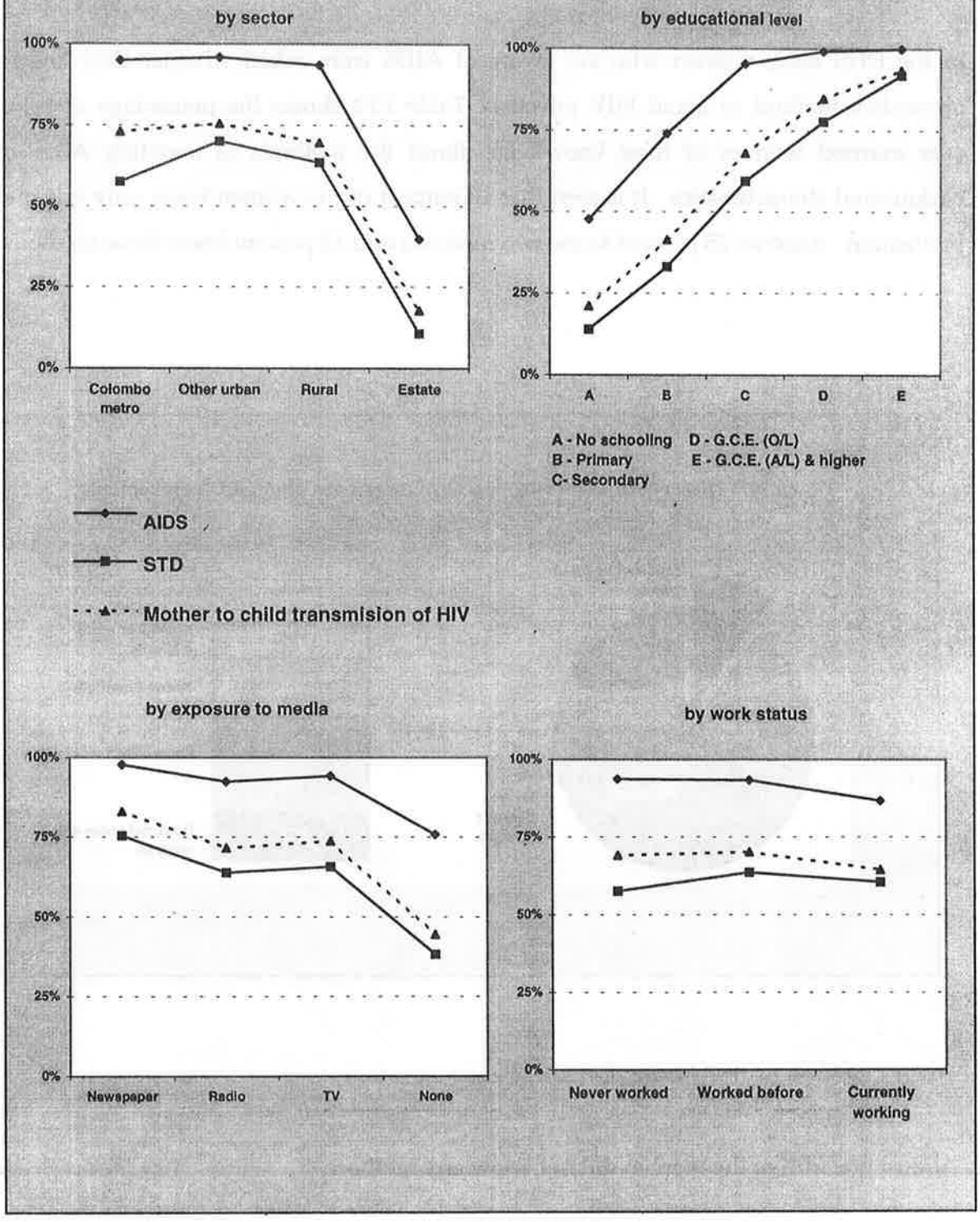


Of the Women in the estate sector only forty percent are aware to AIDS while only about ten percent have heard of other STDs. Fifty eight percent of estate women have not heard of AIDS or other STDs. However, the awareness among women in Colombo metro, Other urban and in the Rural sector is more than ninety percent.

Awareness of AIDS is wide spread among women in all age groups (over 90%). It is slightly lower among women in the lowest age-group (15 - 19) and the highest age-group (45 - 49) among women in the reproductive age. A clear positive relationship can be observed between the level of education and the awareness of AIDS among women. Almost every woman with G.C.E. A' Level and higher education are aware of AIDS while 92 percent of them are aware of other STDs.

The awareness of AIDS/STD was also analyzed by work status of women and their exposure to media. It is seen that women exposed to media have higher level of knowledge of AIDS and STDs than those who are not exposed. In the case of women's work status a clear relationship is not observed. Women who have never worked show the highest level of knowledge with regard to AIDS, but have the lowest level with regard to other sexually transmitted diseases.

Figure 10.2 - Awareness of AIDS, STD and mother to child transmission of HIV among ever-married women

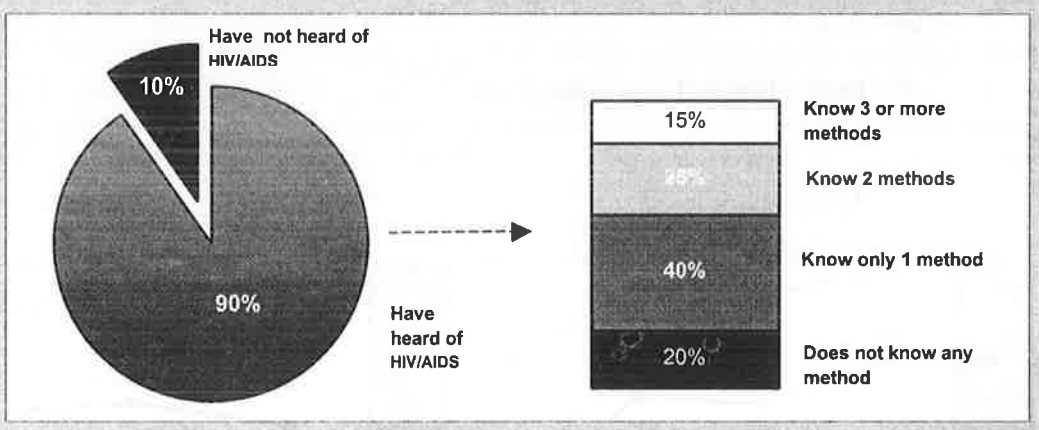


10.2 Awareness of AIDS and methods of prevention

The government of Sri Lanka has initiated various awareness programmes on HIV/AIDS through the National STD/AIDS Control Programme of the Ministry of Health. Under this programme print and electronic media is being used to disseminate information and to educate the people on preventive methods.

In the DHS 2000, women who are aware of AIDS were asked whether they knew of any preventive method to avoid HIV infection. Table 10.2 shows the percentage distribution of ever married women of their knowledge about the methods of avoiding AIDS by their background characteristics. It is seen that 40 percent of the women knew only one method of prevention. Another 25 percent knew two methods and 15 percent knew three methods.

Figure 10.3 - Percent of women by degree of awareness about AIDS prevention



Almost one fifth of the women did not know any method.

Table 10.2 Awareness of AIDS and prevention methods

Percent distribution of ever married women who are aware of AIDS by sector, age group, educational level, work status and exposure to media, according to their knowledge about preventive methods.

Background characteristic	Total number of women who are aware of AIDS	Among women who are aware of AIDS, percent who know only 1 prev. method	know 2 prev. methods	know 3 or more prev. methods	do not know any prev. method	not stated
Sector						
Colombo metro	722	38.4	27.7	12.7	21.3	0.0
Other urban	519	38.0	27.4	20.4	13.5	0.6
Rural	4,357	41.5	24.5	14.8	19.1	0.2
Estate	168	24.4	16.1	8.3	50.6	0.6
Age group						
15-19	129	36.4	24.8	8.5	30.2	0.0
20-24	557	39.1	23.7	16.5	20.5	0.0
25-29	903	41.3	29.1	13.1	16.2	0.3
30-34	1,064	39.7	27.0	16.1	17.1	0.2
35-39	1,103	39.6	25.6	16.3	18.2	0.2
40-44	1,023	41.2	21.5	13.7	23.5	0.0
45-49	987	40.8	22.4	14.5	22.1	0.4
Educational level						
No schooling	161	42.8	5.0	1.2	50.9	0.0
Primary	852	41.7	12.7	5.4	40.1	0.0
Secondary	2,746	43.0	23.9	11.8	21.1	0.3
G.C.E. (O/L)	1,195	37.4	34.4	19.7	8.4	0.2
G.C.E. (A/L) & higher	812	33.4	31.3	30.7	4.4	0.2
Work status						
Never worked	2,228	40.8	24.2	14.0	20.8	0.3
Worked before	1,133	42.4	28.4	13.7	15.3	0.2
Currently working	2,366	38.8	24.0	16.4	20.6	0.1
Exposure to media*						
Newspaper	2,532	37.7	29.5	20.8	11.7	0.4
Radio	3,970	40.2	27.0	15.5	17.2	0.2
TV	4,055	40.4	26.7	16.9	15.8	0.2
None	670	40.4	16.6	7.6	35.2	0.4
Total	**5,766**	**40.3**	**24.9**	**14.8**	**19.8**	**0.2**

Note: Missing information on work status is not presented separately.

* Number of women in this category add up to more than the total, as some women have been exposed to more than one media.

More than half of women in the estate sector and those who have had no schooling did not know any preventive method. About 42 percent of the women with primary education and 35 percent of women who have had no media exposure did not know of any method. Relatively higher proportion of women aged below 25 years, and those over 40 years do not know any method of prevention.

10.3 Mother to child transmission of HIV

Table 10.3 shows the percentage of ever married women who are aware of mother to child transmission of HIV by background characteristics. Of the ever married women, 67.1 percent are aware that HIV can be transmitted from mother to child. The knowledge is highest in the urban sector (Colombo metro 73% and Other urban 75.5%), while it is lowest in the estate sector (17.7%) and in the rural sector, it is almost 70 percent. The knowledge within age groups there is a steady increase up to the age group 30 - 34 and falls thereafter. There is a positive correlation between the level of education of the mother and the awareness of mother to child transmission, 21 percent with no schooling and over 93 percent with G.C.E (O/L) and higher. The work status of women has no bearing in the knowledge of mother to child transmission of HIV but exposure to media shows a positive relationship. The knowledge level of women who read newspapers at least once a week, is twice as compared to the women who do not have any exposure to media. With regard to mother to child transmission of HIV virus, 56 percent of the women are aware of the transmission during pregnancy, 23 percent at delivery, another 23 percent during breast feeding, 13 percent do not know at what stage it can occur.

Table 10.3 Mother to child transmission of HIV

Percentage of ever-married women who are aware of mother to child transmission of HIV by sector, age group, educational level, work status and exposure to media.

Background characteristic	Ever married women who are aware of mother – child transmission		Percentage of women who are aware of transmission			
	No.	%	During pregnancy	At delivery	During breastfeeding	But do not know when
Sector						
Colombo metro	556	73.0	64.0	17.6	18.7	12.8
Other urban	409	75.5	55.0	26.4	20.8	12.2
Rural	3,243	69.6	54.5	23.1	23.7	13.3
Estate	75	17.7	45.3	16.0	33.3	18.7
Age group						
15-19	84	51.5	40.5	14.3	36.9	20.2
20-24	412	68.3	47.3	20.1	33.0	14.1
25-29	697	71.8	57.4	22.1	24.1	13.0
30-34	833	72.4	57.3	26.4	18.6	11.0
35-39	811	67.4	59.1	22.2	24.9	9.9
40-44	739	65.2	55.8	22.3	18.7	16.9
45-49	707	60.9	54.3	21.6	21.5	14.6
Educational level						
No schooling	71	21.0	45.1	14.1	21.1	28.2
Primary	476	41.3	42.6	16.6	24.8	24.2
Secondary	1,956	68.0	53.0	18.8	23.0	15.7
G.C.E.(O/L)	1,021	84.7	60.5	26.0	24.6	8.5
G.C.E.(A/L) & higher	759	93.4	65.0	32.3	19.4	4.7
Work status						
Never worked	1,641	69.0	54.5	22.4	23.3	13.5
Worked before	851	70.1	53.9	20.9	22.1	14.8
Currently working	1,761	64.4	57.8	23.8	22.9	12.0
Exposure to media*						
Newspaper	2,147	82.9	59.4	26.9	23.8	8.7
Radio	3,070	71.5	57.1	23.7	23.6	11.6
TV	3,172	73.7	57.7	23.7	22.7	11.3
None	394	44.5	47.5	14.5	22.6	21.8
Total	**4,283**	**67.1**	**55.6**	**22.6**	**23.0**	**13.2**

Note: Missing information on work status is not presented separately.

* Number of women in this category add up to more than the total, as some women have been exposed to more than one media.

10.4 Signs and symptoms of STDs

Women who are aware of STDs, were asked whether they knew at least three symptoms of infection. This information is classified by background characteristics of the respondent and shown in Table 10.4.

Table 10.4 Signs and symptoms of STD

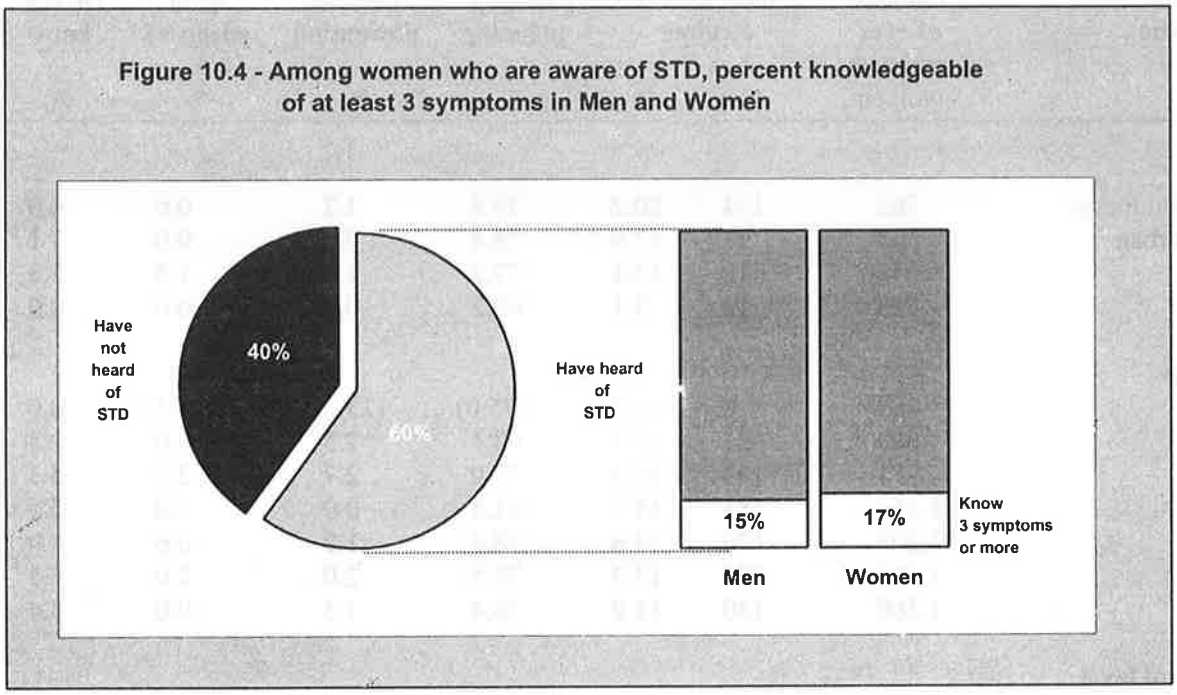
Among women who are aware of STD, percentage of women who are aware of at least 3 symptoms of infection by sector, age group, educational level, work status and exposure to media.

Background characteristic	Number of women aware of STD	Percentage of women aware of symptoms in		
		Men	Women	Both parties
Sector				
Colombo metro	438	7.5	8.7	5.5
Other urban	380	17.9	20.5	15.5
Rural	2,957	15.5	17.8	13.2
Estate	45	2.2	2.2	2.2
Age group				
15-19	54	18.5	20.4	18.5
20-24	325	16.3	18.5	14.5
25-29	591	12.8	16.2	11.2
30-34	715	17.3	19.0	14.1
35-39	765	14.6	16.5	12.3
40-44	680	14.4	16.3	12.2
45-49	690	12.3	14.9	10.4
Educational level				
No schooling	47	8.5	10.6	6.4
Primary	380	11.3	14.5	9.2
Secondary	1,710	10.7	11.5	9.0
G.C.E. (O/L)	936	15.4	18.7	13.4
G.C.E (A/L) & higher	747	24.8	28.4	21.0
Work status				
Never worked	1,369	13.8	15.6	11.6
Worked before	771	11.7	13.4	9.6
Currently working	1,650	16.9	19.6	14.5
Exposure to media*				
Newspaper	1,950	18.0	20.2	15.3
Radio	2,741	15.2	18.0	13.2
TV	2,823	15.0	16.9	12.8
None	338	10.9	12.4	9.2
Total	**3,820**	**14.6**	**16.8**	**12.4**

Note: Missing information on work status is not presented separately.

* Number of women in this category add up to more than the total, as some women have been exposed to more than one media.

Of the 3,820 women who are aware of STDs only 14.6, 16.8 and 12.4 percent knew of symptoms in men, women and both parties respectively. The knowledge of symptoms of STDs in the estate sector is very low (2.2%) while the knowledge of symptoms seem to increase with the women's level of education and exposure to media.



10.5 Aim of using condom

Table 10.5 gives the percentage of women who have used a condom, by reason for use and by background characteristics. It is interesting to know that only 14 percent of women have used a condom among all ever married women canvassed during the survey. Vast majority of these women (77.5%) have said that main use of condom is for family planning , while 6.3 percent did not know why a condom is used. Nearly one fifth of urban women have used a condom while this percentage for rural and estate sector is 13.1 and 3.1 percent respectively. Use of condom also show an increase with the level of education of the woman and her exposure to media.

The percentage of women who have stated that use of condom is for diseases prevention is as low as 1.4 percent. This may be due to the fact that the survey covered the household population and did not capture the sex workers and the people who are engaged in extra marital sex.

Table 10.5 Aim of using a condom

Percentage of women who have reported to have used a condom by sector, age group, educational level, work status and exposure to media, according to the reason for using the method.

Background characteristic	Total number of ever married women	Women who have used a condom		Reason for using a condom				
				Family planning	Disease prevention	Both purposes	Do not know	Not stated
		No.	%	%	%	%	%	%
Sector								
Colombo metro	762	154	20.2	79.8	1.2	0.6	6.0	13.6
Other urban	542	97	17.9	78.4	2.1	0.0	7.1	12.4
Rural	4,658	612	13.1	77.2	1.6	1.3	5.8	16.7
Estate	423	13	3.1	69.2	0.0	0.0	0.0	30.8
Age group								
15-19	163	8	(4.9)	(75.0)	(25.0)	(25.0)	0.0	25.0
20-24	603	81	13.4	69.1	2.5	0.0	2.5	25.9
25-29	971	149	15.3	77.9	2.7	2.7	5.3	16.8
30-34	1,151	181	15.7	81.8	0.0	0.0	5.5	12.7
35-39	1,203	176	14.6	78.4	1.2	0.6	7.9	13.1
40-44	1,134	151	13.3	77.5	2.0	2.0	7.3	15.2
45-49	1,160	130	11.2	75.4	1.5	0.0	5.4	17.7
Educational level								
No schooling	338	6	(1.8)	(100.0)	0.0	0.0	0.0	0.0
Primary	1,151	56	4.9	69.6	0.0	0.0	9.0	21.4
Secondary	2,877	357	12.4	76.8	1.4	0.6	7.3	15.1
G.C.E.(O/L)	1,205	270	22.4	77.1	2.2	1.5	6.3	15.9
G.C.E.(A/L) & higher	813	187	23.0	81.3	1.6	1.6	3.2	15.5
Work status								
Never worked	2,379	321	13.5	79.7	1.2	1.2	5.0	15.3
Worked before	1,214	186	15.3	75.8	1.0	0.5	8.1	15.6
Currently working	2,733	359	13.1	76.0	2.2	1.4	6.5	16.7
Exposure to media*								
Newspaper	2,591	473	18.2	77.6	2.1	1.5	6.8	15.0
Radio	4,296	624	14.5	78.2	1.3	0.8	6.1	15.2
TV	4,306	709	16.5	77.3	1.7	1.3	6.1	16.2
None	885	59	6.7	74.6	1.7	1.7	6.8	18.6
Total	**6,385**	**876**	**13.7**	**77.5**	**1.4**	**1.0**	**6.3**	**15.8**

Note: 1. Figures within parentheses are based on less than 10 cases.
2. Missing information on educational level and work status is not presented separately.

* Number of women in this category add up to more than the total, as some women have been exposed to more than one media.

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Chapter 10

Concepts and Definitions Used

Housing Unit –
Housing unit is a group of persons related or not related to each other who usually live in a house or any other living quarters.

Household –
A household, as defined in the survey refers to a person or a group of persons who usually live in the same housing unit and have common arrangement for the preparation and consumption of food.

Visitor –
A visitor is defined as someone who is not a usual resident of the household but temporarily staying with the family. Such visitors are also included in the household questionnaire.

Head of Household –
The head of household is the adult member, male or female who is primarily responsible for the maintenance, support and care of the household, she / he may be an elder member regarded as the head by the other members of the household. He/She should be a permanent resident of the household.

Median Age –
The midpoint age that separates the younger half of a population from the older half.

Reproductive Age Group –
The period or age group at which a woman has the ability to bear children. (Normally taken as (15-49) including both ends).

Age Dependency Ratio –
The ratio of persons in the ages defined as dependent (under 15 and over 64 yrs.) to those in the ages defined as economically productive (15 to 64 yrs.) in a population.

Singulate Mean Age at Marriage (SMAM) –
It is the average number of years lived in a single state, computed from data on marital status by age.

Infant Mortality Rate –
The number of deaths to infants under 1 year of age per 1,000 live births in a given year. This excludes deaths prior to birth such as still births, miscarriages and abortions.

Neo-Natal Mortality Rate –
The number of deaths within the first 28 days after birth, per 1,000 live births in that year.

Post Neo-Natal Mortality Rate –
The number of deaths within the period of 4 weeks to 51 weeks after birth, per 1,000 live births, in a given year.

Under 5 Children Mortality Rate –
The number of deaths under 5 years of age per 1,000 live births in a given year.

Total Fertility Rate –
The average number of children that would be born alive to a woman (or group of women) during her life time, if she were to pass through her child bearing years conforming to the age specific fertility rates of a given year.

Age Specific Fertility Rate –
The age specific fertility rate for women of a given age/age group is the number of babies born to women of that age/age group, per 1,000 women of that age/age group in the population at the middle of that year.

Contraceptive Prevalence Rate –
Percentage of current users of any contraceptive method among currently married women aged 15-49 years.

Body Mass Index –
BMI = (Weight in Kg) / (Height in m)^2

Median Age at Marriage (MAAM) –
Age at which 50 percent of women in the population get married.

Low Birth Weight –
If the measured birth weight of a child is below 2.5Kg, that birth is considered as a low weighted birth.

Mean Ideal Number of Children –
This is used as a measure of fertility preferences of women in the reproductive age group. Mean ideal number of children is computed by dividing the ideal number of children that women would like to have in their life time by the number of women.

Stunted (Height-for-Age) –
A child whose height-for-age is minus two standard deviations or below from the median of the reference population is considered stunted.

Wasted (Weight-for-Height) –
A child whose weight-for-height is minus two standard deviations or below from the median of the reference population is considered wasted.

Underweight (Weight-for-Age) –
A child whose weight-for-age is minus two standard deviations or below from the median of the reference population is considered underweight.

Appendix A

Estimates of Sampling Errors

For computation of sampling error estimates Microsoft Computer package CENVAR was used. CENVAR is the variance calculation component of the Integrated Microcomputer Processing System (IMPS), developed by the International Programmes Centre (IPC) of the US Bureau of the Census.

For each specified parameter and domain (stratum) estimation, CENVAR produces a tabulated output with the following measures.

- the estimated value of the parameter
- the standard error
- the coefficient of variation
- the 95 percent confidence interval
- the design effect (DEFF) and
- the number of observations upon which the estimate is based

The variance indicate the precision (reliability) of the estimates which is represented usually by the standard error of the estimate, equal to the square root of the variance. The variance is lower when the sample size is large and when the sample design is efficient.

Estimation Formulae

The survey estimates will generally be in the form of totals, ratios, means and proportions.

The estimation formula for a total of a variable Y for a subpopulation A of a domain *d* is the following;

$$\hat{Y} = \sum_{h}^{d} \sum_{i} \sum_{j \in A} W'_{dhij} y_{dhij} \qquad (1)$$

Where; Y_A = estimated total for the variable Y in subpopulation A

d = domain of estimation or combination of domains

h = Substratum within the domain

I = PSU's in the sample

j = record index in the data set : it can denote a household or a person , depending upon what is being analyzed

A = Subset of records (households or persons) belonging to a subpopulation A , that is subgroups of the population that meet a certain criteria.

W'_{dhij} = final weighting factor for the household within the domain of estimation and socio-economic sub stratum

y_{dhij} = Observed value of variable " Y " in record j

The estimation formula for a ratio Y/X in sub population A is given by

$$\hat{R}_A = \frac{\hat{Y}_A}{\hat{X}_A} \qquad (2)$$

Where; $\hat{X}_A$ = Estimated total for variable X in subpopulation A, using formula (1)

$\hat{Y}_A$ = Estimated total for variable Y in subpopulation A, also using formula (1)

Means and proportions are special types of ratios. In the case of the mean , the variable X is equal to 1. for each record so that the denominator of the ratio is the sum of the weighting factors inside the subpopulation .In the case of a proportion variable X in the denominator is also defined to be equal to 1 for all records .But, in addition, variable Y in the numerator is either equal to 0 or 1 , based on the absence or presence ,respectively of a specific characteristic.

Variance Calculation

It is very important to calculate standard errors for the main survey estimates so that the user can have an idea of their reliability or precision.

The variance calculation will use the method of ultimate clusters within any domain of estimation , for a subpopulation A and for a characteristic Y the formula is ;

$$V(\hat{y}_A)=\sum_h\left[\frac{n_h}{n_h-1}\sum_{i=1}^{nh}\left(\hat{Y}_{ahi}-\frac{\hat{Y}_{Ah}}{n_h}\right)^2\right] \qquad (3)$$

Where $\hat{Y}_{Ahi}=\sum_{j\in A}W'_{hij}y_{hij}$

$$\hat{Y}_{Ah}=\sum_i\sum_{j\in a}W'_{hij}y_{hij}$$

$$V(\hat{R}_A)=\frac{1}{\hat{X}_A^2}\left[V(\hat{Y}_A)+\hat{R}^2{}_AV(\hat{X}_A)-2\hat{R}_ACov(\hat{X}_A\hat{Y}_A)\right]$$

Where $\hat{X}_A$ is calculated using formula (1)

$\hat{R}_A$ is calculated using formula (2)

$V(\hat{Y}_A)$ and $V(\hat{X}_A)$ using formula (3)

$$Cov(\hat{X}_A\hat{Y}_A)=\sum_h\left[\frac{n_h}{n_h-1}\sum_{i=1}^{nh}\left(\hat{X}_{Ahi}-\frac{\hat{X}_{Ah}}{n_h}\right)\left(\hat{Y}_{Ahi}-\frac{\hat{Y}_{Ah}}{n_h}\right)\right]$$

In addition to the standard error estimates ,CENVAR 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 is the sampling error due to the use of a more complex and less statistically efficient design.

The relative error which is calculated by dividing the standard error of an estimate by the magnitude of the estimate (SE/R) is also included in these tables. It removes the effect on standard error of the magnitude and scale of measurement of the estimate.

Sampling error are presented in Table A.2-A.11 for the variables considered to be of major interest. Results are presented for the whole country, for urban and rural areas and for the seven zones. For each variable, the type of statistic (Mean, Proportion) and the base population are given in Table A.1, For each variable, Table A.2-A.11 present the value of the statistic, R its standard error SE, the weighted number of cases, WN, the DEFT value, the relative standard error, SE/R and the 95 percent confidence limits R ± 2RE.

Table A.1 List of selected variables for sampling errors

Variable	Type	Base population
School attendance (Secondary or more)	Proportion	All Women
Watching TV (at least once a week)	Proportion	All Women
Heard about HIV / AIDS	Proportion	All Women
Know mother to child transmission	Proportion	All Women
Currently married	Proportion	All Women
Children ever born	Mean	All Women
Children Surviving	Mean	All Women
Currently pregnant	Proportion	Currently married women
Knows modern method	Proportion	Currently married women
Ever use any method	Proportion	Currently married women
Ever use traditional method	Proportion	Currently married women
Currently using any method	Proportion	Currently married women
Currently using traditional method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using female sterilization	Proportion	Currently married women
Currently using abstinence	Proportion	Currently married women
Wants more children	Proportion	Currently married women
wants delay next child 2 or more years	Proportion	Currently married women
Ideal family size	Mean	Currently married women
Medical attention last birth	Proportion	Children Under five
Received tetanus	Proportion	Children Under five
Ever breastfeeding	Proportion	Children Under five
Received Colustrum	Proportion	Children Under five
Diarrhoea last 2 weeks	Proportion	Children Under five
With health card	Proportion	Children 12-23 months
Received BCG	Proportion	Children 12-23 months with health card
Received DPT(3 doses)	Proportion	Children 12-23 months with health card
Received Polio(3 doses)	Proportion	Children 12-23 months with health card
Received Measles	Proportion	Children 12-23 months with health card
Fully immunized	Proportion	Children 12-23 months with health card

Table A.2 Sampling errors : Entire sample

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.767	0.013	6385.0	5.980	0.017	0.741	0.792
Watching TV (at least once a week)	0.674	0.012	6385.0	4.450	0.018	0.650	0.699
Heard about HIV / AIDS	0.903	0.009	6385.0	5.990	0.010	0.885	0.921
Know mother to child transmission	0.671	0.012	6385.0	4.120	0.018	0.647	0.694
Currently married	0.926	0.004	6385.0	1.720	0.004	0.918	0.935
Children ever born	2.227	0.026	6385.0	2.000	0.012	2.176	2.277
Children Surviving	2.135	0.025	6385.0	1.980	0.012	2.087	2.184
Currently pregnant	0.061	0.004	5914.7	1.520	0.066	0.054	0.069
Knows modern method	0.991	0.001	5914.7	1.540	0.001	0.989	0.994
Ever use any method	0.847	0.007	5914.7	2.450	0.008	0.833	0.862
Ever use traditional method	0.485	0.013	5914.7	4.250	0.027	0.459	0.511
Currently using any method	0.700	0.009	5914.7	2.140	0.013	0.681	0.715
Currently using traditional method	0.205	0.009	5914.7	2.730	0.044	0.187	0.221
Currently using pill	0.067	0.004	5914.7	1.560	0.060	0.059	0.075
Currently using female sterilization	0.210	0.009	5914.7	3.120	0.043	0.191	0.228
Currently using abstinence	0.014	0.002	5914.7	1.520	0.143	0.010	0.017
Wants more children	0.341	0.008	5763.5	1.690	0.023	0.325	0.357
wants delay next child 2 or more years	0.110	0.005	5763.5	1.600	0.045	0.100	0.120
Ideal family size	2.763	0.026	5914.7	2.670	0.009	2.712	2.814
Medical attention last birth	0.837	0.016	2831.8	3.050	0.019	0.806	0.867
Received tetanus	0.985	0.007	2831.8	1.700	0.007	0.972	0.998
Ever breastfeeding	0.980	0.006	2831.8	1.650	0.006	0.969	0.992
Received Colustrum	0.768	0.013	2831.8	2.630	0.017	0.739	0.788
Diarrhoea last 2 weeks	0.066	0.006	2831.8	1.750	0.091	0.054	0.078
With health card	0.885	0.010	504.4	2.010	0.011	0.865	0.905
Received BCG	0.998	0.003	504.4	1.040	0.003	0.991	1.002
Received DPT(3 doses)	0.980	0.004	504.4	0.840	0.004	0.985	0.999
Received Polio(3 doses)	0.982	0.006	504.4	0.970	0.006	0.970	0.993
Received Measles	0.940	0.013	504.4	1.400	0.014	0.909	0.962
Fully immunized	0.935	0.013	504.4	1.330	0.014	0.907	0.957

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Table A.3 Sampling errors : Urban

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.834	0.020	1303.8	3.730	0.024	0.795	0.873
Watching TV (at least once a week)	0.794	0.018	1303.8	2.640	0.023	0.759	0.830
Heard about HIV / AIDS	0.952	0.008	1303.8	1.740	0.008	0.936	0.967
Know mother to child transmission	0.740	0.020	1303.8	2.610	0.027	0.702	0.779
Currently married	0.929	0.009	1303.8	1.510	0.010	0.912	0.946
Children ever born	2.045	0.047	1303.8	1.590	0.023	1.953	2.137
Children Surviving	1.980	0.043	1303.8	1.470	0.022	1.895	2.065
Currently pregnant	0.066	0.008	1208.7	1.360	0.121	0.050	0.083
Knows modern method	0.993	0.003	1208.7	1.580	0.003	0.986	0.999
Ever use any method	0.813	0.018	1208.7	2.580	0.032	0.778	0.848
Ever use traditional method	0.468	0.025	1208.7	3.080	0.053	0.419	0.517
Currently using any method	0.646	0.016	1208.7	1.320	0.025	0.614	0.677
Currently using traditional method	0.220	0.018	1208.7	2.160	0.082	0.185	0.254
Currently using pill	0.063	0.007	1208.7	1.060	0.111	0.049	0.077
Currently using female sterilization	0.153	0.013	1208.7	1.580	0.085	0.127	0.178
Currently using abstinence	0.016	0.005	1208.7	1.570	0.313	0.007	0.025
Wants more children	0.364	0.014	1179.1	0.930	0.038	0.338	0.391
wants delay next child 2 or more years	0.091	0.009	1179.1	1.250	0.099	0.073	0.110
Ideal family size	2.711	0.063	1208.7	3.240	0.023	2.587	2.836
Medical attention last birth	0.649	0.025	612.9	1.640	0.039	0.600	0.699
Received tetanus	0.954	0.017	612.9	1.950	0.018	0.921	0.986
Ever breastfeeding	0.997	0.010	612.9	1.190	0.010	0.977	1.016
Received Colustrum	0.801	0.023	612.9	2.180	0.029	0.756	0.847
Diarrhoea last 2 weeks	0.054	0.009	612.9	0.920	0.167	0.037	0.071
With health card	0.892	0.016	112.9	1.320	0.018	0.860	0.924
Received BCG	1.000	0.000	112.9		0.000	1.000	1.000
Received DPT(3 doses)	0.999	0.001	112.9	0.170	0.001	0.996	1.001
Received Polio(3 doses)	0.990	0.008	112.9	0.830	0.008	0.974	1.007
Received Measles	0.919	0.030	112.9	1.220	0.033	0.860	0.978
Fully immunized	0.930	0.027	112.9	1.270	0.029	0.877	0.982

Table A.4 Sampling errors : Rural

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.794	0.014	4657.8	5.530	0.018	0.767	0.821
Watching TV (at least once a week)	0.657	0.016	4657.8	4.990	0.024	0.627	0.688
Heard about HIV / AIDS	0.935	0.007	4657.8	3.450	0.007	0.922	0.949
Know mother to child transmission	0.696	0.013	4657.8	3.520	0.019	0.671	0.721
Currently married	0.925	0.005	4309.2	1.940	0.005	0.915	0.936
Children ever born	2.234	0.034	4657.8	2.370	0.015	2.168	2.299
Children Surviving	2.150	0.032	4657.8	2.340	0.015	2.088	2.212
Currently pregnant	0.061	0.005	4309.2	1.660	0.082	0.052	0.070
Knows modern method	0.995	0.001	4309.2	1.430	0.001	0.992	0.997
Ever use any method	0.873	0.007	4309.2	1.970	0.008	0.859	0.887
Ever use traditional method	0.520	0.017	4309.2	4.760	0.033	0.487	0.552
Currently using any method	0.720	0.010	4309.2	2.330	0.014	0.699	0.740
Currently using traditional method	0.212	0.011	4309.2	2.880	0.052	0.191	0.232
Currently using pill	0.073	0.005	4309.2	1.580	0.068	0.063	0.083
Currently using female sterilization	0.210	0.012	4309.2	4.000	0.057	0.186	0.235
Currently using abstinence	0.012	0.002	4309.2	1.550	0.167	0.008	0.016
Wants more children	0.341	0.010	4195.6	1.850	0.029	0.321	0.360
wants delay next child 2 or more years	0.118	0.007	4195.6	1.720	0.059	0.105	0.131
Ideal family size	2.694	0.030	4309.2	3.310	0.011	2.635	2.754
Medical attention last birth	0.791	0.012	1968.3	1.460	0.015	0.767	0.815
Received tetanus	0.999	0.008	1968.3	1.770	0.008	0.984	1.015
Ever breastfeeding	0.981	0.007	1968.3	1.960	0.007	0.967	0.996
Received Colustrum	0.770	0.015	1968.3	2.490	0.019	0.742	0.799
Diarrhoea last 2 weeks	0.070	0.008	1968.3	1.770	0.114	0.055	0.085
With health card	0.908	0.012	354.9	1.900	0.013	0.885	0.930
Received BCG	0.997	0.003	354.9	1.240	0.003	0.990	1.003
Received DPT(3 doses)	0.994	0.004	354.9	1.120	0.004	0.985	1.120
Received Polio(3 doses)	0.984	0.008	354.9	1.320	0.008	0.969	0.999
Received Measles	0.951	0.014	354.9	1.320	0.015	0.924	0.978
Fully immunized	0.943	0.013	354.9	1.150	0.014	0.917	0.968

Table A.5 Sampling errors : Zone 1

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.833	0.026	761.7	3.750	0.031	0.781	0.884
Watching TV (at least once a week)	0.820	0.018	761.7	1.750	0.022	0.784	0.856
Heard about HIV / AIDS	0.948	0.011	761.7	1.900	0.012	0.926	0.970
Know mother to child transmission	0.731	0.028	761.7	2.980	0.038	0.676	0.785
Currently married	0.924	0.010	761.7	0.980	0.011	0.905	0.942
Children ever born	1.979	0.056	761.7	1.470	0.028	1.870	2.089
Children Surviving	1.916	0.053	761.7	1.450	0.028	1.812	2.020
Currently pregnant	0.069	0.012	704.0	1.600	0.174	0.046	0.093
Knows modern method	0.994	0.003	704.0	0.950	0.003	0.988	0.999
Ever use any method	0.831	0.019	704.0	1.810	0.023	0.794	0.868
Ever use traditional method	0.451	0.028	704.0	2.170	0.062	0.397	0.505
Currently using any method	0.641	0.018	704.0	0.950	0.028	0.606	0.676
Currently using traditional method	0.209	0.017	704.0	1.280	0.081	0.175	0.243
Currently using pill	0.075	0.009	704.0	0.800	0.120	0.057	0.092
Currently using female sterilization	0.146	0.017	704.0	1.600	0.116	0.113	0.179
Currently using abstinence	0.026	0.007	704.0	1.340	0.269	0.012	0.039
Wants more children	0.336	0.018	691.7	1.000	0.301	0.301	0.371
wants delay next child 2 or more years	0.082	0.011	691.7	1.180	0.134	0.060	0.104
Ideal family size	2.702	0.087	704.0	3.340	0.032	2.532	2.872
Medical attention last birth	0.603	0.029	362.2	1.170	0.048	0.547	0.658
Received tetanus	0.946	0.024	362.2	2.320	0.025	0.898	0.994
Ever breastfeeding	0.989	0.013	362.2	1.710	0.013	0.963	1.016
Received Colustrum	0.831	0.026	362.2	1.860	0.031	0.779	0.883
Diarrhoea last 2 weeks	0.056	0.012	362.2	1.020	0.214	0.032	0.079
With health card	0.888	0.020	56.6	1.150	0.023	0.849	0.927
Received BCG	1.000	0.000	56.6	-	0.000	1.000	1.000
Received DPT(3 doses)	1.000	0.000	56.6	-	0.000	1.000	1.000
Received Polio(3 doses)	1.000	0.000	56.6	-	0.000	1.000	1.000
Received Measles	0.909	0.045	56.6	1.310	0.050	0.821	0.997
Fully immunized	0.915	0.043	56.6	1.390	0.047	0.830	0.999

Table A.6 Sampling errors :Zone 2

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	R+2SE
School attendance (Secondary or more)	0.883	0.018	1046.2	3.280	0.020	0.847	0.918
Watching TV (at least once a week)	0.786	0.024	1046.2	3.630	0.031	0.739	0.833
Heard about HIV / AIDS	0.968	0.008	1046.2	2.080	0.008	0.953	0.984
Know mother to child transmission	0.759	0.021	1046.2	2.500	0.028	0.718	0.800
Currently married	0.925	0.011	1046.2	1.900	0.012	0.903	0.947
Children ever born	1.940	0.059	1046.2	2.500	0.030	1.824	2.056
Children Surviving	1.881	0.054	1046.2	2.180	0.029	1.776	1.986
Currently pregnant	0.039	0.007	966.0	1.390	0.179	0.025	0.053
Knows modern method	0.998	0.002	966.0	1.540	0.002	0.995	1.002
Ever use any method	0.863	0.020	966.0	3.390	0.023	0.824	0.903
Ever use traditional method	0.583	0.031	966.0	3.820	0.053	0.523	0.644
Currently using any method	0.683	0.022	966.0	2.090	0.032	0.640	0.725
Currently using traditional method	0.257	0.022	966.0	2.480	0.086	0.214	0.301
Currently using pill	0.067	0.012	966.0	2.130	0.179	0.044	0.090
Currently using female sterilization	0.156	0.017	966.0	2.040	0.109	0.124	0.189
Currently using abstinence	0.016	0.005	966.0	1.810	0.313	0.006	0.027
Wants more children	0.345	0.022	934.5	1.920	0.064	0.303	0.387
wants delay next child 2 or more years	0.094	0.015	934.5	2.570	0.160	0.064	0.124
Ideal family size	2.445	0.051	966.0	2.760	0.021	2.345	2.544
Medical attention last birth	0.737	0.031	413.6	1.900	0.042	0.676	0.798
Received tetanus	0.989	0.012	413.6	1.270	0.012	0.965	1.012
Ever breastfeeding	0.968	0.014	413.6	1.660	0.014	0.940	0.995
Received Colustrum	0.836	0.024	413.6	1.750	0.029	0.789	0.883
Diarrhoea last 2 weeks	0.091	0.020	413.6	1.970	0.220	0.053	0.130
With health card	0.898	0.022	72.2	1.730	0.024	0.854	0.941
Received BCG	1.000	0.000	72.2	-	0.000	1.000	1.000
Received DPT(3 doses)	1.000	0.000	72.2	-	0.000	1.000	1.000
Received Polio(3 doses)	1.000	0.000	72.2	-	0.000	1.000	1.000
Received Measles	1.000	0.000	72.2	-	0.000	1.000	1.000
Fully immunized	1.000	0.000	72.2	-	0.000	1.000	1.000

Table A.7 Sampling errors : Zone 3

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	R+2SE
School attendance (Secondary or more)	0.808	0.030	928.3	5.550	0.037	0.749	0.868
Watching TV (at least once a week)	0.614	0.027	928.3	2.860	0.044	0.561	0.667
Heard about HIV / AIDS	0.921	0.019	928.3	4.720	0.021	0.884	0.959
Know mother to child transmission	0.639	0.029	928.3	3.300	0.045	0.583	0.695
Currently married	0.945	0.008	928.3	1.150	0.008	0.929	0.961
Children ever born	2.232	0.056	928.3	1.300	0.025	2.122	2.342
Children Surviving	2.161	0.056	928.3	1.390	0.026	2.052	2.270
Currently pregnant	0.068	0.012	876.1	2.030	0.176	0.044	0.092
Knows modern method	0.988	0.005	876.1	1.460	0.005	0.979	0.996
Ever use any method	0.839	0.019	876.1	2.450	0.023	0.801	0.877
Ever use traditional method	0.579	0.036	876.1	4.570	0.062	0.509	0.648
Currently using any method	0.686	0.025	876.1	2.470	0.036	0.637	0.734
Currently using traditional method	0.278	0.024	876.1	2.570	0.086	0.231	0.326
Currently using pill	0.057	0.010	876.1	1.670	0.175	0.037	0.077
Currently using female sterilization	0.137	0.016	876.1	1.950	0.117	0.106	0.169
Currently using abstinence	0.025	0.006	876.1	1.340	0.240	0.013	0.037
Wants more children	0.343	0.022	845.8	1.890	0.064	0.299	0.387
wants delay next child 2 or more years	0.135	0.013	845.8	1.290	0.096	0.109	0.161
Ideal family size	2.618	0.041	876.1	1.510	0.016	2.537	2.699
Medical attention last birth	0.781	0.031	433.2	2.110	0.040	0.721	0.842
Received tetanus	1.006	0.013	433.2	1.280	0.013	0.981	1.031
Ever breastfeeding	0.977	0.016	433.2	1.750	0.016	0.946	1.008
Received Colustrum	0.709	0.031	433.2	2.170	0.044	0.648	0.771
Diarrhoea last 2 weeks	0.048	0.011	433.2	1.130	0.229	0.027	0.069
With health card	0.904	0.030	88.6	2.660	0.033	0.846	0.963
Received BCG	0.986	0.014	88.6	1.250	0.014	0.960	1.013
Received DPT(3 doses)	0.986	0.014	88.6	1.250	0.014	0.960	1.013
Received Polio(3 doses)	0.986	0.014	88.6	1.250	0.014	0.960	1.013
Received Measles	0.984	0.015	88.6	1.240	0.015	0.954	1.015
Fully immunized	0.986	0.014	88.6	1.250	0.014	0.960	1.013

Table A.8 Sampling errors : Zone 4

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.797	0.027	1447.1	6.660	0.034	0.743	0.850
Watching TV (at least once a week)	0.662	0.022	1447.1	3.180	0.033	0.618	0.705
Heard about HIV / AIDS	0.926	0.023	1447.1	11.510	0.025	0.880	0.972
Know mother to child transmission	0.739	0.032	1447.1	7.570	0.043	0.676	0.801
Currently married	0.919	0.011	1447.1	2.450	0.012	0.897	0.941
Children ever born	2.218	0.064	1447.1	2.790	0.029	2.092	2.343
Children Surviving	2.281	0.057	1447.1	2.330	0.025	2.169	2.233
Currently pregnant	0.064	0.009	1330.3	1.930	0.141	0.045	0.082
Knows modern method	0.997	0.002	1330.3	1.530	0.002	0.994	1.001
Ever use any method	0.883	0.012	1330.3	1.730	0.014	0.860	0.905
Ever use traditional method	0.567	0.035	1330.3	6.820	0.062	0.497	0.636
Currently using any method	0.739	0.017	1330.3	1.940	0.023	0.707	0.772
Currently using traditional method	0.228	0.023	1330.3	3.930	0.101	0.183	0.273
Currently using pill	0.080	0.011	1330.3	2.090	0.138	0.059	0.101
Currently using female sterilization	0.206	0.018	1330.3	2.690	0.087	0.171	0.242
Currently using abstinence	0.004	0.002	1330.3	1.730	0.500	0.000	0.009
Wants more children	0.339	0.019	1298.0	2.080	0.056	0.302	0.376
wants delay next child 2 or more years	0.129	0.013	1298.0	1.960	0.101	0.103	0.154
Ideal family size	2.710	0.051	1330.3	2.930	0.019	2.611	2.809
Medical attention last birth	0.838	0.054	595.8	9.730	0.064	0.731	0.945
Received tetanus	1.003	0.013	595.8	1.210	0.013	0.978	1.028
Ever breastfeeding	0.982	0.013	595.8	1.560	0.013	0.957	1.007
Received Colustrum	0.784	0.033	595.8	4.050	0.042	0.719	0.849
Diarrhoea last 2 weeks	0.090	0.018	595.8	2.490	0.200	0.054	0.126
With health card	0.895	0.035	124.0	4.500	0.039	0.826	0.964
Received BCG	1.000	0.000	124.0	-	0.000	1.000	1.000
Received DPT(3 doses)	1.000	0.000	124.0	-	0.000	1.000	1.000
Received Pollo(3 doses)	1.000	0.000	124.0	-	0.000	1.000	1.000
Received Measles	0.903	0.030	124.0	1.170	0.033	0.844	0.962
Fully immunized	0.913	0.027	124.0	1.120	0.030	0.861	0.965

Table A.9 Sampling errors : Zone 5

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.652	0.041	1446.4	10.600	0.063	0.572	0.732
Watching TV (at least once a week)	0.607	0.038	1446.4	8.700	0.063	0.533	0.681
Heard about HIV / AIDS	0.794	0.032	1446.4	8.910	0.040	0.732	0.856
Know mother to child transmission	0.541	0.033	1446.4	6.220	0.061	0.477	0.605
Currently married	0.931	0.010	1446.4	2.050	0.011	0.912	0.950
Children ever born	2.396	0.057	1446.4	2.000	0.024	2.285	2.508
Children Surviving	2.281	0.057	1446.4	2.330	0.025	2.169	2.393
Currently pregnant	0.066	0.007	1348.9	1.210	0.106	0.052	0.081
Knows modern method	0.986	0.004	1348.9	1.680	0.004	0.978	0.994
Ever use any method	0.818	0.020	1348.9	3.540	0.024	0.780	0.857
Ever use traditional method	0.334	0.026	1348.9	4.140	0.078	0.283	0.386
Currently using any method	0.711	0.021	1348.9	3.010	0.030	0.669	0.753
Currently using traditional method	0.136	0.015	1348.9	2.630	0.110	0.107	0.166
Currently using pill	0.060	0.007	1348.9	1.160	0.117	0.046	0.074
Currently using female sterilization	0.304	0.026	1348.9	4.350	0.086	0.253	0.356
Currently using abstinence	0.012	0.004	1348.9	1.440	0.333	0.005	0.019
Wants more children	0.328	0.018	1318.7	1.980	0.055	0.293	0.364
wants delay next child 2 or more years	0.095	0.010	1318.7	1.470	0.105	0.076	0.115
Ideal family size	3.084	0.070	1348.9	2.800	0.023	2.947	3.221
Medical attention last birth	0.628	0.031	668.4	2.470	0.049	0.567	0.690
Received tetanus	0.977	0.019	668.4	2.500	0.019	0.939	1.015
Ever breastfeeding	0.980	0.014	668.4	1.970	0.014	0.953	1.007
Received Colustrum	0.751	0.028	668.4	3.060	0.037	0.695	0.807
Diarrhoea last 2 weeks	0.050	0.011	668.4	1.610	0.220	0.029	0.070
With health card	0.851	0.013	106.4	0.660	0.015	0.825	0.877
Received BCG	0.994	0.006	106.4	0.630	0.006	0.983	1.005
Received DPT(3 doses)	0.983	0.009	106.4	0.550	0.009	0.965	1.001
Received Polio(3 doses)	0.946	0.021	106.4	0.950	0.022	0.905	0.987
Received Measles	0.887	0.042	106.4	1.660	0.047	0.805	0.969
Fully immunized	0.866	0.039	106.4	1.390	0.045	0.790	0.941

Table A.10 Sampling errors : Zone 6

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.750	0.022	256.1	0.680	0.029	0.706	0.793
Watching TV (at least once a week)	0.650	0.031	256.1	1.090	0.048	0.588	0.711
Heard about HIV / AIDS	0.939	0.016	256.1	1.140	0.017	0.907	0.970
Know mother to child transmission	0.665	0.029	256.1	0.960	0.044	0.608	0.722
Currently married	0.924	0.016	256.1	0.890	0.017	0.893	0.955
Children ever born	2.455	0.070	256.1	0.450	0.029	2.316	2.593
Children Surviving	2.334	0.062	256.1	0.400	0.027	2.212	2.455
Currently pregnant	0.061	0.010	236.1	0.380	0.164	0.042	0.080
Knows modern method	0.997	0.002	236.1	0.210	0.002	0.993	1.000
Ever use any method	0.912	0.013	236.1	0.460	0.014	0.887	0.937
Ever use traditional method	0.515	0.025	236.1	0.570	0.049	0.467	0.563
Currently using any method	0.747	0.024	236.1	0.700	0.032	0.701	0.793
Currently using traditional method	0.151	0.015	236.1	0.420	0.099	0.121	0.180
Currently using pill	0.085	0.014	236.1	0.560	0.165	0.058	0.111
Currently using female sterilization	0.286	0.026	236.1	0.760	0.091	0.236	0.336
Currently using abstinence	0.003	0.002	236.1	0.230	0.667	0.000	0.006
Wants more children	0.381	0.022	230.4	0.460	0.058	0.388	0.424
wants delay next child 2 or more years	0.123	0.016	230.4	0.520	0.130	0.092	0.153
Ideal family size	2.810	0.062	236.1	0.570	0.022	2.687	2.932
Medical attention last birth	0.720	0.036	98.3	0.600	0.050	0.650	0.789
Received tetanus	0.972	0.013	98.3	0.300	0.013	0.946	0.998
Ever breastfeeding	0.980	0.011	98.3	0.270	0.011	0.959	1.001
Received Colustrum	0.704	0.031	98.3	0.480	0.044	0.643	0.765
Diarrhoea last 2 weeks	0.960	0.022	98.3	0.580	0.023	0.052	0.140
With health card	0.894	0.017	15.2	0.250	0.019	0.860	0.928
Received BCG	1.000	0.000	15.2	-	0.000	1.000	1.000
Received DPT(3 doses)	1.000	0.000	15.2	-	0.000	1.000	1.000
Received Polio(3 doses)	1.000	0.000	15.2	-	0.000	1.000	1.000
Received Measles	0.965	0.017	15.2	0.130	0.018	0.932	0.999
Fully immunized	0.958	0.023	15.2	0.200	0.024	0.913	1.003

Table A.11 Sampling errors : Zone 7

Variable	Value (R)	Standard error (SE)	Weighted number (WN)	Design effect (DEFT)	Relative error (SE / R)	Confidence limits R-2SE	Confidence limits R+2SE
School attendance (Secondary or more)	0.598	0.037	499.200	2.860	0.062	0.525	0.671
Watching TV (at least once a week)	0.576	0.032	499.200	2.050	0.056	0.514	0.639
Heard about HIV / AIDS	0.894	0.025	499.200	3.250	0.028	0.845	0.943
Know mother to child transmission	0.635	0.031	499.200	2.040	0.049	0.574	0.695
Currently married	0.908	0.011	499.200	0.770	0.012	0.886	0.930
Children ever born	2.609	0.058	499.200	0.540	0.022	2.495	2.723
Children Surviving	2.476	0.057	499.200	0.600	0.023	2.364	2.588
Currently pregnant	0.065	0.010	453.300	0.720	0.154	0.046	0.084
Knows modern method	0.978	0.009	453.300	1.810	0.009	0.960	0.996
Ever use any method	0.804	0.028	453.300	2.230	0.035	0.749	0.859
Ever use traditional method	0.342	0.023	453.300	1.040	0.067	0.297	0.386
Currently using any method	0.663	0.031	453.300	1.920	0.047	0.603	0.723
Currently using traditional method	0.093	0.014	453.300	0.990	0.151	0.067	0.120
Currently using pill	0.052	0.008	453.300	0.640	0.154	0.035	0.068
Currently using female sterilization	0.251	0.026	453.300	1.580	0.104	0.201	0.301
Currently using abstinence	0.004	0.002	453.300	0.580	0.500	0.000	0.008
Wants more children	0.357	0.016	444.300	0.520	0.045	0.325	0.389
Wants delay next child 2 or more years	0.123	0.016	444.300	1.060	0.130	0.091	0.154
Ideal family size	2.991	0.067	453.300	1.370	0.022	2.859	3.122
Medical attention last birth	0.671	0.036	260.300	1.410	0.054	0.600	0.741
Received tetanus	0.985	0.016	260.300	0.960	0.016	0.953	1.017
Ever breastfeeding	0.985	0.016	260.300	1.030	0.016	0.954	1.016
Received Colustrum	0.712	0.036	260.300	0.176	0.051	0.641	0.783
Diarrhoea last 2 weeks	0.049	0.012	260.300	0.820	0.245	0.025	0.072
With health card	0.891	0.012	41.400	0.310	0.013	0.867	0.916
Received BCG	1.000	0.000	41.400	-	0.000	1.000	1.000
Received DPT(3 doses)	0.973	0.023	41.400	0.840	0.024	0.929	1.018
Received Polio(3 doses)	0.942	0.029	41.400	0.650	0.031	0.886	0.999
Received Measles	0.966	0.025	41.400	0.740	0.026	0.918	1.015
Fully immunized	0.939	0.029	41.400	0.640	0.031	0.881	0.996

All information collected at this survey will be treated as strictly confidential. Individual information will not be released.

Demographic And Health Survey
Sri Lanka - 2000

Conducted by the Department of Census and Statistics
for the Ministry of Health and Indigenous Medicine
with assistance from the World Bank.

First Three Digits of the Year of Birth	Age Determination Table									
	Last Digit of the Year of Birth									
	0	1	2	3	4	5	6	7	8	9
195.....	49	49 / 48	48 / 47	47 / 46	46 / 45	45 / 44	44 / 43	43 / 42	42 / 41	41 / 40
196.....	40 / 39	39 / 38	38 / 37	37 / 36	36 / 35	35 / 34	34 / 33	33 / 32	32 / 31	31 / 30
197.....	30 / 29	29 / 28	28 / 27	27 / 26	26 / 25	25 / 24	24 / 23	23 / 22	22 / 21	21 / 20
198.....	20 / 19	19 / 18	18 / 17	17 / 16	16 / 15	15 / 14	14 / 13	13 / 12	12 / 11	11 / 10
199.....	10 / 09	09 / 08	08 / 07	07 / 06	06 / 05	05 / 04	04 / 03	03 / 02	02 / 01	01 / 00
200.....	00									

Department of Census and Statistics of Sri Lanka
Demographic and Health Survey

Household Schedule

Identification		
Zone (Sample stratum):	.....	☐☐
District :	.....	☐☐
Sector (Urban/Rural/Estate):	.....	☐
PSU (Ward/GN Div/Estate):	.....	☐☐
SSU (Survey block number):	.....	☐
Housing unit number:	.....	☐☐☐
Household number:	.....	☐
No. of completed individual questionnaires (To be filled by supervisor)	.....	☐☐

Interviewer visits				
	1	2	3	Final visit
Date	.....	.....	.....	Month ☐☐ Year ☐☐ Date ☐☐
Interviewer's name:	.....	.....	.....	
Result*:	.....	.....	.....	☐
Next visit: Date	.....	.....		Total no. of visits ☐
Time	.....	.....		

* RESULT CODES

1. Completed
2. HH exists, but no competent respondent at home
3. Nobody at home
4. Postponed
5. Refused
6. Dwelling vacant/address not a dwelling
7. Dwelling destroyed
8. Dwelling not found
9. Other (Specify) .....

Now record the time in 24 hours time

Hour ☐☐

Minutes ☐☐

	Field edited by	Office edited by	Keyed by	Keyed by
Name:	.....	.....	.....	☐☐
Date :	.....	.....	.....	

Section A : Information of People Who Usually Live / Currently Stay in the Household

Demographic Characteristics								Other Information	
NAME		RELATION - SHIP	RESIDENCE		SEX	AGE	EDUC. LEVEL (5 and above)	MARITAL STATUS (10 & above)	Whether received Rubella (German measles) Vaccine (All females in the age group 11 - 44)	ELIGIBILITY *
Please give me the names of the persons who usually live in your household. Include all others who are staying with you now. **(RECORD NAME OF HEAD OF HOUSEHOLD FIRST)**		(NAME) what is the relationship to head of household? (Put the code no.)	Does (NAME) usually live here? Yes 1 No 2	Did (NAME) sleep here last night? Yes 1 No 2	Is (NAME) male or female? Male 1 Female 2	Completed years of age on his / her last birthday.	No schooling 0 1 - 5 year 1 6 - 10 year 2 Passed G.C.E. O/L or equivalent 3 Passed G.C.E. A/L or equivalent 4 Degree and above 5	Never married 1 Married 2 Widowed 3 Divorced/ Seperated 4	Received 1 Not recceived 2 Don't know whether received 3 Not heard of the vaccine 4	Circle line number of women eligible for individual interview
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
01										01
02										02
03										03
04										04
05										05
06										06
07										07
08										08
09										09
10										10
11										11
12										12
13										13
14										14

15										15
16										16
17										17
18										18
19										19
20										20
21										21
22										22
23										23
24										24

* WOMAN IS ELIGIBLE IF COL: (4) = 1; (5) = 2, (6) = 15 - 49, (8) = 2,3 or 4

Note : If a woman usually reside in the household but did not stay during previous night in the household, and if she satisfy the conditions (5)=2, (6)=15 - 49 and (8)=2,3 or 4, she should be considered as an eligible woman. Remember to put 1 in column 4 for them.

Total no. of eligible women on this sheet. ☐☐

1. Are there any other persons such as small children or infants that we have not listed? **Yes** ☐ → (CORRECT AND ENTER NAMES IN TABLE) ☐ **No**

2. In addition, are there any other people who usually live here but are not members of your family, such as domestic servants, lodgers or friends whom we have not listed? **Yes** ☐ → (CORRECT AND ENTER NAMES IN TABLE) ☐ **No**

3. Are there any guests or visitors who are temporarily staying with the family and who spent last night here and now staying here that are not listed? **Yes** ☐ → (CORRECT AND ENTER NAMES IN TABLE) ☐ **No**

CODES FOR RELATIONSHIP TO HEAD OF HOUSEHOLD (COLUMN 2)

Head of household	01
Husband /Wife	02
Son / Daughter	03
Son-in-law / Daugher-in-law	04
Grand son / Grand daughter	05
Parents	06
Grand father / Grand mother	07
Brother /Sister	08
Other relative	09
Adopted child	10
Domestic servants	11
Visitor	12
Other (Specify)	13

Section B : Information About the Housing Unit and the Family

No.	Questions and filters	Coding categories
B1	What is the major source of drinking water for members of your household?	Protected well within premises ..... 1 Protected well outside premises ..... 2 Unprotected well ..... 3 Tube well ..... 4 Public taps / Street taps (main line) ..... 5 Tap within unit / Premises (main line).... 6 Bowser ..... 7 River / Tank/ Streams etc ..... 8 Other (Specify) 9
B2	Whether boiled water is used for drinking in the household? Interviewer : *Ask this question separately for the children less than 5 years and for the other members of the family. Circle the codes according to the instructions given in the instruction manual.*	Children (< 5 years) Yes ..... 1 No ..... 2 Other family members Yes ..... 1 No 2
B3	What kind of latrine facility is available for use by members of this household?	Water seal ..... 1 Pour flush (Not water seal) ..... 2 Pit ..... 3 Bucket ..... 4 Other (Specify) ..... 5 None ..... 6 → Go to B5
B4	Is this facility for the exclusive use of members of this household, or is it shared, or is it a community / public latrine?	Exclusively for the household ..... 1 For the household but shared with others .. 2 Using latrine of another household ..... 3 Community / Public latrine 4
B5	Do you have the habit of washing your hands with soap after using the toilet?	Yes ..... 1 No 2
B6	What type of salt do you use for cooking purposes?	Powdered ..... 1 Crystals 2
B7	When the salt was tested for iodine, did the colour of the tested salt turn to a blue / voilet colour? Interviewer : *If the colour change occurred from the pink solution, count the no. of drops you had to put and indicate it in the given box. (Maximum you could put is 10)*	Colour changed from white solution ..... 1 Colour changed from pink solution after putting ☐☐ drops ..... 2 No colour change 3

No.	Questions and filters	Coding categories
B8	Does your house have the following? Electricity A radio A television A refrigerator	Yes No Electricity ..... 1 2 Radio ..... 1 2 Television ..... 1 2 Refrigerator 1 2
B9	Does any member of your household own the following? A bicycle A motorcycle A car A van A tractor Any other vehicle	Yes No Bicycle ..... 1 2 Motorcycle ..... 1 2 Car ..... 1 2 Van ..... 1 2 Tractor ..... 1 2 Any other vehicle 1 2
B10	What is the main source of energy you are using for cooking?	Fire wood ..... 1 Saw dust/Paddy husk ..... 2 Kerosene ..... 3 Gas ..... 4 Electricity ..... 5 Other (Specify) ..... 6 .....
B11	Main material of the floor Interviewer : *Record observation*	Terrazzo /Floor tile ..... 1 Cement ..... 2 Wood ..... 3 Dung/Mud ..... 4 Sand ..... 5 Other (Specify) ..... 6 .....
B12	Main material of the roof Interviewer : *Record observation*	Tile ..... 1 Asbestos ..... 2 Tin sheets ..... 3 Cadjan/Palmyrah/Straw ..... 4 Waste materials ..... 5 Other (Specify) ..... 6 .....
B13	Main material of the walls Interviewer : *Record observation*	Brick/Cement/Stone/Cabook ..... 1 Mud ..... 2 Wood ..... 3 Cadjan/Palmyrah ..... 4 Other (Specify) ..... 5 .....

Department of Census and Statistics of Sri Lanka
Demographic and Health Survey

Individual Questionnaire

Identification	
Zone (Sample stratum):	.....
District :	.....
Sector (Urban/Rural/Estate):	.....
PSU (Ward/GN Div/Estate):	.....
SSU (Survey block number):	.....
Housing unit number:	.....
Household number:	.....
Line number of eligible woman :	.....

Interviewer visits				
	1	2	3	Final visit
Date	.....	.....	.....	Month ☐☐ Year ☐☐ Date ☐☐
Interviewer's name:	.....	.....	.....	
Result*:	.....	.....	.....	☐
Next visit: Date	.....	.....		Total no. of visits ☐
Time	.....	.....		

* RESULT CODES

1. Completed
2. Not at home
3. Postponed
4. Refused
5. Partly completed
6. Other (Specify) .....

	Field edited by	Office edited by	Keyed by	Keyed by
Name:	.....	.....	.....	☐☐
Date :	.....	.....	.....	

Section 1 : Respondent's background

No.	Questions and filters	Coding categories
101	Interviewer : *Record number of people listed in the household schedule*	Number of people ☐☐
102	Interviewer : *Record number of children age 5 and under listed in the household and who usually live in the household.*	Number of children age 5 and under ☐☐
103	Interviewer: *Now record the time in 24 hours time*	Hour ..... ☐☐ Minutes ..... ☐☐
104	In what date, month and year were you born ? Interviewer : *Obtain the date, month and year accurately*	Date ..... ☐☐ Month ..... ☐☐ Year ..... ☐☐
105	Interviewer : *Please calculate the age of the woman as at her last birthday by considering the year of the birth and age determination chart. Do not ask age from her. Check again whether she is an eligible woman according to her age.*	*Check age determination chart and year of birth in question 104* Age in completed years ☐☐
106	Have you ever attended school?	Yes ..... 1 No ..... 2 → Go to 108
107	What is your highest educational attainment?	1 - 5 year (Primary) ..... 1 6 - 10 year (Secondary) ..... 2 Passed G.C.E. (O/L) or equivalent ..... 3 Passed G.C.E. (A/L) or equivalent ..... 4 Degree and above 5

No.	Questions and filters	Coding categories
108	How often do you read newspapers? Interviewer : *Read out the categories to the Respondent.*	Daily ..... 1 Not daily but at least once a week ..... 2 Seldom ..... 3 Never 4
109	How often do you watch televison? Interviewer : *Read out the categories to the Respondent.*	Daily ..... 1 Not daily but at least once a week ..... 2 Seldom ..... 3 Never 4
110	How often do you listen to the radio? Interviewer : *Read out the categories to the Respondent.*	Daily ..... 1 Not daily but at least once a week ..... 2 Seldom ..... 3 Never 4
111	From whom do you get advice on health matters? Doctor - (Ayurvedic) ..... 1 Family doctor - (Western) ..... 2 Specialist - (Western) ..... 3 Family health worker ..... 4 Clinic/Hospital ..... 5 Health volunteers ..... 6 Not taken advice ..... 7 Other (Specify) ..... 9 Interviewer : *Ask this question separately for children less than 5 years and for other family members. Read the instructions in the instruction manual thoroughly.* *Indicate relevant code in each cage.*	Children (< 5 years) (i) Mild ailment ☐ (ii) Serious ailment ☐ Other Family Members (i) Mild ailment ☐ (ii) Serious ailment ☐
112	What is your religion ?	Buddhist ..... 1 Hindu ..... 2 Islam ..... 3 Roman Catholic ..... 4 Other Christian ..... 5 Other (specify) 6
113	What is your ethnicity?	Sinhalese ..... 1 Sri Lanka Tamil ..... 2 Indian Tamil ..... 3 Sri Lanka Moor ..... 4 Burgher ..... 5 Malay ..... 6 Other (specify) 7

Section 2: Reproduction

No.	Questions and filters	Coding categories
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 → Go to 204
202	How many sons live with you? And how many daughters live with you? Interviewer : *If none enter "00"*	Sons at home ☐☐ Daughters at home ☐☐
203	How many sons live elsewhere? How many daughters live elsewhere? Interviewer : *If none enter "00"*	Sons elsewhere ☐☐ Daughters elsewhere ☐☐
204	Have you ever given birth to a boy or a girl who was born alive but later died? Interviewer : *If "No" probe :* *Any (Other) boy or girl who cried or showed any sign of life but only survived a few hours or days?*	Yes ..... 1 No ..... 2 → Go to 206
205	How many boys have died? How many girls have died? Interviewer : *If none enter "00"*	Boys dead ☐☐ Girls dead ☐☐
206	*SUM ANSWERS TO 202, 203, 205 AND ENTER TOTAL.* Interviewer : *If none enter "00"*	Total ..... ☐☐

No.	Questions and filters	Coding categories
207	Interviewer : *CHECK 206* Just to make sure that I have this right: You have had in total.....live births during your life. Is that correct? ☐ Yes ☐ No → *Probe and correct 201 - 206 as necessary*	
208	Interviewer : *CHECK 206* ☐ *One or more live births* ☐ *No live births* → Go to 219	

Go to 209

Now I would like to talk to you about all of your births. It is important that you begin with your first birth and then report subsequent births in the order that they occured. Now, please tell me the name of your first birth.

INTERVIEWER : **FIRST, RECORD THE NAMES OF ALL BIRTHS THE WOMAN MENTIONS BY PROGRESSING DOWN COLUMN 209 SECOND , CIRCLE THE APPROPRIATE CODE IN Q 210. IF MULTIPLE BIRTH, ENTER THEM ON THE ADJOINING ROWS. THEN, ASK Q 211-217 FOR EACH BIRTH.**

209 What is the name of your (FIRST SECOND, etc..) birth?	210 Record single or multiple birth status.	211 Is (NAME) a boy or a girl?	212 In what date, month and year was (NAME) born?(Put age in completed years)	213 Does (NAME) have a birth certificate?	214 Was (NAME) born by cesarean operation?	215 Is (NAME) still alive?	216 IF ALIVE Is (NAME) living with you now?	217 IF DEAD How old was (NAME) when he/she died? *(Record, days if less than one month, months if more than one month and less than 2 years or years if 2 or more years)*
01 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD MM YY Age as at last birth day	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 *(GO TO NEXT BIRTH)*
02 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD MM YY Age as at last birth day	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 *(GO TO NEXT BIRTH)*
03 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD MM YY Age as at last birth day	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 *(GO TO NEXT BIRTH)*
04 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD MM YY Age as at last birth day	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 *(GO TO NEXT BIRTH)*
05 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD MM YY Age as at last birth day	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 *(GO TO NEXT BIRTH)*
06 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD MM YY Age as at last birth day	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 *(GO TO NEXT BIRTH)*

Continuation sheet

209 (What is the name of your (FIRST SECOND, etc..) birth?	210 Record single or multiple birth status.	211 Is (NAME) a boy or a girl?	212 In what date, month and year was (NAME) born?(Put age in completed years)	213 Does (NAME) have a birth certificate?	214 Was (NAME) born by cesarean operation?	215 Is (NAME) still alive?	216 IF ALIVE Is (NAME) living with you now?	217 IF DEAD How old was (NAME) when he/she died? *(Record, days if less than one month, months if more than one month and less than 2 years or years if 2 or more years)*
07 ..... (Name)	Single 1 Multi 2	Boy 1, Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 ↓ Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*
08 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 ↓ Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*
09 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 ↓ Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*
10 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 ↓ Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*
11 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 ↓ Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*
12 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 ↓ Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*

Continuation sheet

209 (What is the name of your (FIRST SECOND, etc..) birth?	210 Record single or multiple birth status.	211 Is (NAME) a boy or a girl?	212 In what date, month and year was (NAME) born?(Put age in completed years)	213 Does (NAME) have a birth certificate?	214 Was (NAME) born by cesarean operation?	215 Is (NAME) still alive?	216 IF ALIVE Is (NAME) living with you now?	217 IF DEAD How old was (NAME) when he/she died? *(Record, days if less than one month, months if more than one month and less than 2 years or years if 2 or more years)*
13 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 → Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*
14 ..... (Name)	Single 1 Multi 2	Boy 1 Girl 2	DD ☐☐ MM ☐☐ YY ☐☐☐☐ Age as at last birth day ☐☐	Yes, seen 1 Yes, not seen 2 Registered but not received yet 3 Not registered 4 Birth certificate lost 5	Yes 1 No 2	Yes 1 No. 2 → Go to 217	Yes 1 No 2	Days 1 Months 2 Years 3 ☐☐ *(GO TO NEXT BIRTH)*

218 Interviewer :

COMPARE 206 WITH NUMBERS OF BIRTHS IN HISTORY ABOVE AND MARK CORRECT BOX WITH A "√"

NUMBERS ARE SAME ☐ ↓

NUMBERS ARE DIFFERENT ☐ (PROBE AND RECONCILE)

FOR EACH LIVE BIRTH: YEAR OF BIRTH IS RECORDED ☐

FOR EACH LIVE CHILD: CURRENT AGE IS RECORDED ☐

FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED ☐

COUNT THE NUMBER OF LIVE BIRTHS SINCE 01ST MAY 1995, IN QUESTION 212 AND RECORD IT IN THE BOX ☐

No.	Questions and filters	Coding categories
219	How long ago did your last menstrual period start? Interviewer : *Circle 1 and record days if less than 7 days (1 week)* *Circle 2 and record weeks if more than 7 days (1 week) and less than 4 weeks.* *Circle 3 and record months if more than 4 weeks (1 month) and less than 12 months.* *Circle 4 and record years if more than 12 months (1 year)*	Days ago 1 ☐☐ Weeks ago 2 ☐☐ Months ago 3 ☐☐ Years ago 4 ☐☐ Before last pregnancy 995 → Go to 221 Never menstruated 996 → Go to 227 Don't know / Can't remember 999 → Go to 222
220	Interviewer : *CHECK 219* *Less than 1 month or 4 weeks (30 days or less)* ☐ → Go to 222 and circle 2 *1 month or more and less than 2 months (4 weeks or more and less than 8 weeks)* ☐ → Go to 222 *2 months or more (8 weeks and more)* ☐	
221	Why did your last menstruation occur so long ago?	Menopausal ..... 1 Irregular due to injections ..... 2 Postpartum ..... 3 → Go to 222 and Circle 2. Pregnant ..... 4 → Go to 222 and Circle 1. Not unusual ..... 5 Don't know 9
222	Are you pregnant now?	Yes ..... 1 No ..... 2 Not sure ..... 3 → Go to 227.
223	For how many months have you been pregnant?	Months ..... ☐☐
224	Have you had a tetanus injection since you have been pregnant?	Yes ..... 1 No ..... 2 Don't know 9

No.	Questions and filters	Coding categories
225	Did you see anyone for a check on this pregnancy?	Yes ..... 1 No ..... 2 → Go to 227
226	Whom did you see? Interviewer : *Probe for type of person and record most qualified.*	Doctor ..... 1 Govt. Nurse ..... 2 Family health worker ..... 3 Traditional birth attendant ..... 4 Other (specify) 5
227	Apart from a live birth, a pregnancy can be terminated with a miscarriage, an abortion or a still birth. Have you ever had such a pregnancy? Interviewer : *Explain the terms 'miscarriage' and 'abortion' further.* *Eg. Did your baby die before completing the period of pregnancy?*	Yes ..... 1 No ..... 2 → Go to 230
228	How many such pregnancies you had?	Number ..... ☐
229	How many such pregnancies resulted in the following ways? Still birth Spontaneous abortion Induced abortion	Still birth ..... ☐ Spontaneous abortion ... ☐ Induced abortion ..... ☐
230	What are the days during the month when a woman has to be careful to avoid becomming pregnant? Interviewer : *Here a month is reffered to as the period between the date of her last mensturation to the date of beginning the next mensturation. 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 (specify) ..... 6 Don't know 9
231	Interviewer: *Presence of others at this point:*	Yes No Children under 10 years ..... 1 2 Husband ..... 1 2 Other males ..... 1 2 Other females 1 2

Section 3 : Contraception

Now I would like to talk about a different topic. There are various ways that a couple can delay or avoid a pregnancy. Please tell me all the methods that you have heard of.

INTERVIEWER:
a) **CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.**
b) **THEN PROCEED DOWN THE COLUMN, CONTINUING Q. 302, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.**
c) **THEN FOR EACH METHOD WITH CODE 1 OR 2 CIRCLE IN Q. 302, ASK Q. 303-305 BEFORE PROCEEDING TO THE NEXT METHOD.**

301 METHOD	302 Have you ever heard of (READ METHOD AND DESCRIPTION)?	303 Have you ever used (METHOD)?	304 Where would you go to obtain (METHOD) if you wanted to use it? (CODES BELOW)	305 What would you say is the main problem, if any, in getting or using (METHOD)? * (CODES BELOW)
0 1 **PILL** "Women can take a pill every day".	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	Other.	Other. .....
0 2 **IUD** "Women can have a loop or coil placed inside them by a doctor or a nurse."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	Other.	Other. .....
0 3 **INJECTIONS** "Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	Other.	Other. .....
0 4 **DIAPHRAGM, FOAM, JELLY** "Women can place a sponge or suppository or diaphragm or jelly or cream inside them immediately before intercourse."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	Other.	Other. .....
0 5 **CONDOM** "Men can use a rubber sheath during sexual intercourse."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	Other.	Other. .....

Go to next page

Codes for 304

Family health bureau	01
Family planning association	02
Govt. Hospital/MCH Center	03
Priv Dr/Priv nursing home	04
Non-Govt. clinic	05
Mobile clinic	06
Family health worker/Nurse	07
Other field workers	08
Ayurvedic doctor	09
Friend/Relative	10
Pharmacy/Shop	11
Media	12
Other (Specify above)	13
No where	14
Don't know	99

Codes for 305

Not effective	01
Husband disapproves	02
Health concerns	03
Problems of Access/Availability	04
Costs too much	05
Inconvenient to use	06
Other (Specify above)	07
None	08
Don't know	99

* Interviewer :

(i) Ask this question from women who have ever used the method
What is the main problem you have encountered in getting or using it?

(ii) Ask this question from women who have heard but never used it
What is the main reason for not using it?

METHOD	302 Have you ever heard of (READ METHOD AND DESCRIPTION)?	303 Have you ever used (METHOD)?	304 Where would you go to obtain (METHOD) if you wanted to use it? (CODES BELOW)	305 What would you say is the main problem, if any, in getting or using (METHOD)?* (CODES BELOW)
06 **FEMALE STERILIZATION** "Women can have an operation to avoid having any more children."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	☐☐ Other.	☐☐ Other. .....
07 **MALE STERILIZATION** "Men can have an operation to avoid having any more children."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	☐☐ Other.	☐☐ Other. .....
08 **NORPLANT** "Women can have a capsules inserted into their arms and avoid pregnancy for many years."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	☐☐ Other.	☐☐ Other. .....
09 **WITHDRAWAL** "Men can be careful and pull out before climax."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	→ → → →	☐☐ Other. .....
10 **SAFE PERIOD** "Couples can avoid having sexual intercourse on certain days of each month when the woman is more likely pregnant."	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2	From where would you obtain information for safe period ☐☐ Other.	☐☐ Other. .....
11 **ANY OTHER METHODS?** "Have you heard of any other ways or methods that women or men can use to avoid pregnancy." (Specify).....	Yes/Spon ..... 1 Yes/Prbd ..... 2 No 3	Yes 1 No 2		

Go to 306

Codes for 304

Family health bureau	01
Family planning association	02
Govt. Hospital/MCH Center	03
Priv Dr/Priv nursing home	04
Non-Govt. clinic	05
Mobile clinic	06
Family health worker/Nurse	07
Other field workers	08
Ayurvedic doctor	09
Friend/Relative	10
Pharmacy/Shop	11
Media	12
Other (Specify above)	13
No where	14
Don't know	99

Codes for 305

Not effective	01
Husband disapproves	02
Health concerns	03
Problems of Access/Availability	04
Costs too much	05
Inconvenient to use	06
Other (Specify above)	07
None	08
Don't know	99

* Interviewer :
(i) Ask this question from women who have ever used the method
What is the main problem you have encountered in getting or using it?
(ii) Ask this question from women who have heard but never used it
What is the main reason for not using it?

306 CHECK 303: Ever used a method?
NO (NEVER USER) ☐ → **Go to 307A**
YES (EVER USER) ☐ → **Go to 308A**

No.	Questions and filters.	Coding categories
307A	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	Yes ..... 1 No ..... 2 → Go to 313 and circle 13
307B	What have you used or done? Interviewer : *Correct 302 - 303 and obtain information for 304 - 306 as necessary.*	.....
308A	When did you first start following a method to avoid getting pregnant?	Soon after marriage ..... 1 6 months after marriage ..... 2 1 year after marriage ..... 3 After the first baby was born ..... 4 After the second baby was born ..... 5 Other (Specify) ..... 6 .....
308B	What was the method you used at that time?	Pill ..... 01 Injections ..... 02 Condom ..... 03 IUD ..... 04 Diaphragm / Foam/ Jelly ..... 05 Norplant ..... 06 Withdrawal ..... 07 Female sterilization ..... 08 Male sterilization ..... 09 Safe period ..... 10 Prolonged Abstinence ..... 11 Other (Specify) ..... 12 .....
309	How many living children, if any, did you already have when you first did something to avoid getting pregnant? Interviewer : *If none enter "00"*	Number of children ..... ☐☐
310	Interviewer : *CHECK 303:* **EVER USED SAFE PERIOD** ☐ ↓ **NEVER USED SAFE PERIOD** ☐ → Go to 312	
311	The last time you used the safe period, how did you determine on which days you had to abstain? Interviewer : *Discuss with respondent and circle the code for the main method only.*	Based on calendar ..... 1 Based on body temperature ..... 2 Based on cervical mucus ..... 3 Based on body temperature and mucus ..... 4 Other (specify) 5

No.	Questions and filters	Coding categories
312	Interviewer : *Check the question 222 again . Are you pregnant now?*	Yes ..... 1 → Go to 323 No / not sure ..... 2 → Go to 313
313	What is the method you are currently using to avoid getting pregnant?	Pill ..... 01 Injections ..... 02 Condom ..... 03 → **Go to 314** IUD ..... 04 Diaphragm / Foam/ Jelly ..... 05 Norplant ..... 06 Withdrawal ..... 07 → **Go to 318** Female sterilization ..... 08 Male sterilization ..... 09 → **Go to 315** Safe period ..... 10 → **Go to 316** Prolonged Abstinence ..... 11 → **Go to 317** Other (Specify) ..... 12 ..... Not using any method ..... 13 → **Go to 318**
314	**This question is applicable only if method code = 01 or 02 or 03 in Q 313** How much are you willing to pay for the method (Read out the method) you are currently using? Interviewer : *It is expected to find out how much money this woman is willing to pay for the method she is using. Please note that it is not the amount that she has to pay when she buys it from outside shops.* *Tick the appropriate answer*	
	Pills per cycle / card: Rs. 10 ..... 1; Rs. 15 ..... 2; Other Rs. ☐☐ 3	**Injection**: Rs. 30 ..... 1; Rs. 50 ..... 2; Other Rs. ☐☐ 3	**Condom per unit**: Rs .2.50 ..... 1; Rs. 5 ..... 2; Other Rs. ☐☐ 3
	Go to 318	
315	If code = 08 or 09 in Q 313. (Female or male sterilization) In what month and year did you / your husband have/had the operation? → Go to 318	Month ..... ☐☐ Don't know ..... 99 Year ..... ☐☐ Don't know 10
316	If code = 10 (Safe period) in Q 313. Have you obtained instructions for using the safe period in the last twelve months from a hospital clinic, a doctor, or a fieldworker? → Go to 318	Yes ..... 1 No 2

No.	Questions and filters	Coding categories
317	Interviewer : *Ask this question from those who have answered code = 11 (Prolonged abstinence) in Q 313.* Some women abstain from sexual relations completely for more than one or two months. You have already told me that you are also practicing that method. What is the reason for practising it? Interviewer : *Write the relevant code in this box* ☐ *Specify the reason if code = 7*..... → Go to 319	**Codes for Q 317 & Q 318** Avoid pregnancy ..... 1 Child of marriagable age ..... 2 Husband away ..... 3 Postpartum / Breastfeeding ..... 4 Health concerns ..... 5 Religious reasons ..... 6 Other (Specify) 7
318	Some women abstain from sexual relations completely for more than one or two months. Have you ever abstained? Yes 1 . No 2 If 'Yes' what is the reason? Interviewer : *Write the relevant reason in this box* ☐ *Specify the reason if code = 7*.....	
319	(Those who have covered code 13 in Q 313 please go to question 328) Where did you obtain method/advice (mentioned in Q 313) last time? Interviewer : *Read the method in 313* or Where did the sterilization take place?	Family health bureau ..... 01 Family planning association ..... 02 Govt. Hosp/MCH center ..... 03 Pvt. Dr/Pvt nursing home ..... 04 Non-Govt. clinic ..... 05 Mobile clinic ..... 06 Family health worker/Nurse ..... 07 Other field workers ..... 08 Ayurvedic doctor ..... 09 Friend/Relative ..... 10 Pharmacy/Shop ..... 11 Media ..... 12 Other (Specify) ..... 13 Don't know ..... 99 → Go to 328
320	Was there anything you/your husband disliked about the service you/your husband received there? Interviewer : *Indicate all relevant codes for husband and wife separately.*	

Reason	Husband	Wife
Wait too long	1	1
Staff discourteous	2	2
Services expensive ...	3	3
Not able to get desired Services/method	4	4
Other (specify)	5	5
No complaints	6	6
Don't know	9	9

No.	Questions and filters	Coding categories
321	Were you told about side effects or problems you might have with the methods ?	Yes ..... 1 No ..... 2 → Go to 323
322	Were you told what to do if you experienced side effects or problems ?	Yes ..... 1 No 2
323	Interviewer : *Check 222 (Are you pregnent now ?)* **NOT PREGNANT OR NOT SURE** ☐ ↓ **PREGNANT** ☐ → Go to 328	
324	**CHECK 313:** **HE / SHE STERILIZED** ☐ → Go to326 **CURRENTLY USING ANOTHER METHOD** ☐ ↓ **CURRENTLY NOT USING A METHOD** ☐ → Go to 328	
325	For how long have you been using **(Current method)** continuously? Interviewer : *Write the duration in completed years and months*	Years ..... ☐☐ Months ..... ☐☐ Since last birth ..... 7 Can't remember 8
326	Have you experienced any problems from using current method?	Yes ..... 1 No ..... 2 → Go to 328
327	What is the **main** problem you experienced? Interviewer : *Without reading out the categories to the respondent get the problem from her and encircle the appropriate code.*	Not effective ..... 01 Husband disapproved ..... 02 Health concerns ..... 03 Problems of Access/Availability ..... 04 Cost too much ..... 05 Inconvenient to use ..... 06 Other (Specify) ..... 07 Don't know 99

No.	Questions and filters	Coding categories
328	Do you intend to use a method to avoid pregnancy at any time in the future?	Yes ..... 1 No ..... 2 → Go to 331 Don't know ..... 9 → Go to 331
329	Which method would you prefer to use?	Pill ..... 01 IUD ..... 02 Injections ..... 03 Diaphragm/Foam/Jelly ..... 04 Condom ..... 05 Female Sterilization ..... 06 Male Sterilization ..... 07 Safe Period ..... 08 Withdrawal ..... 09 Norplant ..... 10 Prolonged Abstinence ..... 11 Not Decided ..... 12 Other (Specify) 13
330	Do you intend to use (that method) in the next 12 months?	Yes ..... 1 No ..... 2 Don't know 9
331	Interviewer : *CHECK 222* **NOT PREGNANT OR UNSURE** ☐ ↓ **PREGNANT** ☐ → Go to 333	
332	Interviewer : *CHECK 212* **HAD LIVE BIRTH/S SINCE 01ST OF MAY, 1995** ☐ ↓ **NO LIVE BIRTH/S SINCE 01ST OF MAY, 1995** ☐ → Go to 343	

Go to 333

Now I would like to get some more information about (your pregnancy and) the methods that you used in the last five years.

INTERVIEWER: FIRST, **MARK PREGNANCY STATUS, AND FROM PAGE 11, 12 & 13 RECORD NAMES OF BIRTHS SINCE 01ST OF MAY, 1995**

SECOND, **MARK APPROPRIATE BOX IN 334, AND ASK THE APPROPRIATE QUESTIONS FOR EACH COLUMN FOR WHICH THE HEADING IS FILLED OUT.**

333 ASK QUESTIONS ABOUT ALL BIRTHS SINCE 01ST OF MAY, 1995	CURRENTLY PREGNANT? 0 Yes- ☐ No ☐	LAST BIRTH 1 ..... (Name)	NEXT-TO-LAST BIRTH 2 ..... (Name)	SECOND TO LAST BIRTH 3 ..... (Name)
334 **CHECK 306:**	**EVER USED A METHOD** ☐ (ASK 335 - 342 FOR EACH COLUMN) **NEVER USED A METHOD** ☐ (ASK 341 FOR EACH COLUMN)			
335 Before you became pregnant (with Name) and after the birth of (Name) did you do anything to avoid getting pregnant, even for a short time?	Yes ..... 1 No ..... 2 ↓ **(Go to 341.)**	Yes ..... 1 No ..... 2 ↓ **(Go to 341.)**	Yes ..... 1 No ..... 2 ↓ **(Go to 341.)**	Yes ..... 1 No ..... 2 ↓ **(Go to 341.)**
336 Which was the last method you used then? Interviewer : *Codes on next page*	☐☐ Other	☐☐ Other	☐☐ Other	☐☐ Other ....
337 Any method before that? Interviewer : *If none, enter "00", codes on next page*	☐☐ Preceding method	☐☐ Preceding method	☐☐ Preceding method	☐☐ Preceding method
338 For how long had you used the method in 336? Interviewer : *Read the method in 336*	Months ☐☐ Years ☐☐	Months ☐☐ Years ☐☐	Months ☐☐ Years ☐☐	Months ☐☐ Years ☐☐
339 Did you become pregnant while you were still using the method in 336? Interviewer : *Read the method in 336*	Yes ..... 1 **(Go to 342)** ← No 2	Yes ..... 1 **(Go to 342)** ← No 2	Yes ..... 1 **(Go to 342)** ← No 2	Yes ..... 1 **(Go to 342)** ← No 2
340 What was the main reason you stopped using the method in 336? Interviewer: *Read the method in 336* *If response is 'to get pregnant', circle 01.* *If not, see codes on next page.*	To get pregnant ... 01 **Go to 341 and circle 1** ← ☐☐ Other	To get pregnant ... 01 **Go to 341 and circle 1** ← ☐☐ Other	To get pregnant ... 01 **Go to 341 and circle 1** ← ☐☐ Other	To get pregnant ... 01 **Go to 341 and circle 1** ← ☐☐ Other .....
341 At the time you became pregnant (WITH NAME) did you want to have that child then, to wait until later, or to have no (more) children at all?	Then ..... 1 Have a child later ..... 2 No more ... 3 **Go to next column**	Then ..... 1 Have a child later ..... 2 No more ... 3 **Go to next column**	Then ..... 1 Have a child later ..... 2 No more ... 3 **Go to next column**	Then ..... 1 Have a child later ..... 2 No more ... 3 **Stop**
342 Did you want to have that child (NAME) at a later time, or not to have another child at all?	Have child later ..... 1 Not to have child ..... 2 **Go to next column**	Have child later ..... 1 Not to have child ..... 2 **Go to next column**	Have child later ..... 1 Not to have child ..... 2 **Go to next column**	Have child later ..... 1 Not to have child ..... 2 **Stop**

Interviewer : *Go to question 343, after filling for all children.*

Codes for 336, 337

Pill	01
IUD	02
Injection	03
Diaphragm/ foam/ Jelly	04
Condom	05
Male Sterilization	07
Female Sterilization	08
Safe Period	09
Withdrawal	10
Norplant	11
Other (Specify)	12
Prolonged Abstinence	13

Codes for 340

Not effective	02
Husband disapproves	03
Health concerns	04
Problems of Access/Availability	05
Costs too much	06
Inconvenient to use	07
Rumours of side effects	08
Infrequent sex	09
Other (Specify)	10
Don't know	99

343	Interviewer : *Check Q 313 (Except currently pregnant women)* Women who are currently using contraceptives (If a code between 1 to 12 is circled) → ☐ **Go to 344** Women who are currently not using contraceptives. (If Q 313 = 13 is circled) → ☐ **Go to 345 A**	
344	Whose decision made it possible to use contraceptives? Interviewer : *Ask this question from those who have recorded any code between 1 to 12 in the question 313 (Current users of contraceptives)*	Your decision ..... 1 Your husband's decision ..... 2 Decision of both ..... 3 → **Go to 401**
345A	If you become pregnant in the next few weeks, would you feel happy, unhappy, or would it not matter very much. Interviewer : *Ask this question, if Q 313= 13 (Currently not using contraception)*	Happy ..... 1 → **Go to 345B and circle 01** Not happy ..... 2 Would not matter 3
345B	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 disapprove ..... 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

Section 4 : Health of Children & Mother

401 Check 212. HAD LIVE BIRTH /S SINCE 01ST OF MAY, 1995 ☐ NO LIVE BIRTH/S SINCE 01ST OF MAY, 1995 ☐ → Go to 450

402 **AS RECORDED ON PAGES 11, 12 & 13 WRITE THE NAMES AND LINE NUMBERS OF ALL BIRTHS SINCE 01ST OF MAY, 1995 IN THE FOLLOWING TABLE. FOR EACH BIRTH, CHECK IF ALIVE OR DEAD, AND MARK THE "√" IN APPROPRIATE BOX.**

	ASK QUESTIONS FOR ALL BIRTHS, ALIVE AND DEAD.	LAST BIRTH 1 Name..... Line No. ☐☐ Alive ☐ Dead ☐	NEXT TO LAST BIRTH 2 Line No. ☐☐ Alive ☐ Dead ☐	SECOND TO LAST BIRTH 3 Line No. ☐☐ Alive ☐ Dead ☐
403	Did you receive tetanus toxoid injections when you were pregnant with (NAME)? Interviewer : *Check the pregnancy record*	One dose ..... 1 Two doses ..... 2 No ..... 3 Don't know 9	One dose ..... 1 Two doses ..... 2 No ..... 3 Don't know 9	One dose ..... 1 Two doses ..... 2 No ..... 3 Don't know 9
404	During this pregnancy, did you take drugs to prevent malaria? Interviewer : *Check the pregnancy record*	Yes ..... 1 No ..... 2 Don't know 9	Yes ..... 1 No ..... 2 Don't know 9	Yes ..... 1 No ..... 2 Don't know 9
405A	During your last pregnancy did the family health worker visit you at home to check on your health?	Yes ..... 1 No ..... 2 Go to 406 ←		
405B	How many times did the **family health worker visit you at home during the 1st 3 months** of your pregnancy, when you were pregnant with (NAME, last birth)? Interviewer : *Check the pregnancy record* *If did not visit enter 00.*	No. of times ☐☐ Can't remember 88		
405C	How many times did the **family health worker visit you at home** during the **whole period of last pregnancy?** Interviewer : *Check the pregnancy record* *If did not visit enter 00.*	No. of times ☐☐ Can't remember 88		
406	How many times did you visit a doctor or a clinic for a check on your last pregnancy? Interviewer : *If did not visit enter 00.*	No. of times ☐☐ Can't remember 88		
407	Were you told about the symptoms of complications of pregnancy such as *swelling, bleeding, severe headache, abdominal pain, excessive vomiting* that need immediate care, during your last pregnancy? Interviewer : *Our objective is to find out whether she is aware of those pregnancy complications.*	Yes ..... 1 No ..... 2 Go to 409 ←		
408	Were you told where to go if you had any of these symptoms of complications (read out those mentioned in Q 407) that need immediate care, during your last pregnancy?	Yes ..... 1 No 2		
409	During your last pregnancy, were any of the following done at least once? Were you weighed? Was your height measured? Was your urine sample tested? Was your blood tested for VDRL(Sexually transmitted diseases)? Was your blood tested to check grouping? Was your blood pressure checked? Interviewer : *Check her pregnancy record and circle relevant code for each*	Yes No DK Weight .... 1 2 9 Height .... 1 2 9 Urine ..... 1 2 9 VDRL .... 1 2 9 Blood Group ..... 1 2 9 Blood pressure .. 1 2 9		

		Last Birth	Next-to-Last Birth	Second-to-Last Birth
410	During the last pregnancy, did you take iron tablets or syrup ? Interviewer : *'Obrone' or any iron tablets or syrup.*	Yes ..... 1 No ..... 2 Don't know ..... 9 **Go to 411C**		
411A	What reason were you given for taking Iron tablets or syrup? Interviewer : *Indicate all relavant reasons*	Good for the baby ... 1 For mother's health/Strength ..... 2 Helps blood formation ..... 3 Other (Specify) ..... 4 Can't remember 8		
411B	How often did you usually take Iron tablets or syrup ?	Daily ..... 1 Every 2 days ..... 2 Every 3-4 days ..... 3 Every 5-6 days ..... 4 Weekly ..... 5 Other (Specify) ..... 6 Can't remember 8		
411C	Was there anything you dislike about taking Iron tablets or syrup? Interviewer : *Indicate the main complaint.*	No complaints ..... 1 Diarrhoea ..... 2 Constipation ..... 3 Nausea ..... 4 Bad taste/Hard to swallow ..... 5 Other (Specify) 6		
412	Where was (NAME) born?	Govt. Hosp/ Maternity Home ..... 1 Pvt. Nursing Home ..... 2 At home ..... 3 Other ..... 4 (Specify)	Govt. Hosp/ Maternity Home ..... 1 Pvt. Nursing Home ..... 2 At home ..... 3 Other ..... 4 (Specify)	Govt. Hosp/ Maternity Home ..... 1 Pvt. Nursing Home ..... 2 At home ..... 3 Other ..... 4 (Specify)
413	Who assisted at the delivery of (NAME)? Interviewer : *Probe and record most qualified person*	Doctor ..... 1 Govt.Nurse/Family health worker ..... 2 Traditional birth attendant ..... 3 Relative/ Neighbour ..... 4 Other ..... 5 No one 6	Doctor ..... 1 Govt.Nurse/Family health worker ..... 2 Traditional birth attendant ..... 3 Relative/ Neighbour ..... 4 Other ..... 5 No one 6	Doctor ..... 1 Govt.Nurse/Family health worker ..... 2 Traditional birth attendant ..... 3 Relative/ Neighbour ..... 4 Other ..... 5 No one 6

		Last Birth	Next-to-Last Birth	Second-to-Last Birth
414	During the **1st 10 days** after delivery of (NAME), how many times did a **medical officer** or a **family health worker** check on your health? Interviewer : *If not checked enter 00*	No. of visits ☐☐ Can't remember 88		
415A	Did you ever feed (NAME) at the breast?	Yes ..... 1 No ..... 2 → (Go to 424)	Yes ..... 1 No ..... 2 → (Go to 424)	Yes ..... 1 No ..... 2 → (Go to 424)
415B	How long did you practice exclusive breast feeding of (NAME)? Interviewer : *Here the child must not be given any other milk, fruit juice or other drinks except water and breast milk.*	Months ☐☐ Still breast feeding 77	Months ☐☐	Months ☐☐
416	How long after birth did you begin feeding (NAME) at the breast? Interviewer : *If less than one hour, circle 1 and enter 00 in the box* *If more than one hour and less than 24 hours, circle 1 and enter hours* *If 24 hours or more than 24 hours, circle 2 and enter days* *Check pregnancy record for each child*	Hours ... 1 ☐☐ Days ..... 2 ☐☐	Hours ... 1 ☐☐ Days ..... 2 ☐☐	Hours ... 1 ☐☐ Days ..... 2 ☐☐
417	Was the first milk discarded when you started breastfeeding?	Yes ..... 1 No ..... 2 **(Go to 420)**	Yes ..... 1 No ..... 2 **(Go to 423)**	Yes ..... 1 No ..... 2 **(Go to 423)**
418	Why did you throw away the first milk?	Milk bad for baby ..... 1 Milk yellow .. 2 Baby refused . 3 Habit ..... 4 Other ..... 5 (Specify) (Go to 420) Advised to do so 6	Milk bad for baby ..... 1 Milk yellow .. 2 Baby refused . 3 Habit ..... 4 Other ..... 5 (Specify) (Go to 423) Advised to do so 6	Milk bad for baby ..... 1 Milk yellow .. 2 Baby refused . 3 Habit ..... 4 Other ..... 5 (Specify) (Go to 423) Advised to do so 6
419	Who advised you to throw away the first milk? Interviewer : *Encircle all relevant codes*	Mother ..... 1 Mother in law .... 2 Family health worker ..... 3 Hospital staff ..... 4 Other ..... 5 (Specify)	Mother ..... 1 Mother in law .... 2 Family health worker ..... 3 Hospital staff ..... 4 Other ..... 5 (Specify) **→ Go to 423**	Mother ..... 1 Mother in law .... 2 Family health worker ..... 3 Hospital staff ..... 4 Other ..... 5 (Specify) **→ Go to 423**

		Last Birth	Next-to-Last Birth	Second-to-Last Birth
420	Are you still breastfeeding (NAME, the youngest child)? Interviewer : *(If dead, circle '3')*	Yes ..... 1 No ..... 2 Child dead .... 3 **(Go to 423)** ↵		
421	How many times did you breastfeed (NAME), last night between sunset and sunrise? Interviewer : *If answer is not numeric, probe for approximate number.* *If the child was breastfed whenever he / she woke up in the night and if he / she sleeps while feeding circle 95*	Number of night time feedings..... ☐☐ Child sleeps at breast..... 95		
422	How many times did you breastfeed (NAME), yesterday during the daylight hours? Interviewer : *If answer is not numeric, probe for approximate number*	Number of daylight feedings.. ☐☐ As often as wanted..... 95 → Go to (425A)		
423	At what age did you totally stop breastfeeding (NAME)? Interviewer : *If less than one month enter "00"*	Months ..... ☐☐ At death ..... 96 ↓ Go to 424 & Circle 96	Months ..... ☐☐ Still Brestfeeding ..... 95 **(Go to 426)** ↵ At death ..... 96 Go to 424 & Circle 96 ↵	Months ..... ☐☐ Still Brestfeeding ..... 95 **(Go to 426)** ↵ At death ..... 96 Go to 424 & Circle 96 ↵
424	What is the main reason you never breastfed/stopped breastfeeding (NAME)? Interviewer : * *The respondent is referred as the mother.*	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) → (Go to 425A) At death ..... 96 (Go to 428) ↵	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) → (Go to 426) At death ..... 96 (Go to 428) ↵	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) → (Go to 426) At death ..... 96 (Go to 428) ↵

		Last Birth	
		Yesterday, how many times during the day or night did (NAME) get each item	During the last 7 days, on how many days did (NAME) get each of the following
		N	D
425A	Now I would like to ask you about the types of complementary foods that was given to (NAME) yesterday and the food he/she got in the last seven days. You must ask the number of times given during yesterday and number of days during last 7 days. Indicate the items given in either way with a " √ " mark in this column.		
	1) Water	01	01
	2) Fresh animal milk (Cow milk, Goat milk)	02	02
	3) Any other milk (Powdered or tinned)	03	03
	4) Yogurt / Curd	04	04
	5) Ice Cream / Puddings	05	05
	6) Fruit juice / King Coconut	06	06
	7) Cunjee / Soup	07	07
	8) Soft drinks, corriander and other drinks.	08	08
	9) Rice	09	09
	10) Any food made from cereals (Nestum, Samaposha, Tri-posha, Farline etc.)	10	10
	11) Grains (Gram, Green gram, Cowpea)	11	11
	12) Pumpkin, carrot and yellow sweet potatoes.	12	12
	13) Potatoes, manioc, or other yams.	13	13
	14) Any green leafy vegetables and green vegetables	14	14
	15) Yellow fleshy fruit, such as mango, papaya or mandarin..	15	15
	16) Any other fruit (Bananas, Apples, Grapes, Avocados, Tomato)	16	16
	17) Beef, chicken, mutton, fish, prawns, sprats	17	17
	18) Eggs	18	18
	19) Any food cooked in oil, fat or butter	19	19
	20) Bread, biscuits, buns	20	20
	21) Sweets (Toffees, Chocolates, Cakes, any other sweets made of sugar or treacle.)	21	21
	22) Other	22	22
		Note : 1. For food item 3 onwards in N, record 8 if N > 7 2. If D or N is not known for any of the food items, indicate with 9.	
425B	Did you give any kind of vitamin syrup / iron supplement to (NAME) within the last 7 days? Interviewer : *Check the container*	Vitamin syrup	Yes ..... 1 No 2
		Iron syrup / tablets	Yes ..... 1 No 2
		Any other vitamin syrup including iron	Yes ..... 1 No 2

No.		Last Birth	Next-to-Last Birth	Second-to- Last Birth
426	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	Yes .... 1 No .... 2 Don't know 9	Yes .... 1 No .... 2 Don't know 9	Yes .... 1 No .... 2 Don't know 9
427	At what age did you begin to give complementary foods to (NAME)? Interviewer : *Complementary foods are the foods mentioned in 425A excluding any kind of milk.*	Months ☐ Weeks ☐ Not yet started 95	Months ☐ Weeks ☐	Months ☐ Weeks ☐
428	When you began daily supplemental feeding of (NAME), did you continue full breastfeeding, did you reduce, or did you stop completely?	Continued full ...... 1 Reduced gradually ... 2 Stopped .... 3 Never Breastfed 4	Continued full ...... 1 Reduced gradually ... 2 Stopped .... 3 Never Breastfed 4	Continued full ...... 1 Reduced gradually ... 2 Stopped .... 3 Never Breastfed 4
429	Do you have your child's (NAME) health development card?	Yes, card seen 1 Yes, not seen .. 2 (Go to 433) No card 3	Yes, card seen 1 Yes, not seen .. 2 (Go to 433) No card 3	Yes, card seen 1 Yes, not seen .. 2 (Go to 433) No card 3
430	Interviewer : *Record the child's (NAME) weight at birth as given in the health development card. Convert the weight in to Kg. if it is given in pounds.* 1Kg. = 2.24 pounds	Kg. ☐ • ☐☐	Kg. ☐ • ☐☐	Kg. ☐ • ☐☐
431	Interviewer : *Check the growth curve in the child's health development card and record the no. of dots marked in the growth curve (including the weight at birth) for the (NAME) during the 1st year.*	No of dots marked during the 1st year ☐☐ (Including weight at birth)	No of dots marked during the 1st year ☐☐ (Including weight at birth)	No of dots marked during the 1st year ☐☐ (Including weight at birth)
432	Interviewer : *RECORD THE DATES OF IMMUNIZATIONS FROM THE CARD. CIRCLE '2' IF NOT GIVEN.* BCG TRIPLE 1 POLIO 1 TRIPLE 2 POLIO 2 TRIPLE 3 POLIO 3 TRIPLE 4 POLIO 4 MEASLES Other (Specify)	Year / Month / Day / Not Gvn BCG 2 Triple1 2 Polio 1 2 Triple 2 2 Polio 2 2 Triple 3 2 Polio 3 2 Triple 4 2 Polio 4 2 Measles 2 Other (Specify).......... → Go to 436	Year / Month / Day / Not Gvn BCG 2 Triple1 2 Polio 1 2 Triple 2 2 Polio 2 2 Triple 3 2 Polio 3 2 Triple 4 2 Polio 4 2 Measles 2 Other (Specify).......... → Go to 436	Year / Month / Day / Not Gvn BCG 2 Triple1 2 Polio 1 2 Triple 2 2 Polio 2 2 Triple 3 2 Polio 3 2 Triple 4 2 Polio 4 2 Measles 2 Other (Specify).......... → Go to 436

No.		Last Birth	Next-to-Last Birth	Second-to- Last Birth
433	Interviewer : *Ask the weight at birth from the respondents for those children who do not have health development card. If she does not know the weight at birth at all record 9.99.* *Convert the weight into Kg. if she tells it in pounds* *1Kg. = 2.24 pounds* What is the weight at birth of (NAME)?	Kg. ☐ • ☐☐	Kg. ☐ • ☐☐	Kg. ☐ • ☐☐
434	Please tell me if (NAME) has had any of the following injections / vaccines?			
	BCG	BCG 1 2	BCG 1 2	BCG 1 2
	Triple 1	Triple 1 1 2	Triple 1 1 2	Triple 1 1 2
	Polio 1	Polio 1 1 2	Polio 1 1 2	Polio 1 1 2
	Triple 2	Triple 2 1 2	Triple 2 1 2	Triple 2 1 2
	Polio 2	Polio 2 1 2	Polio 2 1 2	Polio 2 1 2
	Triple 3	Triple 3 1 2	Triple 3 1 2	Triple 3 1 2
	Polio 3	Polio 3 1 2	Polio 3 1 2	Polio 3 1 2
	Triple 4	Triple 4 1 2	Triple 4 1 2	Triple 4 1 2
	Polio 4	Polio 4 1 2	Polio 4 1 2	Polio 4 1 2
	Measles	Measles 1 2	Measles 1 2	Measles 1 2
	Other (Specify)	Other 1 2	Other 1 2	Other 1 2
435	At what age was (NAME) given the last of these immunizations ? Interviewer : *If she cannot remember the age circle 88*	Months ..... ☐☐ Can't remember 88	Months ..... ☐☐ Can't remember 88	Months ..... ☐☐ Can't remember 88
436	National Polio Vaccination Campaign is launched in order to eradicate Polio from Sri Lanka. Oral Polio drops was given on the special vaccination dates held by the campaign to cover all children in Sri Lanka. Has (NAME) received Polio vaccination in any such national immunization day campaign?	Yes ..... 1 No ..... 2 Can't remember .. 8 Don't know ..... 9 Go to 438 ←	Yes ..... 1 No ..... 2 Can't remember .. 8 Don't know ..... 9 Go to 438 ←	Yes ..... 1 No ..... 2 Can't remember .. 8 Don't know ..... 9 Go to 438 ←

No.		Last Birth	Next-to-Last Birth	Second-to-Last Birth
437	At which special national immunization day campaign did (NAME) receive Polio vaccinations? Interviewer : *Circle all the relevant codes for the years that each child had received the vaccination from special Polio campaigns.*	1999 ..... 1 1998 ..... 2 1997 ..... 3 1996 ..... 4 1995 5	1999 ..... 1 1998 ..... 2 1997 ..... 3 1996 ..... 4 1995 5	1999 ..... 1 1998 ..... 2 1997 ..... 3 1996 ..... 4 1995 5
438	Now I am going to ask a few questions about the health condition of your child. Has (NAME) had diarrhoea in the last 24 hours?	Yes ..... 1 ↓ Go to 439 & Circle 1 No 2	Yes ..... 1 ↓ Go to 439 & Circle 1 No 2	Yes ..... 1 ↓ Go to 439 & Circle 1 No 2
439	Has (NAME) had diarrhoea in the last two weeks?	Yes ..... 1 No ..... 2 Child dead ..... 3 Do not know ... 9 Go to 446	Yes ..... 1 No ..... 2 Child dead ..... 3 Do not know ... 9 Go to 446	Yes ..... 1 No ..... 2 Child dead ..... 3 Do not know ... 9 Go to 446
440	Did you take (NAME) to a government hospital or dispensary, to a Western doctor, or to an Ayurvedic doctor to treat the diarrhoea (the last time)? IF YES : Where did you take him/her?	Yes, Govt. Hosp/ Dispensary .... 1 Yes, Western doctor ..... 2 Yes, Ayurvedic doctor ..... 3 No, not taken 4	Yes, Govt. Hosp/ Dispensary .... 1 Yes, Western doctor ..... 2 Yes, Ayurvedic doctor ..... 3 No, not taken 4	Yes, Govt. Hosp/ Dispensary .... 1 Yes, Western doctor ..... 2 Yes, Ayurvedic doctor ..... 3 No, not taken 4
441	Was (NAME) given any packet of Jeevanee or any other ORS salts to treat the diarrhoea (the last time)?	Yes ..... 1 No ..... 2 Don't know 9	Yes ..... 1 No ..... 2 Don't know 9	Yes ..... 1 No ..... 2 Don't know 9
442	When (NAME) had diarrhoea last time did you continue (full) breastfeeding, did you reduce or did you stop completely? Interviewer : *Ask this question from those who circled 1 in the question 420. Others should go to question number 444.*	Continued full ..... 1 ↓ Go to 444 Reduced ..... 2 Stopped completely 3		
443	Why did you reduce / stop ? Interviewer : *Indicate the main reason only.*	Bad for the child ..... 1 Parents advised .. 2 Doctor/Family health worker advised ..... 3 Child refused ..... 4 Other (Specify) .. 5		

No.	Questions and filters.	Last - Birth	Next-to-Last Birth	Second-to- Last Birth
444	Now I would like to know how much (NAME) was **offered** to drink when (NAME) had diarrhoea. Was he/she offered less than usual to drink, about the same amount, more than usual to drink, or nothing to drink? Interviewer : IF LESS, PROBE : *Was he/she offered much less than usual to drink or somewhat less? Objective of this question is to check the mother's knowledge.*	Much less ..... 1 Somewhat less ..... 2 About the same .... 3 More ..... 4 Nothing to drink ..... 5 Don't know 9	Much less ..... 1 Somewhat less ..... 2 About the same .... 3 More ..... 4 Nothing to drink ..... 5 Don't know 9	Much less ..... 1 Somewhat less ..... 2 About the same .... 3 More ..... 4 Nothing to drink ..... 5 Don't know 9
445	When (NAME) had diarrhoea, was he/she **offered** less than usual to eat, about the same amount, more than usual, or nothing to eat? Interviewer : IF LESS, PROBE : *Was he/she offered much less than usual to eat or somewhat less? Objective of this question is to check the mother's knowledge.*	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Nothing to eat ..... 5 Don't know 9	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Nothing to eat ..... 5 Don't know 9	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Nothing to eat ..... 5 Don't know 9
	Interviewer : *Now I would like to ask few questions about the health of your family.*			
446	The last time you fed your child (ren), did you wash your hands immediately before feeding (him/her/them)?	Yes ..... 1 No 2		
447	The last time you had to clean (your child/one of your children) after he/she defecated, did you wash your hands with soap immediately afterwards?	Yes ..... 1 No 2		
448A	Do your children use a toilet when they want to defecate?	Yes ..... 1 → **Go to 449** No 2		
448B	If code 2 is circled in the question 448 A, what do you do with the stools?	Throw into the toilet ..... 1 Throw outside the house ..... 2 Throw outside the garden ..... 3 Bury in the garden ..... 4 Rinsed away ..... 5 Not disposed of ..... 6 Other (specify) 9		
449	Interviewer : *Ask this question from only those women who have answered yes (code 1) in Q 204 (Page 9)* Did any of your children die of diarrhoea? Yes ..... 1 No ..... 2 No of children died due to diarrhoea ☐			
	Interviewer - *Ask questions 450 , 451A, 451B, 451C and 452 from all eligible women with or without children*			
450	The last time you prepared a meal for your family, before starting did you wash your hands?	Yes ..... 1 No 2		

No.	Questions and filters.	Coding categories
451A	Have you been using any method to protect you and your family from mosquitoes ?	Yes ..... 1 No ..... 2 Go to 451C ←
451B	If "yes", state 3 main methods you adopt to protect yourself.	1 ..... 2 ..... 3 .....
451C	If "no", why?	....
452	Now I would like to ask you some questions about medical care for yourself. Many different factors prevent women from getting medical advice or treatment for themselves. Interviewer : *Read each of the following reasons and ask whether it is a big problem, a small problem or no problem for her and circle the relevant code.*	

	Big Problem	Small Problem	No Problem
Knowing where to go.....	1	2	3
Getting permission to go.....	1	2	3
Getting money needed for treatment.....	1	2	3
Not having a health facility nearby.....	1	2	3
Transport problems.....	1	2	3
Not wanting to go alone.....	1	2	3
Concern that there may not be a female health provider.....	1	2	3
Household duties.....	1	2	3
Other (Specify).....	1	2	3

Section 5: Marriage

No.	Questions and filters.	Coding categories
501A	Interviewer : *Do not ask this question as it is. Frame the question according to the background of the respondent. Remember that at this stage you are familier with the respondent.* Are you currently married, living with a man outside wedlock, widowed, divorced or separated ?	Married ..... 1 Living with a man ..... 2 Widowed ..... 3 Divorced ..... 4 Separated ..... 5 → Go to 502
501B	Are you and your husband / partner currently living in home together?	Yes ..... 1 No 2
502	Have you been married once, or more than once?	Once ..... 1 More than once 2
503	In what month and year did you first start to live with your husband / partner as husband and wife? Interviewer : *If this woman has married more than once, ask the date that she started to live with the first husband.*	Month ..... ☐☐ Don't know month ..... 99 Year ..... ☐☐ Don't know year 10
504	How old were you when you started living with him?	Age in years ..... ☐☐
505	Interviewer : CHECK 501A. **CURRENTLY MARRIED OR LIVING WITH A MAN OUTSIDE WEDLOCK** ☐ **OTHER** ☐ → Go to 601	
506	Have you had sexual intercourse in the last four weeks with your husband / partner?	Yes ..... 1 No ..... 2 → Go to 508
507	How many times?	No. of times ..... ☐☐ Don't know 99
508	When was the last time you had sexual intercourse? Interviewer : *Circle the relevant code according to the answer and record answer in the given box.*	Days ago ..... 1 ☐☐ Weeks ago ..... 2 ☐☐ Months ago ..... 3 ☐☐ Years ago ..... 4 ☐☐ Before last birth 995

Section 6 : Fertility Preferences

No.	Questions and filters.	Coding categories
601	**Interviewer :** *Check 313* **WOMAN OR HUSBAND STERILIZED** ☐ → (Go to 607) **OTHER** ☐ →	
602	**Interviewer :** ***Tick the relevant box according to the respondent. At this stage you are familier with her background.*** **CURRENTLY MARRIED HAVE CHILDREN** ☐ → **CURRENTLY MARRIED BUT DO NOT HAVE CHILDREN AT ALL** ☐ → (Go to 609) **OTHER** ☐ → (Go to 609)	
603	Now I have some questions about the future. Interviewer : *CHECK 222* ☐ **NOT PREGNANT / NOT SURE** Would you like to have a (another) child or would you prefer not to have any (any more) children? ☐ **PREGNANT** After the child you are expecting, would you like to have another child or would you prefer not to have any more children?	Have a / another child ..... 1 → Go to 606 No (More) children ..... 2 Undecided / Don't know ..... 9 → Go to 605
604	Would you say that you definitely do not want to have (more) children, or are you not sure?	Definitely no more ..... 1 Not sure ..... 2 → Go to 609
605	Are you more inclined towards having a (another) child, or toward not having a (another) child?	Have another ..... 1 Not have another ..... 2 Undecided ..... 3 → Go to 609

No.	Questions and filters.	Coding categories
606	How long would you like to wait from now before the birth of a (another) child?	Months ..... 1 ☐☐ Years ..... 2 ☐☐ → Go to 609 Don't know 999
607	Do you regret that you (your husband) had the operation not to have any more children?	Yes ..... 1 No ..... 2 → Go to 609
608	Would you like to have another child or would you prefer not to have any more children?	Have another ..... 1 No more ..... 2 Undecided / Don't know 9
609	Interviewer : *Circle the relevant code according to the respondent's information and ask the appropriate question.* Has no living children ..... 1 Has not given birth to a child ..... 2 → Ask A Has living children ..... 3 → Ask B A. If you could choose exactly the number of children you want to have in your life time, how many would that be? B. Assume that you do not have any children. If you could choose exactly the number of children you would like to have, how many would that be? Interviewer : *Circle the relevant code and record the number of children.*	None..... ☐ Boys (No.)..... ☐ Girls (No.)..... ☐ Either sex (No.)..... ☐
610	Interviewer : *Check Q 602. This question should be asked from those who mentioned 'Currently married, but no children at all'. Direct other women to Q 701* How long have you waited to have a child? Interviewer : *If the period is greater than one year record number of years. If the period is less than one year record number of months.*	Years ..... ☐☐ Months ..... ☐☐ → Go to 611 No expectations but like to have a child ..... 1 Do not want a child ..... 2 Not applicable because married recently ..... 3 → go to 701
611	Did you ever receive medical or any other treatment to become pregnant?	Yes ..... 1 No ..... 2 → Go to 701
612	What type of treatments? Interviewer : *There may be more than one answer. Circle all.*	Hormone injections ..... 1 Induce sperms into the womb artificially ..... 2 Religious activities ..... 3 Other (Specify) 4

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Section 7 : Husband's Background and Work / Respondents Work

No.	Questions and filters.	Coding categories
	Now I have some questions about your husband, his background and his work.	
701	Did your husband ever attend school ?	Yes ..... 1 No ..... 2 Go to 704 ←
702	What was his highest educational attainment?	1 - 5 year (Primary) ..... 1 6 - 10 year (Secondary) ..... 2 Passed G.C.E. (O/L) or equivalent ..... 3 Passed G.C.E. (A/L) or equivalent ..... 4 Degree and above 5
703	Interviewer : *Mark in the relevant box after considering the husband's level of education.* PRIMARY ☐ ↓ SECONDARY OR HIGHER ☐ → Go to 705	
704	Can (could) he read a letter or newspaper easily, with difficulty, or not at all?	Easily ..... 1 With difficulty ..... 2 Not at all 3
705	If your husband is employed, what kind of work does (did) he mainly do? Interviewer : *Write the 'work' in details in the given space. If work is 'farming or livestock rearing / Poultry' Go to 707*	.... 'Work' code * ☐☐☐☐ * For office use only. Not employed 2
706	Does (did) he earn a regular income?	Yes ..... 1 No ..... 2 Don't know ..... 9 → Go to 710
707	Interviewer : *Ask this question from the woman whose husband's work is 'farming or livestock rearing / poultry'.* Does (did) your husband work MAINLY on his or his family's or on someone else's land?	His/ Family land ..... 1 Someone else's land ..... 2 → Go to 709

No.	Questions and filters.	Coding categories
708	Does (did) he hire others to work the land for him?	Yes ..... 1 No ..... 2 → Go to 710
709	Does (did) he work MAINLY for money or does (did) he work for a share of the crops?	Money ..... 1 Share of crops 2
710	Interviewer : *Now I have some questions about your work.* Have you ever been engaged in an income generating activity either before marriage or after marriage?	Yes ..... 1 No 2
711	What is your main activity at present? Interviewer : *Here the main activity can be economic, educational or housework. If it is an economic activity write down the activity in detail. If it is housework probe and check whether she is doing any other work (such as agricultural activity) together with housework and write them down in detail*	.... [ ][ ][ ][ ] * * For office use only

Section 8 : AIDS and Other Sexually Transmitted Diseases

No.	Questions and filters.	Coding categories
801	Interviewer : *Now I would like to talk about something else.* Have you ever heard of the virus HIV or an illness called AIDS?	Yes ..... 1 No 2
802	Is there anything a person can do to avoid getting infected with HIV?	Yes ..... 1 No ..... 2 → Go to 804 Don't know ..... 9 → Go to 804
803	What can a person do ? Anything else? Interviewer : *Record all mentioned*	Abstain from sex ..... 01 Use condoms ..... 02 Limit sex to one partner/Stay faithful to one partner ..... 03 Limit number of sexual partners ..... 04 Avoid sex with prostitutes ..... 05 Avoid sex with persons who have many partners ..... 06 Avoid sex with homosexuals ..... 07 Avoid sex with persons who inject drugs intravenously ..... 08 Avoid blood transfusions ..... 09 Avoid injections ..... 10 Avoid kissing ..... 11 Avoid mosquito bites ..... 12 Seek protection from traditional healer ..... 13 Avoid sharing razors / Blades ..... 14 Other (Specify) ..... 15 Other (Specify) ..... 16 Don't know 99
804	Can the HIV virus be transmitted from a mother to a child?	Yes ..... 1 No ..... 2 → Go to 806 Don't know ..... 9 → Go to 806

No.	Questions and filters.	Coding categories
805	When can the virus that causes AIDS be transmitted from a mother to a child? Any other times? Interviewer : *Record all responses*	During pregnancy ..... 1 At delivery ..... 2 During brestfeeding ..... 3 Other (Specify) ..... 4 Don't know 9
806	Apart from AIDS, have you heard about (other) infections that can be transmitted through sexual contact?	Yes ..... 1 No ..... 2 → Go to 809
807	In a man, what signs and symptoms would lead you to think that he had such an infection? Any others? *Interviewer : Record all mentioned*	Abdominal pain ..... 01 Genital discharge / Dripping ..... 02 Foul smelling discharge ..... 03 Burning pain on urination ..... 04 Redness / Inflammation in genital area ..... 05 Swelling in genital area ..... 06 Genital sores / Ulcers ..... 07 Genital warts ..... 08 Blood in urine ..... 09 Loss of weight ..... 10 Impotence ..... 11 No symptoms ..... 12 Other (Specify) ..... 13 Other (Specify) ..... 14 Don't know 99

No.	Questions and filters.	Coding categories
808	In a woman, what signs and symptoms would lead you to think that she has such an infections? Any other? Interviewer : *Record all mentioned*	Abdominal pain ..... 01 Genital discharge ..... 02 Foul smelling discharge ..... 03 Burning pain on urination ..... 04 Redness / Inflammation in genital area ..... 05 Swelling in genital area ..... 06 Genital sores / Ulcers ..... 07 Genital warts ..... 08 Blood in urine ..... 09 Loss of weight ..... 10 Inability to give birth ..... 11 No symptoms ..... 12 Other (Specify) ..... 13 Other (Specify) ..... 14 Don't know 99
809	Interviewer : *Ask this question, only from those who have said "yes" to Q 303 - code 05 (Use of condom)* You have told me about the use of condoms during sex. Tell me how often you use it?	Frequently ..... 1 Occasionally 2
810	What was the aim of using condoms?	Family planning ..... 1 For disease prevention ..... 2 For both above purposes ..... 3 Other (Specify) ..... 4 Do not know / No answer 9
811	Interviewer : *Now record the time in 24 hours time*	Hour ..... ☐☐ Minutes ..... ☐☐

Section 9: Length and Weight

INTERVIEWER : **FROM PAGE 11, 12 & 13, RECORD NAMES AND LINE NUMBERS OF ALL LIVING CHILDREN BORN SINCE 01ST OF MAY, 1995. START WITH THE YOUNGEST CHILD. RECORD THE NAME AND LINE NUMBER OF THE MOTHER IN 907. RECORD DATE OF BIRTH IN 902 AND CHECK AGE IN 903.**

Name of the measurer : ..... Date of measurement DD MM

901 Child Identification data	1 Youngest living child ..... Name Line No Sex Male - 1 Female - 2	2 Next-to-youngest living child ..... Name Line No Sex Male - 1 Female - 2	3 Second-to-youngest living child ..... Name Line No Sex Male - 1 Female - 2	4 Third-to-youngest living child ..... Name Line No Sex Male - 1 Female - 2
902 Date of Birth Check with 212 in pages 11, 12 & 13	Date..... Month..... Year.....	Date..... Month..... Year.....	Date..... Month..... Year.....	Date..... Month..... Year.....
903 Check Age : (3 months or more-less than 60 months)	Yes ..... 1 No ..... 2 →	Yes ..... 1 No ..... 2 →	Yes ..... 1 No ..... 2 →	Yes ..... 1 No ..... 2 **GO TO NEXT PAGE**
904 Length / Height (in cms) Interviewer : *If the age of the child is 3 months or more or less than 24 months measure the length. If the age is more than 24 months measure the height.*	.	.	.	.
904 A Measuring Length / Height	Measured lying down 1 Measured standing 2	Measured lying down 1 Measured standing 2	Measured lying down 1 Measured standing 2	Measured lying down 1 Measured standing 2
905 Weight of the Child (NAME) Weight (in Kg)	.	.	.	.
906 Result	Measured ..... 1 Not at home ..... 2 Mother refused ..... 3 Child refused ..... 4 Other ..... 5 (Specify)	Measured ..... 1 Not at home ..... 2 Mother refused ..... 3 Child refused ..... 4 Other ..... 5 (Specify)	Measured ..... 1 Not at home ..... 2 Mother refused ..... 3 Child refused ..... 4 Other ..... 5 (Specify)	Measured ..... 1 Not at home ..... 2 Mother refused ..... 3 Child refused ..... 4 Other ..... 5 (Specify)

907

Record line number, name and age of the woman who had given above births.

Measure the weight of the mother and record it in the relevant box.

Line No :.....

Name :.....

Age :.....

Weight (Kgms) :..... .

Height (Cms) :..... .

Tear -Off Measurement Sheet

INTERVIEWER : **FROM PAGE 11, 12 & 13, RECORD NAMES AND LINE NUMBERS OF ALL LIVING CHILDREN BORN SINCE 01ST OF MAY, 1995. START WITH THE YOUNGEST CHILD. RECORD THE NAME AND LINE NUMBER OF THE MOTHER IN 907-T. GIVE THIS TEAR-OFF SHEET TO MEASURER.**

MEASURER: COMPLETE 904-T, 904A - T, 905-T, 906-T AND 907 -T. GIVE THIS TEAR-OFF SHEET TO TEAM SUPERVISOR

Identification

PSU (Ward/GN Div./Estate): ☐☐

SSU (Survey block number): ☐

Housing unit number : ☐☐☐

Household number: ☐

Line number of eligible woman: ☐☐

Name of the measurer : ..... Date of measurement ☐☐ (DD) ☐☐ (MM)

	1 Youngest living child	2 Next-to-youngest living child	3 Second-to-youngest living child	4 Third-to-youngest living child
901 - T Child Identification data	..... Name Line No ☐☐ Sex ☐ Male - 1 Female - 2	..... Name Line No ☐☐ Sex ☐ Male - 1 Female - 2	..... Name Line No ☐☐ Sex ☐ Male - 1 Female - 2	..... Name Line No ☐☐ Sex ☐ Male - 1 Female - 2
902 - T Date of Birth Check with 212 in pages 11, 12 & 13	Date..... ☐☐ Month..... ☐☐ Year..... ☐☐☐☐	Date..... ☐☐ Month..... ☐☐ Year..... ☐☐☐☐	Date..... ☐☐ Month..... ☐☐ Year..... ☐☐☐☐	Date..... ☐☐ Month..... ☐☐ Year..... ☐☐☐☐
904 - T Length/ Height (in cms) Interviewer : *If the age of the child is 3 months or more or less than 24 months measure the length. If the age is more than 24 months measure the height.*	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐
904 A- T Measuring Length / Height	Measured lying down 1 Measured standing 2	Measured lying down 1 Measured standing 2	Measured lying down 1 Measured standing 2	Measured lying down 1 Measured standing 2
905 - T Weight of the Child (NAME) Weight (in Kg.)	☐☐.☐	☐☐.☐	☐☐.☐	☐☐.☐
906 - T Result	Measured ..... 1 Not at home ..... 2 Mother refused..... 3 Child refused ..... 4 Other ..... 5 (Specify)	Measured ..... 1 Not at home ..... 2 Mother refused..... 3 Child refused ..... 4 Other ..... 5 (Specify)	Measured ..... 1 Not at home ..... 2 Mother refused..... 3 Child refused ..... 4 Other ..... 5 (Specify)	Measured ..... 1 Not at home ..... 2 Mother refused..... 3 Child refused ..... 4 Other ..... 5 (Specify)

907- T

Record line number, name and age of the woman who had given above births.

Measure the weight of the mother and record it in the relevant box.

Line No :..... ☐☐

Name :.....

Age :..... ☐☐

Weight (Kgms) :..... ☐☐.☐

Height (Cms) :..... ☐☐☐.☐

INTERVIEWER : RECORD THE INFORMATION FROM 901-T, 904-T, 904A - T, 905-T, 906-T AND 907 - T ON THIS PAGE INTO 901, 904, 904A, 905 , 906 AND 907 IN PAGE 43

Interviewer's Observations

(To be filled in after completing interview)

Person Interviewed: .....

.....

.....

Problems arose at the interview .....

.....

.....

Other Aspects: .....

.....

Name of Ir terviewer : ..... Date : .....

Supervisor's Observations

.....

.....

.....

.....

Name of Supervisor : ..... Date : .....

Editor's Observations

.....

.....

.....

.....

Name of Editor : ..... Date : .....

Name of Keyer : ..... Date : .....

Colombo Metropolition Area

District	Local Government*
Colombo	Colombo Municipal Council
	Kolonnawa Urban Council
	Kotikawatta Town Council
	Moratuwa Urban Council
	Dehiwala Municipal Council
	Kotte Urban Council
	Maharagama Town Council
	Battaramulla Town Council
Gampaha	Peliyagoda Urban Council
	Dalugama Town Council
	Kelaniya Town Council
	Negombo Municipal Council
	Ja-Ela Urban Council
	Kandana Town Council
	Ragama Town Council
	Hendala Town Council
	Wattala Mabola Urban Council
	Welisara Town Council
	Seedoowa Urban Council

* Definition according to the 1981 Census.

Appendix C

Staff Involved in Demographic and Health Survey 2000

Project Director	-	Mr. A.G.W. Nanayakkara , Director General, Department of Census & Statistics
Project Manager	-	Mr. S. Madurapperuma, Director , Department of Census & Statistics
Project Co-ordinator	-	Mr. S. Sangarapillai, former Director, Department of Census & Statistics

Steering Committee

Mr. A.G.W. Nanayakkara	-	Director General, Department of Census & Statistics (Chairman)
Dr. A.T.P.L. Abeykoon	-	Director ,Population Division, Ministry of Health ,Nutrition & Welfare Service
Mr. S. Madurapperuma	-	Director , Department of Census & Statistics
Mr. S. Sangarapillai	-	former Director, Department of Census & Statistics
Mrs. D.B.P.S. Vidyaratne	-	Director, Department of Census & Statistics
Dr. Gamini De Silva	-	Director, Department of Census & Statistics
Mr. H.R. Gunasekara	-	Director, Department of Census & Statistics
Mrs. S.V. Nanayakkara	-	Director, Department of Census & Statistics
Mr. G.Y.L Fernando	-	Director, Department of Census & Statistics
Mrs. A.P. De Silva	-	Deputy Director, Department of Census & Statistics
Mr. R. Balakrishnan	-	Deputy Director, Department of Census & Statistics
Mr. T. Thanapalasingam	-	Deputy Director, Department of Census & Statistics

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Mrs. Indu Bandara
Mr. Suranjan Wijeratne
Mr. W.D.P. de A Goonatilake

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Mr. D. Amarasinghe	-	Director
Mrs .L. P De Silva	-	Deputy Director
Mr. D.C.A. Gunawardena	-	Deputy Director
Mr. C.N. Galahitiyawa	-	Deputy Director
Mrs. S.M. Rajapaksha	-	Deputy Director
Mrs. H.D.E. Somarathna	-	Deputy Director
Mrs. A.P. De Silva	-	Deputy Director
Mr. R. Balakrishnan	-	Deputy Director
Mr. H.N. Siriwardana	-	Deputy Director
Mr. L.J.S De Silva Wijeratne	-	Senior Statistician
Mrs. I.R. Bandara	-	Senior Statistician
Mr. M.A.N. Fernando	-	Senior Statistician
Mr. P.V.C. Perera	-	Senior Statistician
Mr. A.D.H. Gunatilake	-	Senior Statistician
Mrs. A.B.S. Fernando	-	Senior Statistician
Mrs. W.T.I.M. Tissera	-	Senior Statistician

District Statistical Staff

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Mr. W. Gunasiri	-	Statistician	-	Kalutara
Mr. P.H.M. Cyril	-	Senior Statistician	-	Kandy
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Mr. T.P. Kodituwakku	-	Senior Statistician	-	Galle
Mr. K.A. Karunatilaka	-	Senior Statistician	-	Matara
Mr. H.K.M.A. Chandrasiri	-	Statistician	-	Hambantota
Mr. W.M. Dharmasena	-	Senior Statistician	-	Kurunegala
Mr. M.P. Gunaratna Banda	-	Statistician	-	Puttalam
Mr. S.G. Kariyawasam	-	Senior Statistician	-	Anuradhapura
MR. M.A. Gunapala	-	Senior Statistician	-	Polonnaruwa
Mr. J.M. Wijekoon	-	Statistician	-	Badulla
Mr. W.M. Gunasekara	-	Statistician	-	Monaragala
Mr. L.W. Ranjith	-	Statistician	-	Ratnapura
Mr. W. Samarakoon	-	Statistician	-	Kegalle

Field Survey Teams

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Mrs. Y.P. Rajapaksha	-	Interviewer
Miss K.K. De Almeida	-	Interviewer
Mrs. R. Gunawardana	-	Interviewer
Mrs .D. R. Jayatissa	-	Interviewer
Mr . K.S.R.L. Senadeera	-	Measurer
Mr. W. Sugathapala	-	Assistant

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Miss I.C. Premaratne	-	Interviewer
Miss. Imalka Roshini	-	Interviewer
Mrs. K.D.K. Wijesena	-	Interviewer
Mrs. S. Boralesgamuwa	-	Interviewer
Mr. C. Weerasinghe	-	Measurer
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Mrs. H.A. Wimalawathie	-	Interviewer
Mrs. S.M. Jayakody	-	Interviewer
Mrs. W. Jayaneththiarachchi	-	Interviewer
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Mr. G.K. Aladin	-	Assistant

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Mrs. S.A. Karunawathie	-	Interviewer
Mrs. W.S.L D. A. Gunatilake	-	Interviewer
Mrs. D.M. Samarawickrama	-	Interviewer
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Mrs. K. Winodahewa	-	Interviewer
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Mrs. M. Jayarathna	-	Interviewer
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Mr. D.R.M. Dharmadasa	-	Measurer
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