Annual Report
on
Family Health
2013

Family Health Bureau
Ministry of Health
Sri Lanka

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Preface

The Family Health Bureau of the Ministry of Health, Sri Lanka is pleased to present its 23rd Annual Report on Family Health Programme. The Programme is dedicated in embarking on its responsibilities to ensure optimal health for women, infants, children and families. It is predominantly operating through the public health service network possessing linkages with curative health services, concerned government departments, professional organizations, development partners and other relevant stakeholders.

Reproductive Health - Management Information System of the Family Health Programme routinely collects data on programme implementation and its outcome / impact which is also assisted with surveillance. The information generated is continuously being utilized for programme redirection at the central level and provides feedback to the grass root level public health staff on their untiring efforts. The stakeholders of the Programme also receive feedback on their contributions to maintain the smooth conduct of the Programme.

The succinct format of this report is intended to facilitate the use of the information as a snapshot of the programme's progress towards its goals set out in the national maternal and child health policy and strategic plans.

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Acknowledgments

This report provides the progress that the programme made over recent years and the stakeholders of the Programme need to be gratefully remembered.

The support given by the Government of Sri Lanka, Ministry of Health by identifying the Family Health Programme as a key element in the health system should be appreciated and it is this sustained strength that had made the Programme grow over the decades.

The continuous technical inputs given by the Professional colleges; Perinatal Society of Sri Lanka, Sri Lanka college of Obstetricians and Gynaecologists, Sri Lanka College of Paediatricians, College of Pathologists of Sri Lanka and College of Community Physicians of Sri Lanka should always be appreciated.

Technical as well as the financial supports rendered by the development partners; World Health Organization, United Nations Population Fund, United Nations Children's Fund, **GAVI-HSS** and the World Bank have always strengthened the Programme. GAVI-HSS has to be specially mentioned for providing the financial assistance to make this publication.

From the Family Health Bureau, Director and Deputy Director for their guidance and all Consultant Community Physicians for their inputs need to be thankfully remembered. A special word of appreciation to Dr. Neil Thalagala, Consultant Community Physician of the Family Health Bureau, for his assistance in editing this report. A special thanks also should go to Dr Buddhika Samarawickrama Medical Officer, Monitoring and Evaluation unit for her support in preparing this report.

The public health staff from all over the country who has always made immense efforts to send the completed timely returns should be highly regarded. Mr. Sarath Gamage, Assistant Director (IT), and the staff of the Planning, Monitoring and Evaluation unit deserves to be honoured for the effort they have taken to make the data management and quality assurance process smooth and efficient.

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Summary Statistics

Indicator		Data	Year	Source
Demographic				
Total population		20,483,00	2013	Registrar General's Department
Age distribution ('000)	0-14 years	5,171	2013	Central Bank Report
	15-64 years	13,707		
	65 years over	1,605		
Live births[2]	Total	355,900	2013	Registrar General's Department
	Male	181,184		
	Female	174,716		
Surface area (Sq. km)		65,610	2012	Statistical Data Sheet 2013 Department of Census and Statistics
Population density (Persons per sq. km)		323	2012	Department of Census and Statistics
Population growth rate (%)		0.71	2012	
Rate of Natural Increase (per 1000 population)		11.5	2012	Central Bank Report 2013
Crude Birth Rate (per 1000 population)[2]		17.9	2013	Department of Census and Statistics
Crude Death Rate (per 1000 population)[2]		6.2	2013	
Urban population (%)		18.3	2012	Department of Census & Statistics
Sex ratio at birth (No. of male births per 100 female births)		104.0	2013	Department of Census & Statistics
Child population (<5 year)%		8.6	2012	Department of Census and Statistics 2012
Women in the reproductive age group (15-49 years)%		51.0	2012	
Average house hold size (number of persons)[3]		3.9	2012	Central Bank Report 2013
Health and Nutrition				
Life expectancy at birth (years)	Total	75.1	2012	Central Bank Report 2013
	Male[2]	70.5	2011	Department of Census and Statistics
	Female[2]	79.8	2011	
Neonatal Mortality Rate[2] (per 1000 live births)		6.4	2009	Registrar General's Department
Infant Mortality Rate[2] (per 1000 live births)		9.7	2009	
Under five Mortality Rate[2] (per 1000 live births)		12.1	2009	
Total Fertility Rate[2]		2.3	2006/2007	Demographic and Health Survey[1]
Maternal Mortality Ratio (per 100000 live births)		32.5	2013	Family Health Bureau
Still Birth Rate (per 1000 births)[2]		7.0	2012	Medical Statistics Unit
Low birth weight per 100 live births in Government Hospitals[2]		16.3	2012	

Indicator	Data	Year	Source
Pregnant women attending ANC more than 4 visits (%)	92.5	2006/2007	Demographic and Health Survey[1]
Average number of clinic visits per mother	6.6	2013	Family Health Bureau
Average number of antenatal home visits per mother by a PHM	4.5	2013	Family Health Bureau
Pregnant women visited at least once by PHM at home (%)	91.3	2013	Family Health Bureau
Live births in government hospitals (%)[2]	95.75	2012	Medical Statistics Unit
Births attended by skilled health personnel (%)	98.6	2006/2007	Demographic and Health Survey[1]
Mothers receiving at least 1 postpartum visit during 1st 10 days (out of reported deliveries)	92.2	2013	Family Health Bureau
Average number of postpartum visits by PHM during 1st10 days	1.7	2013	Family Health Bureau
Children ever breastfed of all children <5 years (%)	99.3	2006/2007	Demographic and Health Survey[1]
Breastfeeding initiation within 1 hour of birth (%)	79.9	2006/2007	
Exclusive breastfeeding under 6 months (%)	76.0	2006/2007	
Immunization coverage (%) BCG at birth (live births) Pentavalent 3rd dose Measles containing vaccine[1] (MCV 1)	 97.0 96.0 95.5	2013	Epidemiology Unit
Children under five (%) Underweight (weight- for- age) <-2SD Acute Under nutrition (weight for height) -Wasting <-2SD Chronic malnutrition (height for age) -Stunting<-2SD	 21.1 14.7 17.3	2006/2007	Demographic and Health Survey[1]
Average Daily Calorie Intake[3] (kCal) (Both poor and non-poor)	2,145	2012	Central Bank Report 2013
Current use of contraceptive methods among 15-49 year age married women (%) Any method Modern Method Traditional Method	 68.4 52.5 15.9	2006/2007	Demographic and Health Survey[1]
Water supply and sanitation			
Access to safe drinking water (%)[3]	88.7	2013	Central Bank Report 2013
Access to pipe borne water (%)	44.3	2013	

Indicator		Data	Year	Source
Socio-economic				
GDP per capita at current prices	Rs	423,467	2013	Central Bank Report 2013
	US $	3,280		
GNP per capita at current prices	Rs	411,998	2013	
	US $	3,191		
Human development index		0.715	2012	
Unemployment rate	Total	4.6	2013	Sri Lanka Labour Force Survey (2013-3rd quarter)
	Male	3.3		
	Female	7.0		
Labour force (10 years & over population)		8,802,113	2013	Sri Lanka Labour Force Survey (Annual Bulletin)
Dependency ratio (%)		49.4	2013	Central Bank Report 2013
Literacy rate %	Total	95.6	2012	Department of Census and Statistics
	Male	96.8		
	Female	94.6		
School going population (%)	Primary	42.0	2012	Ministry of Education
	Junior secondary	31.0		
	Senior secondary	15.0		
	Collegiate	12.0		
Median age at marriage (Female 25-49 years)		23.3	2006/2007	Demographic and Health Survey[1]
Health Resources				
Government expenditure on health (% of GDP)		1.4	2013	Central Bank Report 2013
Government health expenditure as % of national expenditure[2]		4.1	2012	Department of Health Services
Per capita health expenditure (Rs)[2]		4392	2012	Medical Statistics Unit
Medical Officer per 100,000 population[2]		78.6	2012	Medical Statistics Unit
Population per Medical Officer[2]		1,278	2012	Medical Statistics Unit
Dental Surgeons per 100,000 population[2]		6.0	2012	Medical Statistics Unit
Nurses per 10,000 population[2]		180.3	2012	Medical Statistics Unit
Public Health Midwives per 100,000 population[2]		28.6	2012	Medical Statistics Unit
Number of hospitals[2]		621	2012	Medical Statistics Unit
Number of hospital beds[2]		76,087	2012	Medical Statistics Unit
Hospital beds per 1,000 population[2]		3.8	2012	Medical Statistics Unit
Number of Central Dispensaries[2]		487	2012	Medical Statistics Unit
Number of MOH divisions		333	2013	Family Health Bureau

[1] DHS 2006 / 2007 excludes Northern and Eastern provinces

[2] Provisional

[3] Based on data of Household Income and Expenditure Survey 2009/2010, DCS

1 Background

1.1 Family Health Programme

Family Health Programme is a collection of several packages of interventions that are aimed to promote the health of families around the country with special emphasis on mothers and children. The programme provides the most wide spread community based health care services enjoyed by Sri Lankan public. Present day Family Health Programme reflects more than 85 years of successful programme maturation. The origin of it dates back to 1926, when it was initiated in Kalutara, as the first field based health unit system of the country. Today, Family Health programme reaches almost all families throughout the country. It forms a well-organized health care system, Implementing services through 333 divisional health units called Medical Officer of Health (MOH) areas.

The official mission of the Family Health Programme is "to contribute to the attainment of highest possible levels of health of all women, children and families through provision of comprehensive, sustainable, equitable and quality maternal and child health services in a supportive, culturally acceptable and family friendly setting." In serving this mission the programme relies on evidence based public health interventions which are proven to be effective and delivered by multi disciplinary team of health professionals. Major share of the Family Health programme interventions are preventive in nature while some of them focus on secondary care by including interventions to ensure the standards and quality of care. A series of well designed programme packages are available to deliver these interventions to target groups across two continuums of care: the life cycle and health system.

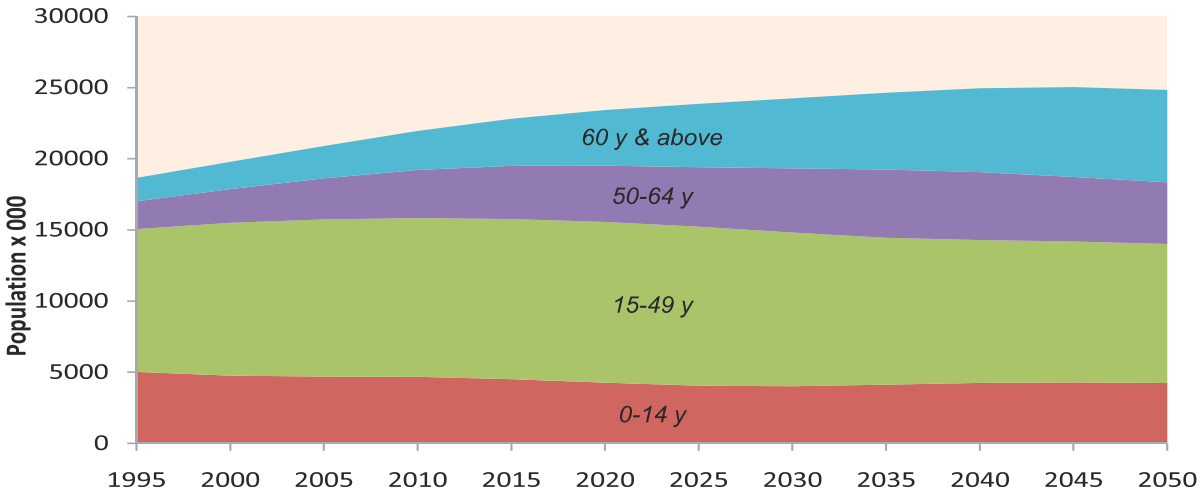
The Family Health Programme is comprised of several major components that aim to promote maternal, child, school and adolescent health. It also includes Family planning and Women's health components incorporating perimenopausal care and gender concerns. The maternal component is further sub-divided as; Antenatal, Intrapartum, Postpartum and Maternal mortality and morbidity surveillance entities. Newborn care, Child nutrition, Child development and special needs, Child morbidity and mortality prevention and surveillance elements comprise the Child health component. In addition, Family Health Programme includes an oral health component which focuses on maternal and child oral health care.

As a whole, Family Health Programme focuses on a sizable proportion (around 54%) of the population, which includes children, adolescents and those in reproductive ages. The population estimates show that these large numbers will remain so for several more years to come (Figure1). Estimates also indicate that nearly 15 million people come under the purview of Family Health Programme.

1.2 Health Administration of Sri Lanka

Sri Lanka has a devolved health system resulting in Ministry of Health at central level and separate provincial ministries of Health at nine provinces. The central ministry has the overall responsibility of maintaining the health services of the country, while the nine Provincial ministries empowered with nine Provincial Directors of Health Services (PDHS) are responsible for effective implementation of the services in their respective provinces.

Figure 1: Distribution of estimated population over broad age groups from 1995 -2050



There are 26 Regional Directors of Health Services (RDHS) to assist the PDHSs. The RDHS areas are similar to administrative districts except in Ampara where the district is subdivided to Ampara and Kalmunai RDHS areas.

1.3 Organization and Delivery of Family Health Programme

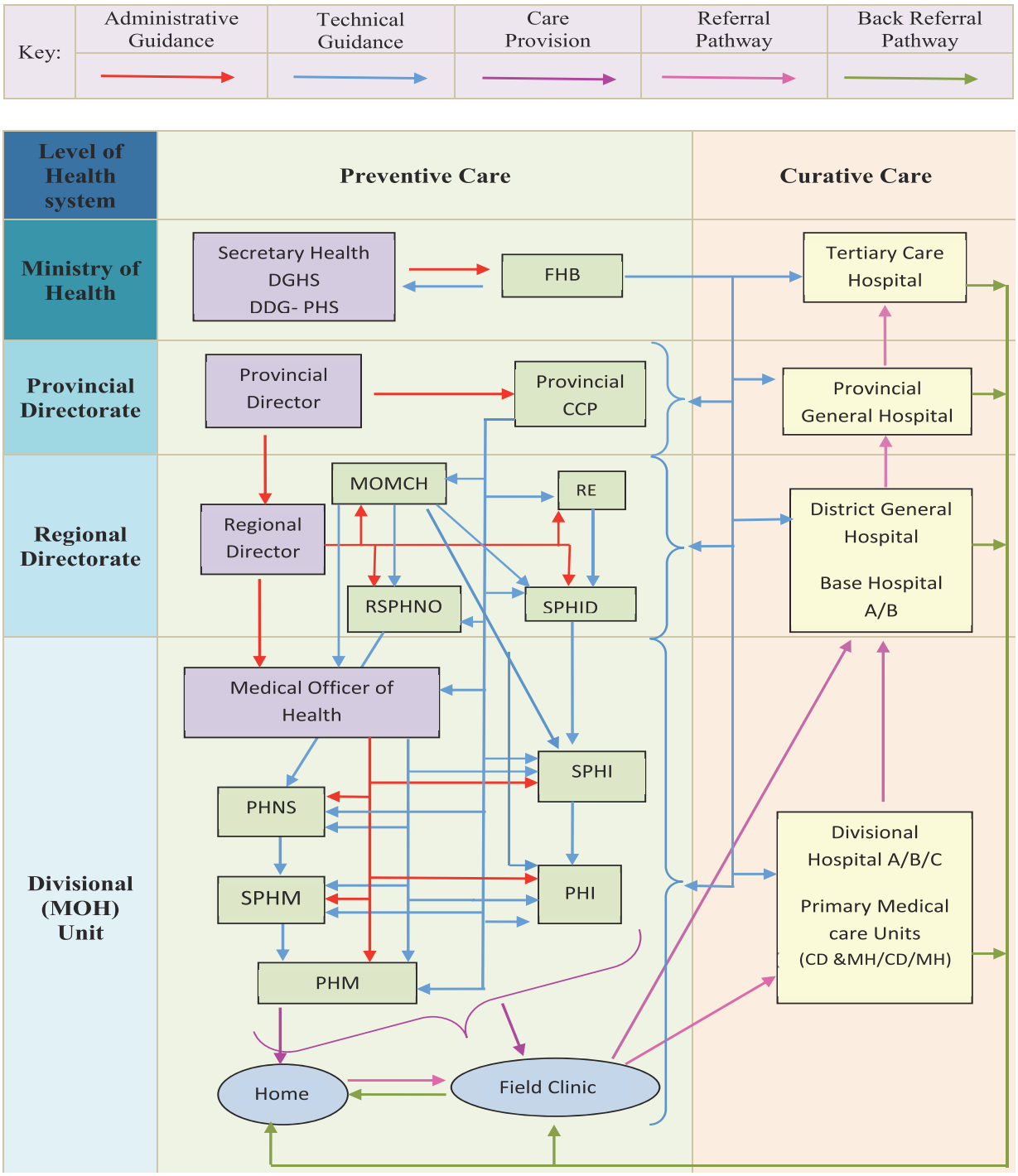
Family Health Programme collaborates with a number of partners in the process of its organization and delivery. Family Health Bureau (FHB), a central level institution of the Ministry of Health, is responsible for designing and planning of Family Health Programme. FHB also provides technical guidance for provincial systems on its implementation. In addition, FHB advocates the Ministry of Health on matters related to policy, finance, infrastructure and other resource requirements relevant to Family Health Programme. Quality control, monitoring and evaluation of the Family Health Programme also come under the purview of FHB.

FHB has several sub units that covers the different components of the Family Health Programme. These include: a) Maternal Health, b) Maternal Morbidity and Mortality Surveillance, c) Intrapartum and Newborn care, d) Child Development and Special Needs, e) Child Nutrition, f) School and Adolescent Health, g) Gender and Women's health, h) Family Planning, i) Planning, Monitoring and Evaluation, j) Oral Health and k) Research and Development. Each of these units is manned by a public health specialist, who is the national programme manager for areas under the unit's purview. Each unit possessing a separate staff responsible for advocacy, policy and strategic analysis, programme development, technical guidance, evaluation and supervision related to the respective programme components.

Figure 2 shows the administrative and technical guidance pathways that facilitates the organization and implementation of Family Health Programme activities through the national health system.

The red and blue lines in the diagram depict the administrative and technical supervision pathways relevant to different levels of health system that are involved with the Family Health

Figure 2: Organization of FHP at different levels of health system



Programme. The diagram also depicts the referral and back referral pathways available for people confronted by health conditions related to family health (Child birth, childhood illness etc.) in pink lines. The administrative and technical guidance relevant to the Family Health Programme is integrated into the usual multi-tier organizational arrangement of the Ministry of Health. Tiers include, Central Ministry of Health Institutions, headed by the Secretary of Health, 9 Provincial Directors, and 26 Regional Directors.

At Central Ministry of Health, policy making and financial allocation related to Family Health Programme become the responsibility of Secretary to the Ministry. The overall administration including logistical supply comes under the purview of the Director General of Health Services (DGHS). FHB is the main think tank behind the technical management of the Family Health Programme providing technical guidance for all levels of the health system. FHB provides policy and strategic advocacy to the Ministry of Health and Provincial and Regional directorates.

Implementation of the Family Health Programme is advised and supervised by Provincial Consultant Community Physicians, and Medical Officers of Maternal and Child Health (MOMCH) attached to regional (district) directorates. MOMCHs also act as the major link between FHB and the Provincial system. At the district level, MOMCH is supported by Regional Supervising Public Health Nursing Sister (RSPHNO) and Divisional Supervising Public Health Inspector (SPHID) in monitoring of the Family Health Programme in the district.

The implementation of the Family Health Programme is carried out by the Medical Officer of Health (MOH) teams under the administrative supervision of the Provincial and Regional Directorates of Health. In Sri Lanka 333 MOH areas are distributed within 26 health regions. The MOH areas are the smallest health unit in the public health network and it consists of a team comprising several categories of staff. MOH is the Manager of the MOH team. He is a MBBS qualified doctor who is given special orientation training on public health activities. Both technical and administrative supervision of the MOH team becomes the main responsibility of the MOH. At present most MOHs are assisted by Additional Medical Officers of Health (AMOHs). The Public Health Midwife (PHM) and Public Health Inspector (PHI) are the ultimate grass root level primary health care workers of the MOH team. On average one PHM is appointed for 3000 population while a PHI is appointed for 15,000 population. While the principle roles of the PHM lies around maternal and child health activities, the PHIs are principally held responsible for school and adolescent health programme, Environmental and Occupational health activities including control of communicable diseases, ensuring water and food safety, and sanitation related interventions. Several other categories of interim level supervisors are available in the MOH team. They are supposed to assist the MOH in supervision of activities of grass root level staff. Public Health Nursing Sisters (PHNS) and Supervising Public Health Midwives (SPHM) are responsible for supervising the PHMs. PHNS and SPHM have a hierarchical administrative relationship where PHNS is also supposed to supervise SPHM. Both of them are responsible for the MOH. Supervising Public Health Inspectors (SPHI) become immediate supervisors of PHIs. They are directly responsible for the MOH. MOH team is further potentiated by clerical and other categories of supportive staff such as drivers, labourers etc. MOH staff includes School Dental Therapists (SDT) who are responsible for providing routine dental care for school children. The following table presents the overall staff position of the MOH areas around the country.

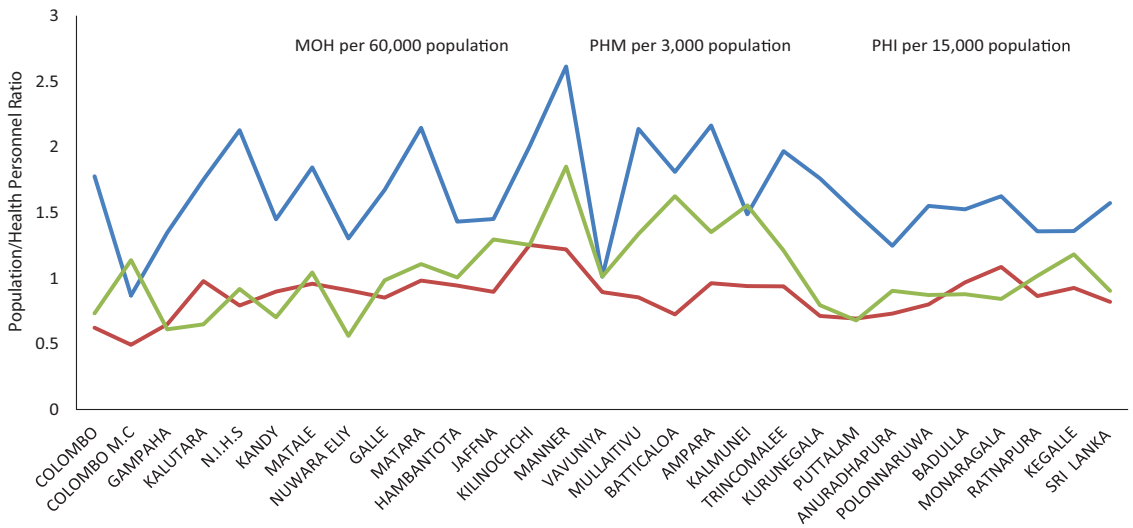
Figure 3 shows 3 human resource availability indicators of Family Health Programme. They include number of MOHs (including AMOHs) per 60,000 population, number of PHMs per

3,000 population and number of PHIs per 15,000 population. Until the carder of PHMs being filled according to the letter number FHB / DIR / GF / 2012 issued on 28-03-2012 3,000 to be considered as the standard average number of population allocated to a PHM. PHI is supposed to cover a population of 15,000. The graph shows that there is a gross inadequacy in allocation of public health staff island wide based on the population alone although there are other factors also to be considered e.g. terrain. It should be noted that even if the district meets the standards of staff position, there is often a maldistribution of staff within districts. This seems to create notable inequities in service provision between the MOH areas within a district. The Colombo Municipal Council (CMC) does not employ MOHs and it follows a different system to provide MCH care.

Table 1: Distribution of different types of staff personnel in the MOH teams around the country, 2013

Category of staff	Number of personnel	Staff target population (Officers/ 100,000 population)
MOH	302	1.4
AMOH	265	1.2
PHNS	259	1.2
SPHI	209	1.0
SPHM	240	1.1
PHM	5918	27.4
PHI	1306	6.0
SDT	296	1.4

Figure 3: Number of MOHs / 60,000 population, number of PHMs / 3,000 population and number of PHIs / 15,000 population 2013



2 Purpose of the Report

This is the 23rd annual report of the Family Health Programme. The main purpose of the report is to provide feedback to partners of Family Health Programme on successes and failures of their hard work during the recent past. The report includes information on background, and selected input, process, outcome and impact indicators relevant to the Family Health Programme. It also provides the platform for various outside agencies such as other Ministries, INGOs, Professional bodies and researchers to learn the contemporary progress of Family Health Programme.

This report presents data by 28 health areas. These include 26 RDHS areas, National Institute of Health Science (NIHS) area and Colombo Municipal Council (CMC) area. Latter two are separately mentioned due to the unique nature of organization of services in these areas.

All maps show boundaries of 26 RDHS area. Therefore the indicators of, NIHS and CMC areas are separately shown in circles embedded in relevant districts in which they are located, whenever the performance of those areas are different to respective districts.

3 Data Sources and Indicators

Annual report summarized and analyzed the data from several sources. They include:

1. H 509: Quarterly MCH return
2. H1200: Family Planning Monthly Return
3. H 797: Quarterly School Health Return
4. Maternal Mortality Surveillance system
5. Annual Data Sheet of MOHs
6. Annual Nutrition Month Return
7. Monthly return from Dental Therapists
8. Registrar General's Department and other relevant sources

3.1 H 509: Quarterly MCH Return

H 509 provides a comprehensive set of data on the performance of Family Health Programme. It is a quarterly return compiled by the MOH area. The data items cover wider scopes. These include: information on target population, performances of maternal care, child care, well woman clinic, and family planning services provided both at field and clinic settings by the MOH staff. Several registers, records and returns used in field and clinic settings are used to compile H 509. Each MOH is supposed to compile H 509 in 3 copies and send one to FHB, another one to RDHS Office before the 25th of the month following each quarter (Figure 4). The 3rd copy is retained at MOH Office.

3.2 H 1200: Family Planning Monthly Return

H 1200 serves dual purpose of record and return of family planning new acceptors. Each family planning service provision points has to maintain a H 1200 for new acceptors of all modern methods excepts for Condoms (H 1200 A). Each service delivery point is sending H 1200 A to the respective MOH office. Every MOH is required to send the H 1200B, consolidated monthly return compiled using all H 1200 A to FHB before the 20th of each month (Figure 4).

3.3 H 797: Quarterly School Health Return

H 797 summarizes the size of the target school population and the performance of school health programme. It covers the school medical inspections, immunizations and follows up of children identified to have problems. This quarterly return from each MOH office is expected to reach FHB before the 25th of the month following each quarter (Figure 4).

3.4 Maternal Mortality Surveillance system

Each maternal death is expected to be reported within 24 hours to the RDHS and FHB by the MOH of the field and or the Institutional Head, where the death occurred. There is standard procedure to be followed and the information is recorded in a standard format (H 677, H 677a). Each year District and National Maternal Mortality Reviews are conducted and information is compiled by the FHB (Figure 5).

Figure 4: Sources and pathways of data used in the annual report

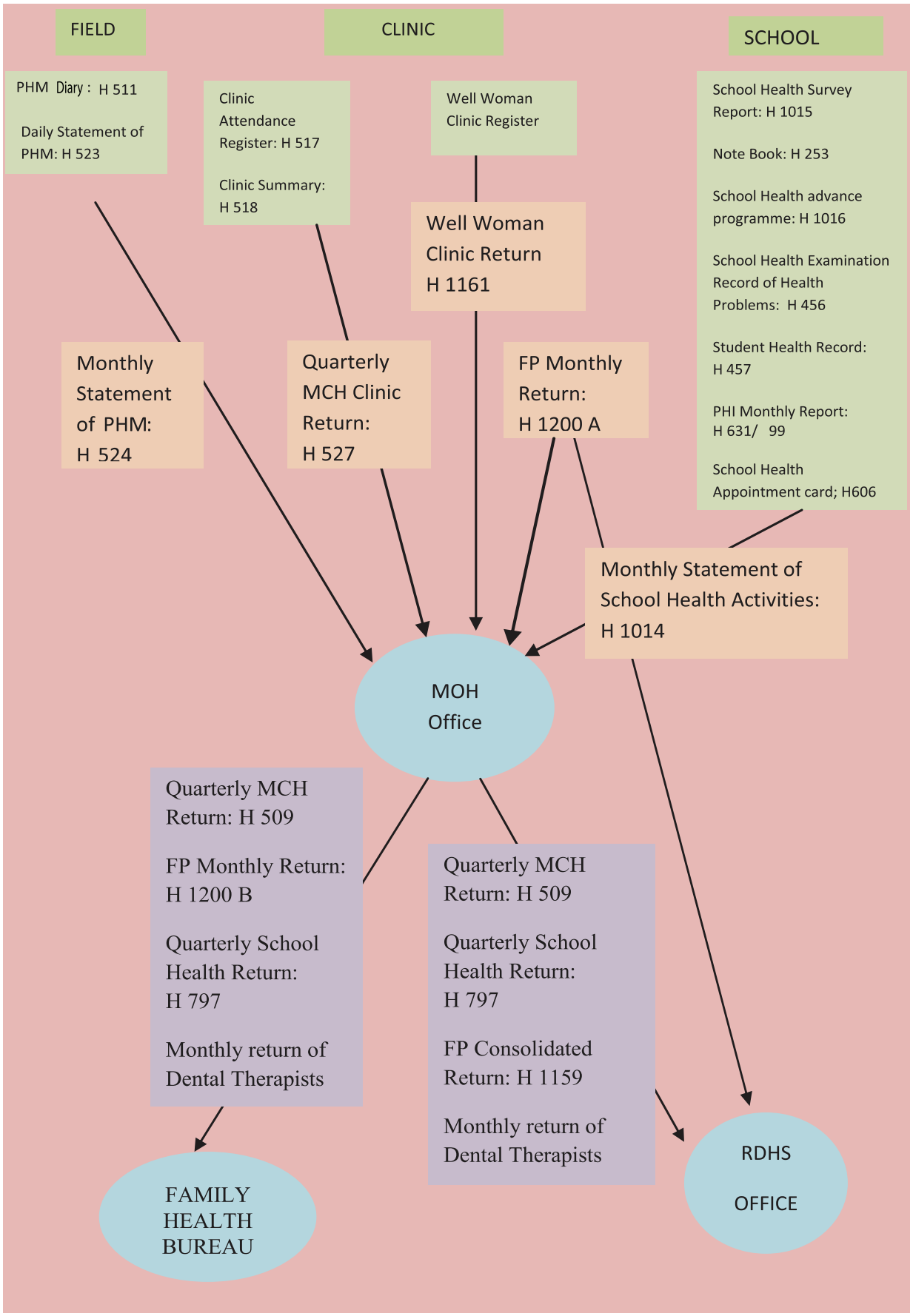
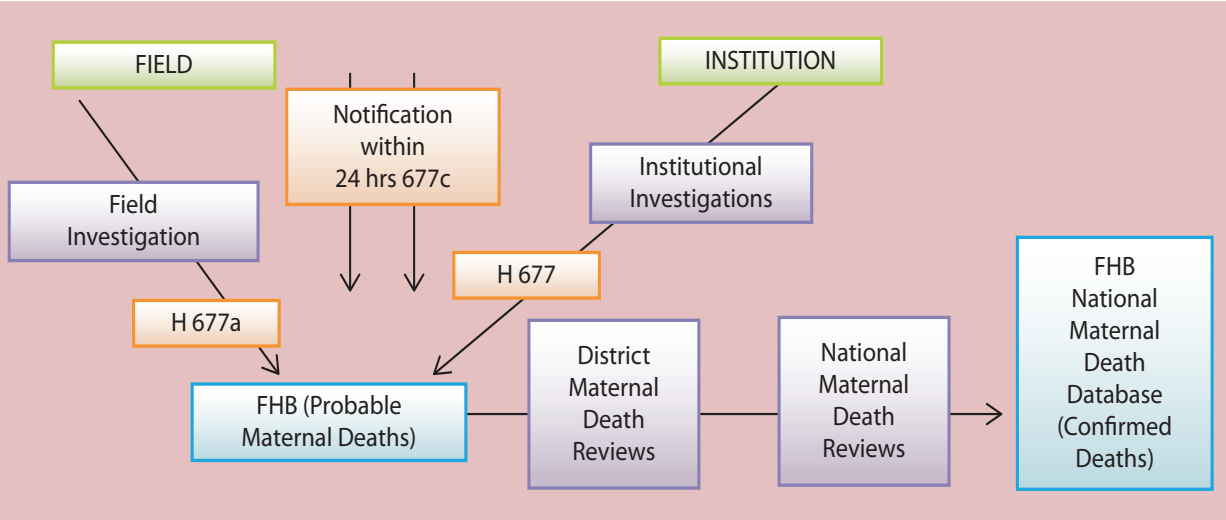


Figure 5: Information flow of National Maternal Mortality Surveillance System



3.5 Annual Data Sheet of MOHs

This is a data sheet used to collect the basic information on MOH such as staff positions, facilities, population data etc.

3.6 Annual Nutrition Month return

Data on nutrition month activities are to be reported annually once the designated month activities are over to family Health Bureau from each RDHS area. Nutritional status of children under five and Grade 10 students are to be provided by PHM and PHIs respectively. Data compiled by MOH area is being sent.

3.7 Monthly return from Dental Therapists

School Dental Therapists (SDTs) are sending returns on their monthly performances and summary of this is available for the district.

3.8 Registrar General's Department and other relevant sources

The national population estimates, and fertility and mortality rates published by the Registrar General are used in some of the denominators of indicators used in the annual report.

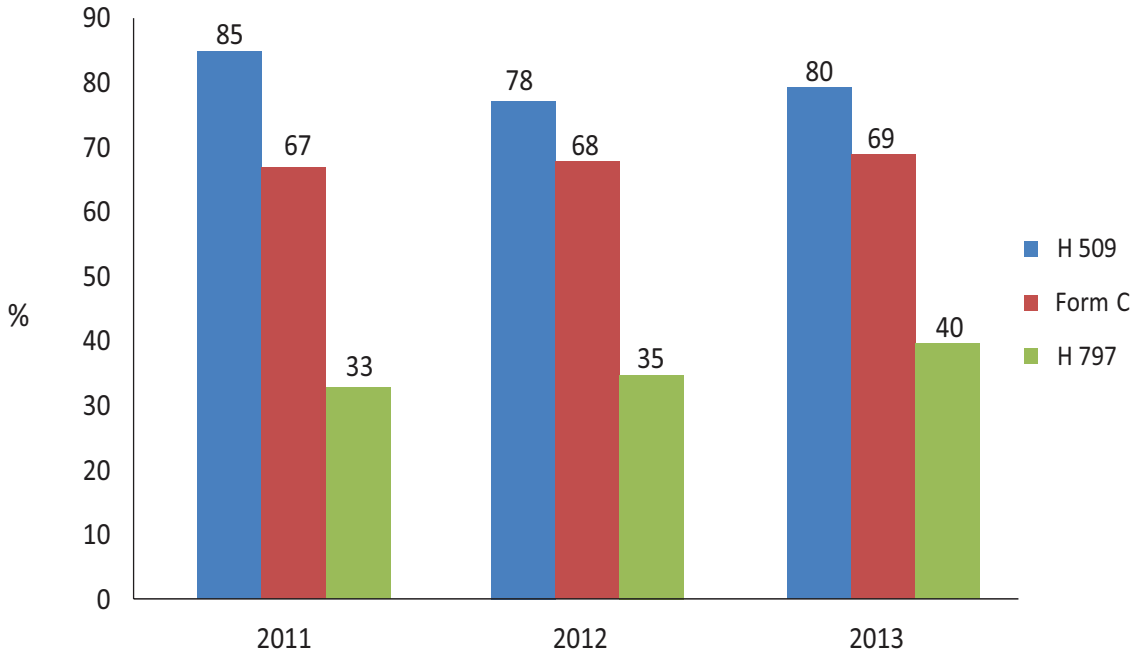
This report is based on data available for all 4 quarters of the year through quarterly and monthly returns sent by public health staff of the country. However 4th quarter return for year 2013 were not available for Gampaha district, Moratuwa, Kaduwela, Hanwella MOH areas of Colombo district & Imaduwa MOH area of the Galle district. Therefore only available returns were considered in analysis and indicator based on estimated figures considered 3/4 of estimated values.

4 Data Quality

The quarterly returns are supposed to be received at FHB before the 25th of the month following each quarter. Monthly returns should be available before the 20th of following month. However the records show that the timeliness of receiving quarterly returns for year 2013 was not optimal (Figure 6).

Timeliness of H 509 is much better than that of H 797. Each return is scrutinized for completeness and accuracy of data at FHB. Discrepancies are verified through the phone and in some cases the defaulted returns are sent back to the respective MOHs to revise and resubmit. Then these formats are entered into epi data based data entry format. The analysis is carried out using SPSS software. Data entry validation is done by re-entering 5% of the returns.

Figure 6: Timeliness of returns H 509, Form C and H 797 - 2011 to 2013



5 Target Population of Family Health Programme

There are two mechanisms to identify the target populations by the grass root level workers. These include registration of eligible families by PHMs and identifying the schools under their care and the number of children in these schools who should be examined during the year by PHIs. PHMs are supposed to maintain an Eligible Family Register (H-526) for this purpose. The School Health Survey report (H-1015) compiled by PHIs contains data on school population.

Eligible Family is defined as a family either legally married or living together where the woman is between 15 to 49 years and / or having a child under 5 years. A family with a pregnant or cohabiting woman irrespective of marital status and age and single women (widow, divorced, separated) are also considered under eligible family. It is estimated that the number pertaining to 16 % of the population approximates the number of eligible families.

All the children in schools with enrolment less than 200 and those in grades 1,4,7 and 10 in schools having enrolments over 200 are supposed to be subjected to medical examinations by MOH staff.

Table 2 presents the sizes of various types of target groups coming under the Family Health Programme in the year 2013. The total population reported by PHMs was compared with the estimated population.

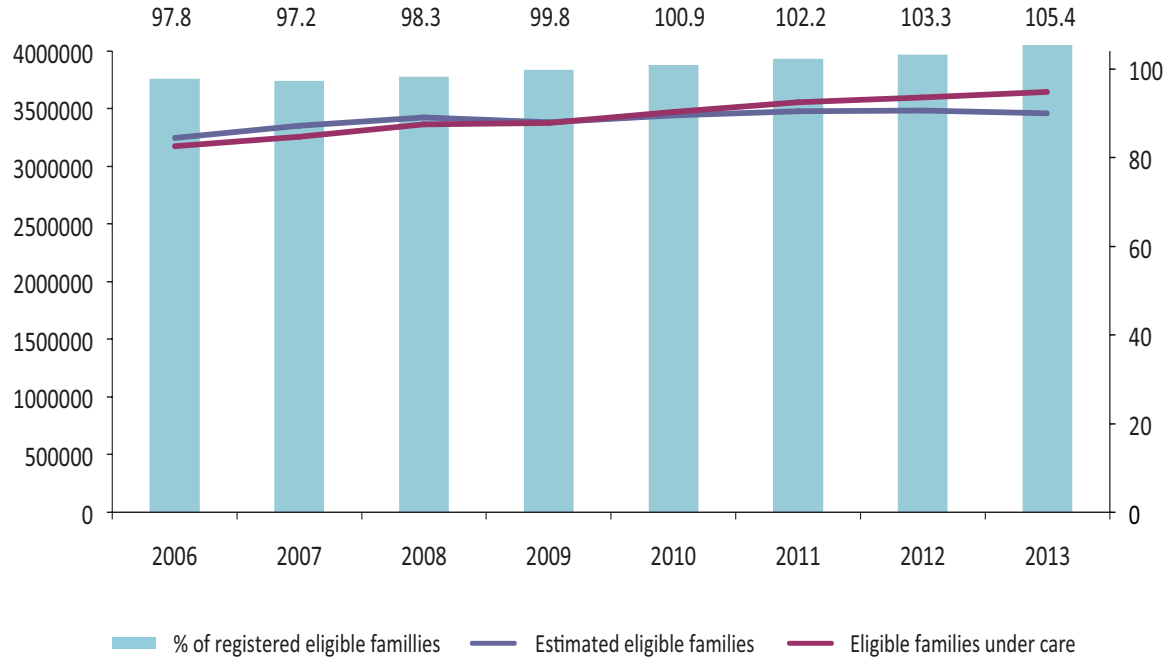
The total population reported by PHMs exceeded the estimated population given by Registrar General's Department in 2013 by 5.6%. Figure 7 presents the trends in the percentage registration of eligible families

Table 2: Sizes of different target populations of Family Health programme 2013

Indicator	Estimated	Reported
Midyear population	20,483,000	21,635,237
Eligible families	3,277,280	3,647,093
Pregnant mothers	403,310	383,383
Births	366,646	321,880
Infants under care	366,646	346,946
1-2 years under care	366,646	353,754
3-5 years under care	1,099,937	1,020,364
Number of schools < 200	-	4702
Number of Schools > 200	-	4412
Total school children under care at the beginning of year	-	3,872,969

* Estimates are based on the mid year population of 2013 given by the Registrar General's Department

Figure 7: Comparison of numbers of estimated and reported eligible families and the reported eligible families as a percentage of estimated families



in comparison to estimated eligible families in the country. The estimations were based on population reported by PHMs and proportion of eligible families was taken as the 16% of the total population for that year. Estimated mid year population reported by Registrar General's Department was used for calculations for estimated target groups in that year. The mid year population for 2013 was reported as 20,483,000. Hence, 3,461,638 eligible families could be estimated to present during 2013. However, PHMs have reported a total of 3,647,093 eligible families (105.4%). Since it has exceeded 100 %, it reflects either lack of efficiency in updating the eligible family register or inaccuracy in the estimate we used for calculations as the proportion of eligible families in the population (16%) or both. These need to be re assessed with the availability of detailed information on the demographic characteristics of the population from the census.

Figure 7 shows that almost all eligible families were registered by the PHMs since 2006 to 2013.

A wide variation, 79.6 % - 120 %, was seen in the percentage of eligible mothers reported across districts. The districts from Northern Province reported the lowest percentages. (Annexure 1)

6 Preconception care

Interventions in improving maternal and child health should be started from the pre-conception stage. A new package of interventions for "pre-conception care" has been piloted and introduced to the Family Health Programme in 2012 to promote health of women and their partners to enter pregnancy in optimal health, and to maintain it throughout the life course. The main strategy used to fulfil this is by ensuring women of childbearing age and their partners receiving a comprehensive package of pre-conception care. The care includes creating awareness, health promotion, screening and appropriate mediations to reduce risk factors that might affect future pregnancies of the reproductive aged women.

This package is introduced to extend the maternal health continuum prior to pregnancy to reduce indices such as maternal mortality, infant mortality and low birth weight into lower indices. The package focuses on the newly married couples as the name implies.

The new package would

- Improve knowledge and attitudes of men and women especially in relation to pre-conception health which would lead to behavioural changes.
- Assure that all newly wedded couples receive pre-conception care services. (health promotion, evidence based risk screening, interventions etc.)
- Improve the health of women before pregnancy by giving pre - conception care.
- Detect the health problems of the couple to prevent, minimize, treat or correct the health problems before they attain parenthood.

The package was introduced to 18 MOH areas at the end of 2013.

7 Maternal and Newborn Care

Maternal and newborn care component of the Family Health Programme includes interventions that focus the antenatal, intra natal and postnatal aspects of pregnancy.

This section describes some important characteristics of pregnant women registered for care either at field or clinic during 2013. It also presents the current and past trends of selected process and outcome indicators related to maternal care.

7.1 Antenatal Care

According to the Family Health Programme framework, antenatal care begins with the registration of pregnant woman by PHM either at field or clinic. After the registration, basic antenatal care is provided through clinic visits and home visits.

It is encouraged that all pregnancies are identified as soon as possible, and a standard package of interventions is offered to them. Standard package of interventions for pregnant women included preliminary clinical assessment and screening for risks factors, screening for Pre eclampsia, eclampsia and Syphilis, screening for Anaemia and management, Tetanus Toxoid immunization, provision of antihelminthic, prevention and management of STIs and RTIs, prevention of mother to child transmission of HIV, intermittent presumptive treatment for malaria where relevant), monitoring of maternal and foetal wellbeing in subsequent visits, assessment of fundal height, Micronutrient supplementation, (iron, folic acid, calcium), food supplementation ("Triposha"), referral of high risk pregnancies for specialist care, providing information and counseling for pregnancy related issues (breast feeding and family planning, birth and emergency preparedness).

Revision for the standard package of maternal care was done in year 2012 with the objective of improving the quality of care and reducing the duplication of the services within the public health system. With this revision clear guidelines are issued on the service provision for high risk and low risk pregnancies. The recommended number of clinic visits for low risk pregnancy is limited to 9 visits at any government health facility while three home visits are recommended for them. Introduction of three antenatal classes in each trimester for couples enhances their exposure to common health issues specific for that trimester and make them ready for the childbirth, postpartum, newborn care and emergencies. Number of postpartum home visits remained as four while a compulsory postnatal clinic visit was introduced by one month after delivery where the screening for Postpartum Depression using Edinburg Postnatal Depression Screening (EPDS) to be done. Implementation status of these has to be assessed by routine information in future.

The following section shows some of the indicators that reflect the trends of the status of antenatal care.

7.1.1 Registration of pregnant mothers

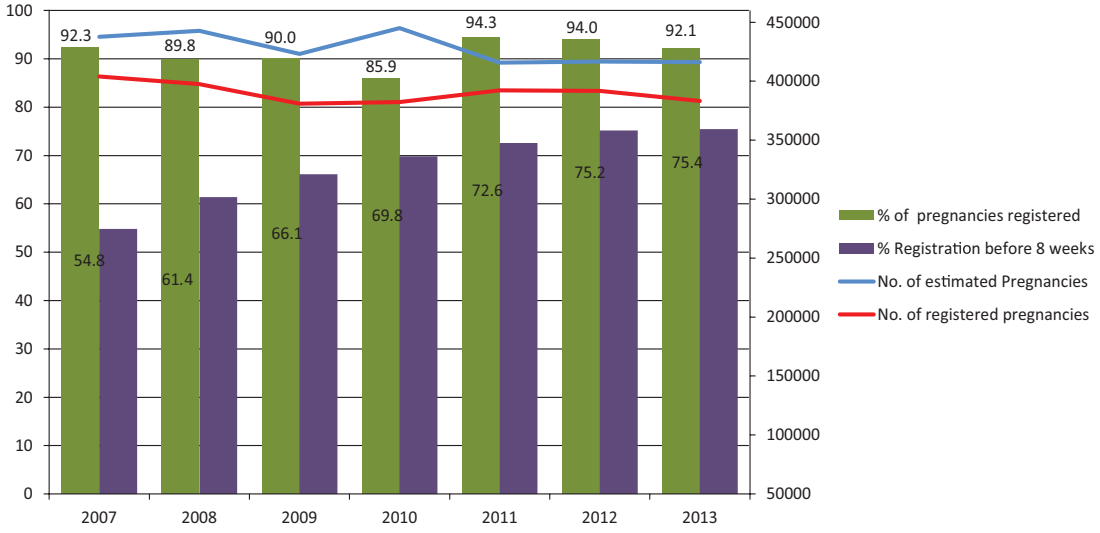
The RH-MIS makes provisions to record the number of pregnant mothers registered by PHMs along with the time of registration

in relation to period of gestation (POG). In addition the number of teenage pregnancies, of first pregnancies, of pregnancies at fifth parity and above and whether the registered mother is protected from Rubella vaccine are also noted. PHMs have registered 383,383 pregnant mothers during 2013 either at antenatal clinics or during field visits. This accounted for 92.1% of expected pregnancies of 416,340 in that year. This indicates that a very high percentage of pregnant women in Sri Lanka are in contact with the maternal care services offered by the Family Health Programme. There are notable differences in the percentages of pregnancies registered in different districts. Except Killinochchi (66%), Mannar (72%), Nuwara Eliya (78%) and Ampara (76%) all other RDHS areas registered more than 80% of the expected pregnant mothers during the year. Figure 8 and Table 3 show the trends in percentage of pregnant mothers out of expected pregnancies who came into contact with the maternal care programme over last 7 years.

The percentage registration over last 7 years indicates that PHMs have registered high proportions of estimated number of pregnancies. This high coverage seen in the pregnant mothers' registration not only shows the efficiency of the primary health care staff around the country, but also the positive health seeking behaviour among Sri Lankan mothers. It could also be a reflection of sound health care network of the country which facilitates the service provider recipient contacts. Further it indicates the tremendous potential that it creates to ensure the life cycle approach where the children of these mothers could also be brought in close contact with the health system through these initial linkages. This will ensure that they get exposed to similar kind of interventions at relevant points in life, promoting and protecting their health.

Family Health Programme promotes early and regular antenatal care. Registration before 8 weeks is considered as early registration and the percentage of pregnancies that are registered early has shown 20% increase over past 7 years (Figure 8 and Table 3). The percentage of mothers registered early ranged from 44.1% (Colombo M.C.) to 85.1% (Hambantota, and Kurunegala). (Annexure 2).

Figure 8: Trends in estimated and registered pregnancies 2007-2013



7.1.2 Field Clinic care

Following registration, a pregnant mother should receive clinic antenatal care as early as possible. 95% of mothers had visited field antenatal clinics which are conducted at field clinics or non-specialists institutions at least once during 2013. The information on clinic visits to specialist units and private sector is not reported in RH-MIS. This high coverage has been present throughout the period since 2007. On average, a mother made 6.6 field clinic visits during her pregnancy (Table 4). However, the total number of antenatal clinic visits by a mother may be higher than this provided we consider the visits at other service providers mentioned above. The district variations of these indicators are given in the Annexure 3.

Table 3: Pregnant mothers' registration with PHMs 2007-2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% of pregnant mothers registered out of estimated pregnancies	92.3	89.8	90	85.9	94.3	94	92.1
% of pregnant mothers registered before 8 weeks out of registered pregnancies	54.8	61.4	66	69.8	72.6	75.2	75.4
% of pregnant mothers registered between 8-12 weeks out of registered pregnancies	34.3	28.5	25	22.6	20.3	18.3	17.7

7.1.3 Antenatal screening

In addition to clinical screening conducted by a Medical Officer of Health, every mother is screened for; prepregnancy nutritional status (Body Mass Index-BMI), maternal anaemia (Serum Hb), Sexually Transmitted Infection (Syphilis antibodies-VDRL) and blood grouping and Rh. Several indicators are available for assessing the efficacy of antenatal screening for BMI, Hb, VDRL and blood grouping and Rh which are gathered from different sources. The data for BMI and Hb are available for mothers attending clinics. The data for VDRL and blood grouping are available for both reported deliveries and mothers attending clinics.

Table 5 presents the trends in the coverage of these screening activities since 2007. As reported by PHMs at the first postpartum visit, percentage of mothers, who was tested for VDRL at the time of delivery, amounted to 99.7% in 2013. However, clinic records indicate only 59.2% of antenatal mothers attending field clinics were tested for VDRL at the clinic. There had been 1840 field clinics having facilities to draw blood for VDRL testing during the year 2013. Out of the 363,528

Table 4: Percentage of pregnant mothers visiting field antenatal clinic at least our and averge number of clinic visits since 2007

Indicator	2007	2008	2009	2010	2011	2012	2013
% of pregnant mothers making at least one field clinic visit out of registered pregnancies	97.1	96.1	95.6	94.7	95.9	95.2	94.8
Average number of clinic visits per mother	6.8	7	7.1	7	7.2	6.8	6.6

Table 5: Percentage of pregnant mothers who got different types of screening done at field Antenatal Clinic

Indicator	2007	2008	2009	2010	2011	2012	2013
% of pregnant mothers tested for VDRL at the time of delivery out of reported deliveries	92	93.9	97.8	96	97	99.3	99.7
% of mothers whose blood is tested for grouping and Rh at the time of delivery out of reported deliveries	99	99.5	99.9	99.8	99.6	100	99.9
% of mothers whose BMI is assessed before 12 weeks out of total clinic attendance	85	85.4	85.5	85.6	85.9	82.7	83.1
% of mothers screened for Hb at the field clinic out of mothers attending antenatal clinics	72.2	72.4	62.7	57.8	56.1	52.3	50.6
No. of clinic with VDRL testing facilities	1290	1723	1495	1545	1375	1829	1840
% of mothers tested for VDRL at field clinic out of mothers attending antenatal clinics	41.2	48	51	51.3	51.2	53.8	59.2
Number of mothers who was VDRL positive for 10,000 mothers attending antenatal clinics	3.5	5.5	4.3	6	6.7	3.1	4.8
% of mothers whose blood Gp and Rh tested at field antenatal clinic	39.3	28.4	26.1	27.3	25.9	24.8	27.3

mothers attending antenatal clinics, in 2013 175 (0.05%) were reported to be reactive for VDRL test.

A similar pattern is seen in testing the blood for grouping and Rh antibodies. Almost all mothers delivering knew their blood group and Rh status while 27.3% of clinic attending mothers get the testing done at field clinics. It is known that mothers who had written evidence on their blood group according to the testing done at previous pregnancies may not tend to get it repeated.

The high coverage of VDRL and blood grouping and Rh testing as reported during first postpartum visit indicate that a considerable percentage of mothers may obtain these services directly from government hospital clinics or from private sector.

Almost all mothers under care of the Family Health Programme in all districts were tested for blood grouping and Rh at the time of delivery. VDRL coverage among delivering mothers reported to be relatively low in RDHS areas of Batticaloa (94.6%), Puttlam (98.2%) and Kilinochchi (98.2%) (Annexure 2).

Approximately 50.6% of the mothers attending clinic had their Hb level tested. However it should be noted that this may be an over estimation as according to guidelines each mother is supposed to be tested for Hb twice; both at booking visit and between 26 - 28 weeks of pregnancy.

It was also notable that BMI of 17 % of mothers attending clinics were not measured. Annexure 3 presents the district differential of the above parameters.

7.1.4 Domiciliary Care

The clinic care given to antenatal mothers is expected to be compliment by domiciliary

care offered by PHMs during home visits. During field contacts PHMs should assess the antenatal mothers' health status by risk screening and examination, conducting simple investigations such as urine sugar / albumin at first visit, educating pregnant mothers and family members, and making necessary referrals. Table 6 presents the percentage of pregnant mothers, who were visited at least once and average number of field visits paid to them by PHMs. Home visits for registered pregnant mothers at least once by PHMs had been gradually reducing for last 6 years. According to rented pregnant a mother is expected to receive 3 of more lone visits by PHM. The district variations of these indicators are given in the Annexure 2.

Table 6: Percentage of pregnant mothers who were visited at least once and average number of home visits paid to them by PHM 2007-2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% of registered pregnant mothers visited at least once at home by PHM	97.1	96.1	94.4	92.9	91.7	90.2	91.3
Average number of PHM field visits per mother	4.8	5.1	5.0	4.9	5.2	5.0	4.5

7.1.5 Characteristics of pregnant mothers

7.1.5.1 Protection from Rubella and Tetanus

In Sri Lanka, comprehensive efforts have been made to ensure all reproductive age women are protected for Rubella by immunizing them with rubella vaccine. The initial strategy was to immunize all women from 15 - 44 years of age with Rubella vaccine. Therefore since 1995 to 2001, girls in 11 - 16 years were immunized at schools while other women in child bearing ages were immunized at field clinics. Then in 2001 the policy of Rubella immunization has been expanded to control Rubella infection in the community in addition to controlling Congenital Rubella Syndrome. Hence, since 2001, two doses of MR vaccine were administered to children at the ages 3 and 13 years. In 2010 MR vaccines was replaced by MMR vaccine and at present 2 doses of MMR vaccine are given to all children at 1 and 3 years of age.

Neonatal tetanus has been eliminated from the country. This success could be attributable to the high coverage of tetanus vaccination among antenatal mothers along with safe

Table 7: Percentage of antenatal mothers who were protected with Rubella vaccination and Tetanus toxoid 2007-2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% of pregnant mothers protected for Rubella out of registered pregnancies	100	93.3	94.8	95.4	95.9	96.8	97.0
% of pregnant mothers protected for Tetanus out of total reported deliveries	99.6	99.8	100	99.9	99.6	99.9	99.9

delivery and newborn care practices. Table 7 presents the percentages of mothers who have been protected for Tetanus and Rubella.

Rubella coverage has been very high over the time and in 2013, 97% mothers were protected for Rubella by the time they get pregnant. Almost all mothers were protected with Tetanus vaccine at the time of delivery.

Annexure 2 shows the district variations in Rubella coverage in 2013 and the coverage varied from 77.7% in Mannar to 99.4% in Anuradhapura district. The areas with coverage less than national average were, Colombo Municipal Council (87.7%), Badulla (96.6%), all districts in Northern and Eastern provinces except Jaffna (98.0%) and Ampara (99.0%).

7.1.5.2 Teenage pregnancies

Around 5.3% of total pregnancies registered by PHMs belong to mothers less than 20 years. There has been a definition change on the teenage pregnancy used in the RH-MIS in the year 2007, when it was changed from those under 19 years to those under 20 years. The following graph shows the trends in teenage pregnancies over the last 7 years. It shows that during last 7 years the percentage of teenage pregnancies remained more or less similar and stayed between 6 - 8 % where 2013 reported the lowest proportion of teenage pregnancy among pregnancies registered during that particular year.

The percentages of teenage pregnancies were higher compared to national average in almost all Northern and Eastern RDHS areas, except Jaffna (3.0%) and Mannar (4.5%) where RDHS Jaffna reported the lowest teenage pregnancy percentage in the country. RDHS areas Trincomalee (9.8%), Batticaloa (9.4%), Puttlam (8.4%), Mullaitivu (7.6%), Killinochchi (7.4%) and Vavuniya (7.3%) recorded higher teenage pregnancy rates. Figure 10 shows the percentage of teenage pregnancies by RDHS areas for year 2013.

7.1.5.3 Primies and Multipara

Primies and multipara (P5 and above) are considered to have relatively higher risk pregnancies than others. Figure 11 shows that in 2013, about 33.3 % of total pregnancies registered in the year were primies and 63.9%

Figure 9: Trends in percentages of teenage pregnancies 2007- 2013

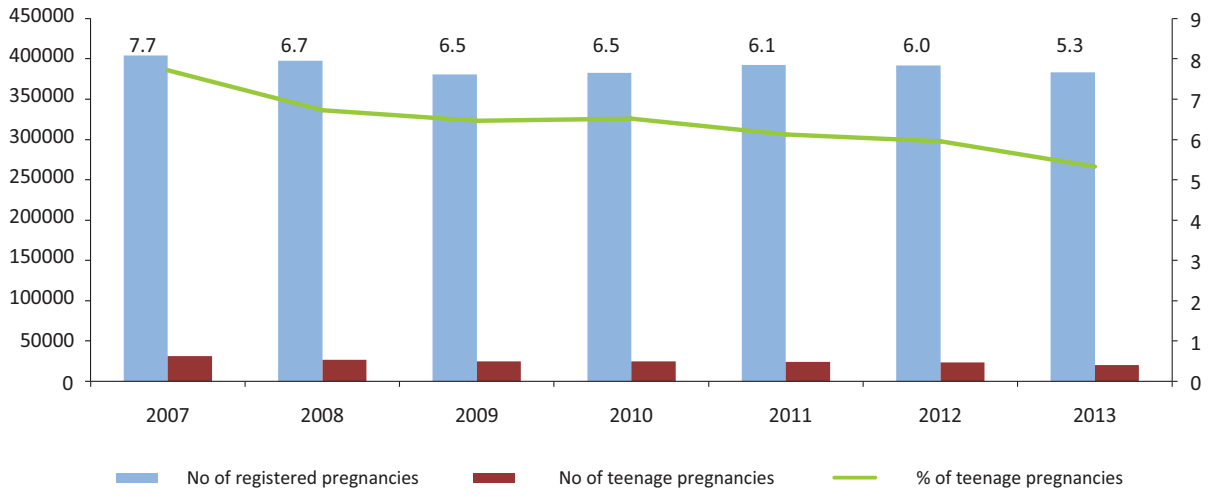
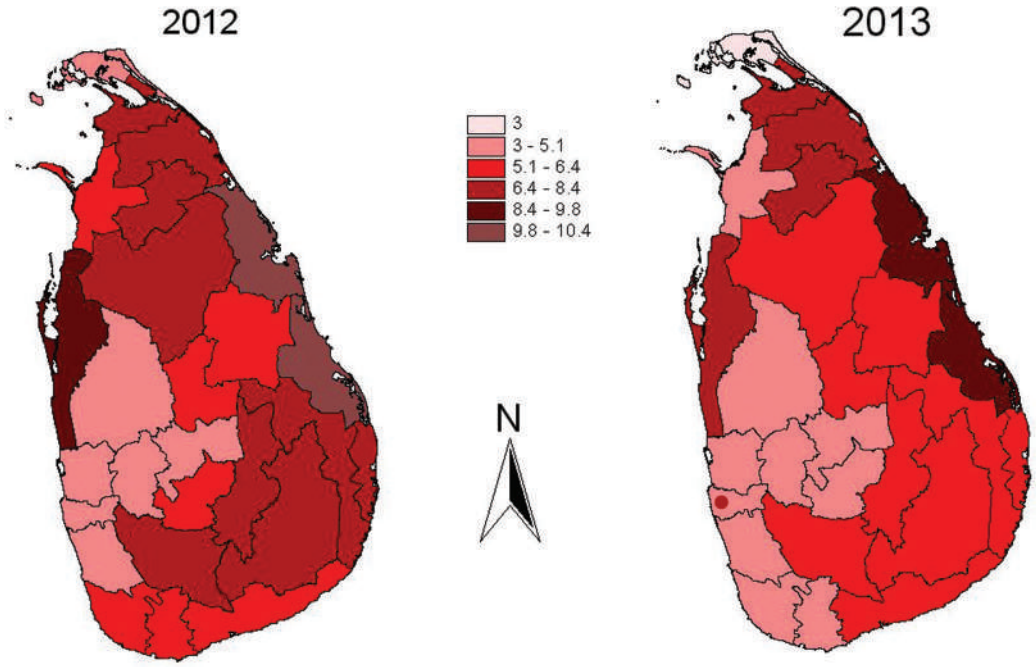


Figure 10: Percentage of teenage pregnancies by district in 2013



were in the 2nd to 4th pregnancy. Only 2.8% of pregnancies were 5th or higher order pregnancies. In addition to its importance as an accumulation of high risk set of pregnancies, presence of multi-para pregnancies indicates the efficiency of the family planning services.

Figure 11: Distribution of registered pregnancies by parity in 2013

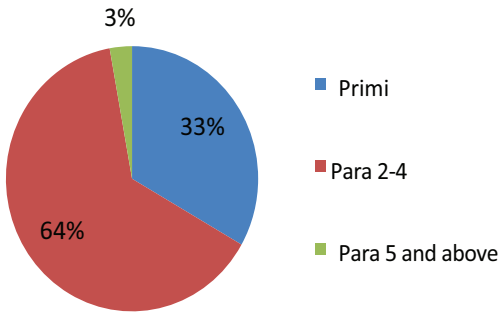


Figure 12: Percentage of multi-para (≥P5) and teenage pregnancies by percentage of current users of contraceptives 2013

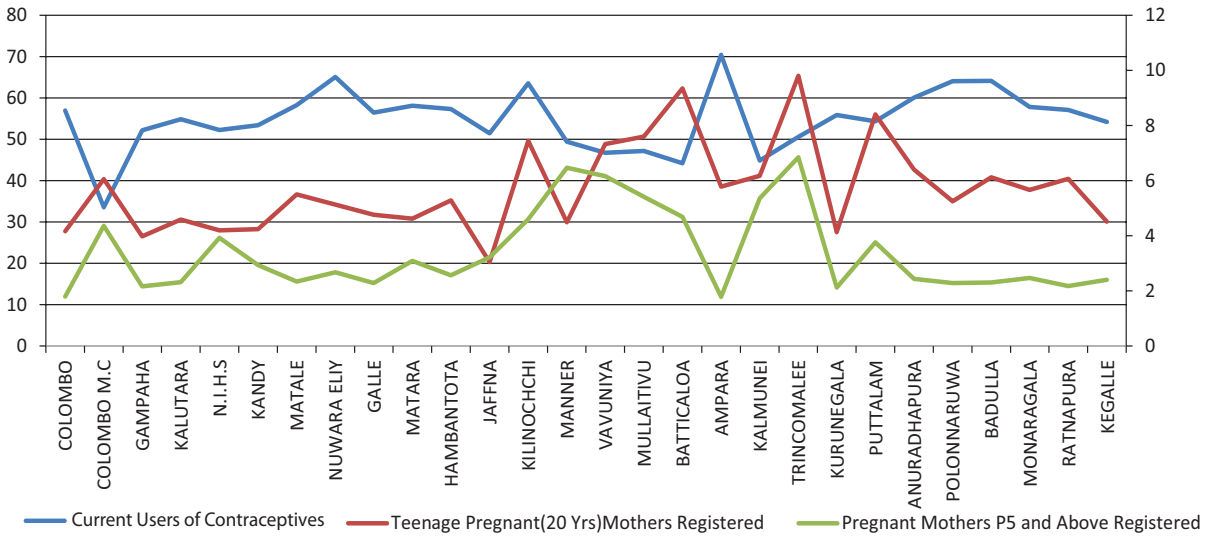
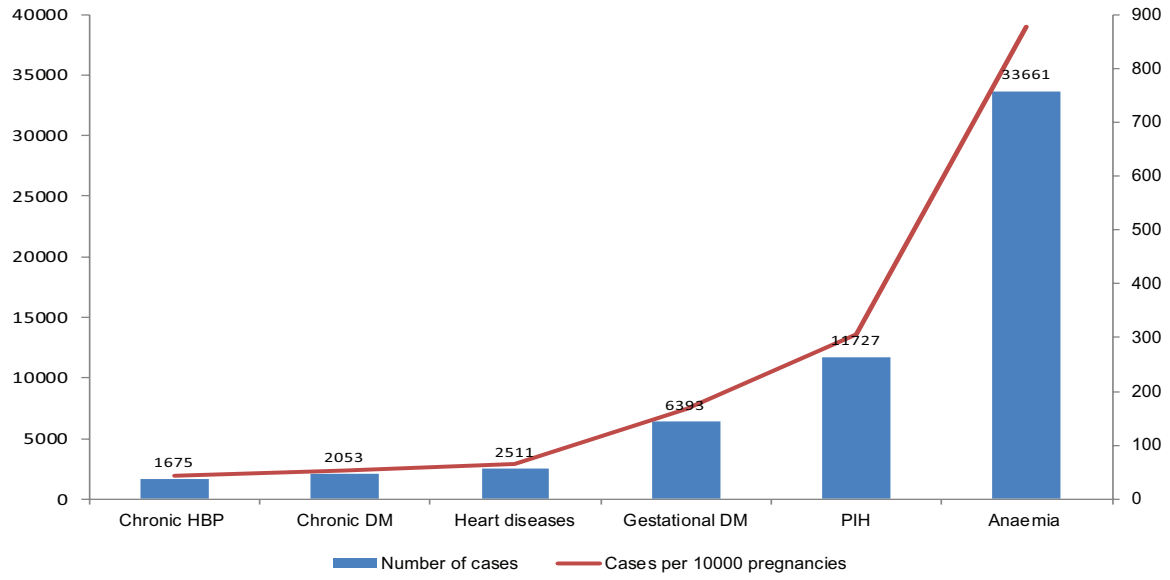


Figure 12 compares the percentage of multipara pregnancies, (≥P5) percentage of teenage pregnancies to the contraceptive prevalence rate of districts. A clear inverse relationship is seen between the percentages of multipara and teenage pregnancies with the percentages of current users of contraceptives in different districts.

Therefore, absolute numbers of cases may be more than that was reported. Around 21% of pregnancies were associated with at least one of these conditions. The most commonly reported conditions include: Anaemia, Pregnancy Induced Hypertension (PIH) and Gestational Diabetes.

Figure 13: Number of maternal morbidities and cases per 10,000 pregnancies 2013



7.1.5.4 Antenatal morbidities

The PHMs are expected to report selected types of morbidities and complications during antenatal period. These include: Hypertension (Chronic and Pregnancy Induced), Diabetes (Chronic and Gestational), Heart Diseases, Anaemia, Asthma, Malaria, Sexually Transmitted Infections, Liver diseases, Psychiatric illness, Epilepsy and any other significant illnesses. These reportings are made during the first postpartum visit. Figure 13 shows the number of different types of antenatal morbidities that occurred during antenatal period and corresponding cases per 10,000 pregnancies.

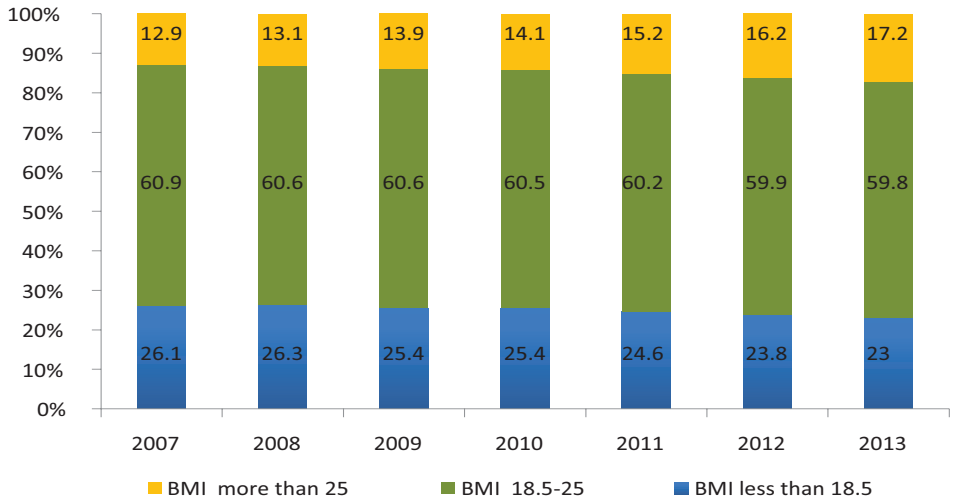
This indicator is a relatively new addition and it is still taking the momentum in reporting.

7.1.5.5 Maternal Nutritional status

7.1.5.5a BMI

Under nutrition is considered as one of the most resistant public health problems in Sri Lanka. According to RH-MIS, around 13.3% newborns in 2013 weighed less than 2500 grams and hence became Low Birth Weight (LBW) babies. Maternal under nutrition is considered as one of the main reasons behind this high rate of LBW. Pre pregnant BMI is considered as an important associate of the birth weight of the newborn which in turn affect the child's nutrition. BMI measured before 12 weeks of gestation is approximated for pre pregnant BMI. In order to assess that, pregnant mothers should be identified before

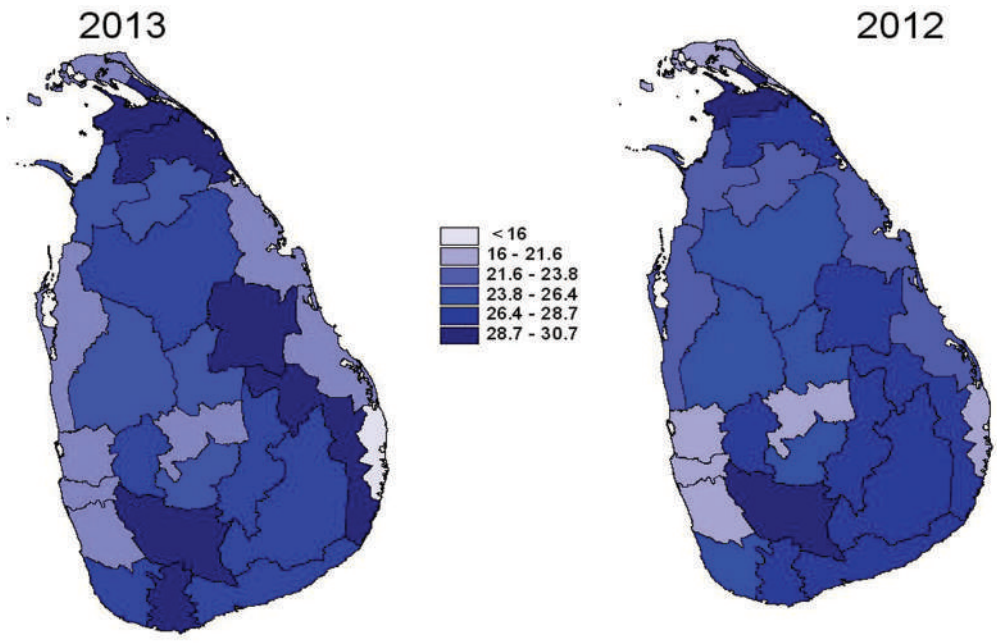
Figure 14: Percentage distribution of pregnant mothers according to their BMI status at booking visit (before 12 weeks) since 2007



12 weeks of pregnancy. Hence, the percentage of mothers who have been examined for BMI will be dependent on their time of registration. The Figure 14 indicates the BMI status of pregnant mothers whose BMI was assessed before 12 weeks. Approximately 23.0% of pregnant mothers were found to be underweight and this proportion was remained more or less similar over past 7 years.

Geographic variations are often prominent in nutritional indicators where. Kilinochchi (28.7%), Ratnapura (28.2%), Ampara (27.8%), Matara (26.8%), Monaragala (26.4%), Polonnaruwa (26.8%), Mullaitivu (26.4%), and Hambantota (26.4%) RDHS areas reported the highest percentages of pregnant mothers with low BMI for year 2013 (Annexure 3).

Figure 15: Geographical variations in percentage of pregnant women with low BMI at booking visit 2012 and 2013



7.1.5.5b Maternal Anaemia

Anaemia as indicated by the serum Haemoglobin (Hb) level less than 11 g/dl is another important indicator of antenatal health. There are three indicators related to Haemoglobin status.

status reported here has based on different testing methods used in the field for last few years. Of 9.8% anaemic mothers in 2013, 9.4 % were mild or moderately anaemic (Hb 7-11 g /dl) while only 0.4% was severely anaemic (Hb<7g/dl). As described in section 7.1.5.4 this could be an under reporting. As in the case of

Table 8: Percentages of mothers whose Haemoglobin examined at field clinic and who were anaemic 2007-2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% of mothers tested for Hemoglobin out of mothers attending antenatal clinics	72.2	72.4	62.7	57.8	56.1	52.3	50.6
% of pregnant mothers anaemic out of mothers attending antenatal clinics	5.1	6.1	6.4	8.3	9.1	9.3	9.8

Information for two of them is collected at field clinic visits and the other one describes the status as reported as at first postpartum visit. Percentage of mothers who have had their blood tested in field clinics and the percentage of mothers who were anaemic use the number of mothers attending antenatal clinics as the denominator. Sometimes mothers get their Hb status tested from sources other than the field clinic. Low Hb reporting from the test done outside the field clinic centers were also counted in calculating the anaemic status.

Retrospective reporting of the anaemic status as an antenatal morbidity at first postpartum visit is given in the section 7.1.5.4. Table 8 includes the reporting on Hb assessments and prevalence of anaemia over last 7 years among the mothers attending field ANC.

The percentage of mothers who were tested for Hb at field clinics has been reduced while the percentage of mothers with anaemia has increased by 4.7 % during last 7 years. It is not appropriate to comment on the trend since Hb

malnutrition, there is a notable geographical variation in prevalence of anaemia among mothers (Annexure 3).

7.2 Intra-Natal and Newborn Care

Almost all the deliveries around the country occur in institutions. It is the duty of the PHMs to report deliveries occurring to mothers who reside permanently in her area. The reporting is set to be optimized through 2 mechanisms. Almost all mothers are given a Child Health Development Record (CHDR) for their newly born children from the hospitals. CHDR includes instructions which request the mothers to inform area PHMs about her delivery. The PHMs also should maintain active surveillance on the deliveries occurring to mothers who have been under her care using the Pregnant Mother's Register (H 513) and Monthly Expected Mothers Register (H 515).In addition to number of deliveries, the reporting includes place of delivery, mode of delivery and type of personnel who assisted the delivery.

7.2.1 Delivery reporting

Table 9 presents deliveries reported by PHMs in 2013 according to different perspectives.

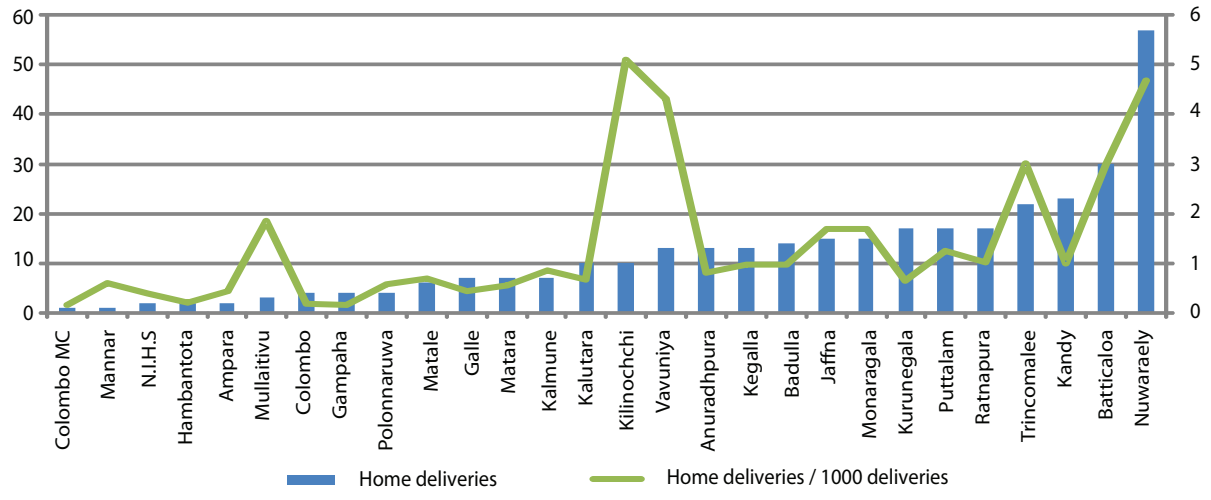
On average around 1/6th of total pregnancies registered were not reported as deliveries. Not counting pregnancies that had ended up as abortion as delivery and gaps in delivery reporting may be possible reasons for this. Delivery reporting for estimated pregnancies varied from 95.5% (NIHS) to 56.4% (Mannar).

Some portion of mothers are exclusively cared by the private sector may be a reason for this

Table 9: Patterns of delivery reporting by PHMs

Indicator	2007	2008	2009	2010	2011	2012	2013
Estimate number of pregnant mothers	437729	442828	423109	445081	415869	416747	425998
Pregnant mothers registered by PHM	404138	397527	380884	382418	392202	391712	383383
No. of deliveries reported by PHM	320287	327326	313958	310240	320021	319592	320943
% of deliveries reported out of total estimated pregnancies	73.2	73.9	74.2	69.7	76.9	76.7	75.3
% of deliveries reported out of total registered pregnancies	79.3	82.3	82.4	81.1	81.6	81.6	83.7
% of institutional deliveries out of total reported deliveries	99.5	99.6	99.7	99.8	99.9	99.9	99.9
% of Home deliveries out of total reported deliveries	0.5	0.4	0.3	0.2	0.15	0.1	0.1
% LSCS out of total reported deliveries	24.3	25.8	27	27.7	28.7	30.5	31.1
% of untrained deliveries out of total reported deliveries	0.3	0.3	0.2	0.1	0.1	0.1	0.1

Figure 16: Number of home deliveries and cases per 1000 deliveries reported by district in 2013



gap other than the two reasons given above. Details are given in the Annexure 4.

Almost all mothers were delivered in health institutions while only very few cases delivered at home (n=336). Only 0.08% of deliveries were conducted by untrained personnel.

Figure 16 shows the number of home deliveries and home delivery rate per 1,000 reported deliveries by RDHS area. The number of home deliveries were notably high in Batticaloa (n=30), Nuwara Eliya (n=57), Kandy (n=23) and Trincomalee (n=22) districts. All the districts in the Northern Province except Mannar and Mullaitivu recorded a very high number of home deliveries compared to the total number of deliveries taken place in the respective district.

7.3 Pregnancy Outcome

PHMs should report live births categorized according to their birth weight (less than or more than or equal to 2500 gm) and plurality (singleton or multiple). In addition number of abortions and still births are also reported.

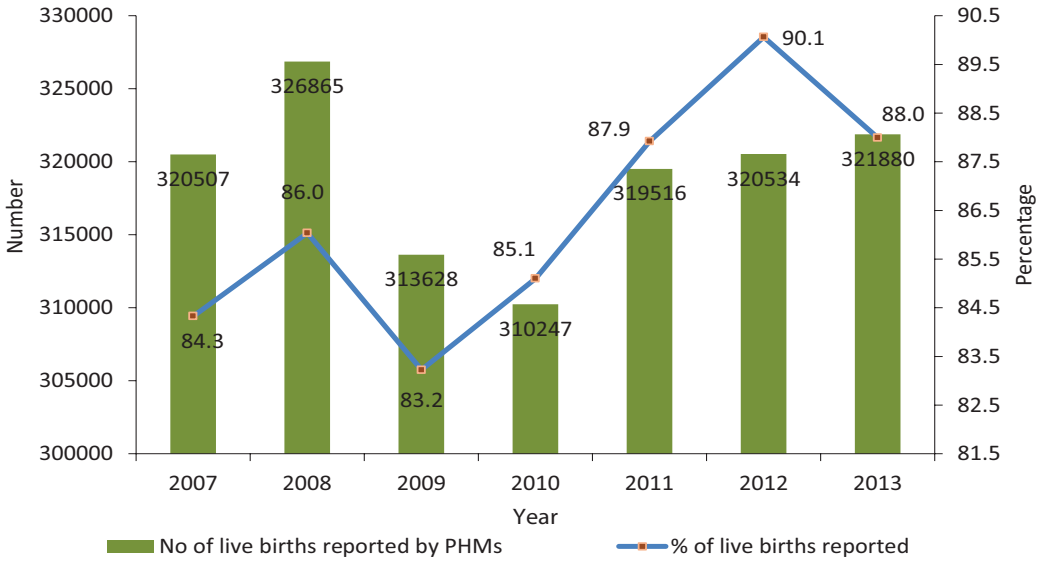
In 2013 PHMs around the country have reported 321,890 live births (either singleton/ multiple). This exchnled the live birth occurred during 4th quater of 2012 in areas where returns have not been sent. In addition 2,081 stillbirths and 29,856 abortions were also reported. Figure 17 reflects the live births reported by PHMs as a proportion of the live births reported through the vital registration system.

It is observed that 12% of the live births occurred in the country is not captured by the field PHMs. This may be due to some portion of pregnant mothers not receiving health services through public health system. Under reporting of the birth by PHMs may also account for this to certain extent.

7.4 Postpartum and Newborn Care

Family Health Programme makes provision for PHMs to pay at least 4 postpartum visits to a mother who had an institutional delivery. Of these visits, are visit each has to be made during first 5 and 6 - 10 days following delivery and the other 2 during 14 to 28 days and

Figure 17: Live births reported by PHMs as a proportion of the live births reported through vital registration system 2007 -2013



around 42 days respectively following the delivery. During these visits PHMs examine mothers and babies for any postpartum and newborn problems. In addition they should record antenatal and postpartum morbidities, support breast-feeding the newborn, counsel for family planning, advice on other health matters, administer vitamin A to mothers in case she missed it at the hospital and register the newborn for future care.

7.4.1 Postpartum visits

Postpartum visits made by PHMs during postpartum period are reported though RH-MIS. The Table 10 examines the efficiency of these activities.

During 2013 PHMs around the country had visited 92.2% of postpartum mothers who were identified and reported by them at least once during the first 10 postpartum days. On average 2 postnatal visits were made within the first ten days. However, it should be noted that percentage of deliveries reported out of registered pregnancies for 2013 was only 83.7% (Table 9).

Figure 18 indicates that a considerable percentage of mothers may not receive their

Table 10: Pattern of postpartum visits provided for mothers by PHMs 2007-2013

Indicator	2007	2008	2009	2010	2011	2012	2013
At least 1 visit during 1st 10 days out of estimated births	77.9	79.4	75.9	75	77.4	77.3	78.2
At least 1 visit during 1st 10 days out of reported deliveries	88.8	90.6	89.2	90.8	91.4	91.6	92.2
Average number of visits during 1st 10 days	1.8	1.8	1.8	1.8	1.8	1.7	1.7
At least 1 visit during 11th to 28th day out of reported deliveries	20.7	17.9	16.3	15.5	14.6	14	13.8
Postpartum visits by PHM at or around 42 days out of reported deliveries	71.4	73.7	73.8	72.9	73.3	74.3	76.7

Figure 18: Percentages of postpartum visits made within the first 10 days of delivery 2007-2013

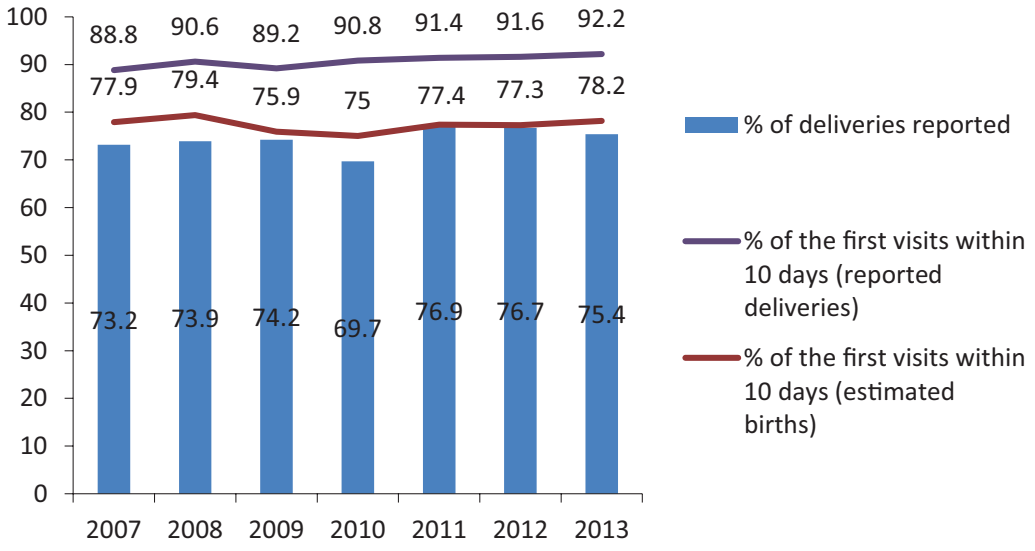
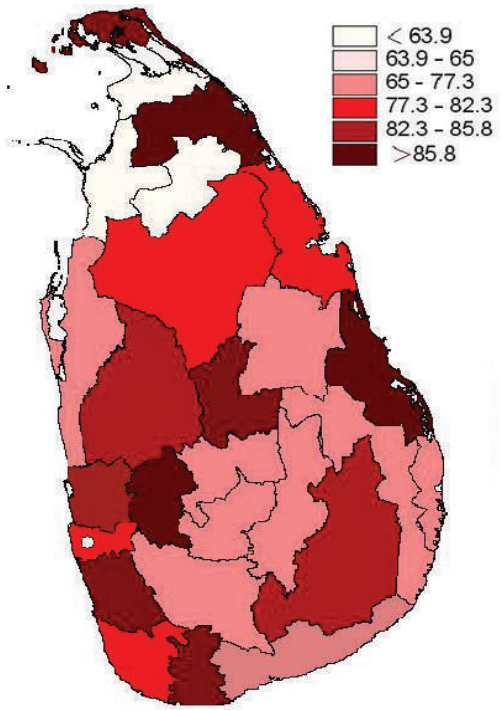


Figure 19: Percentage of estimated births, who were receiving the first post natal visit within the first 10 days of delivery in 2013



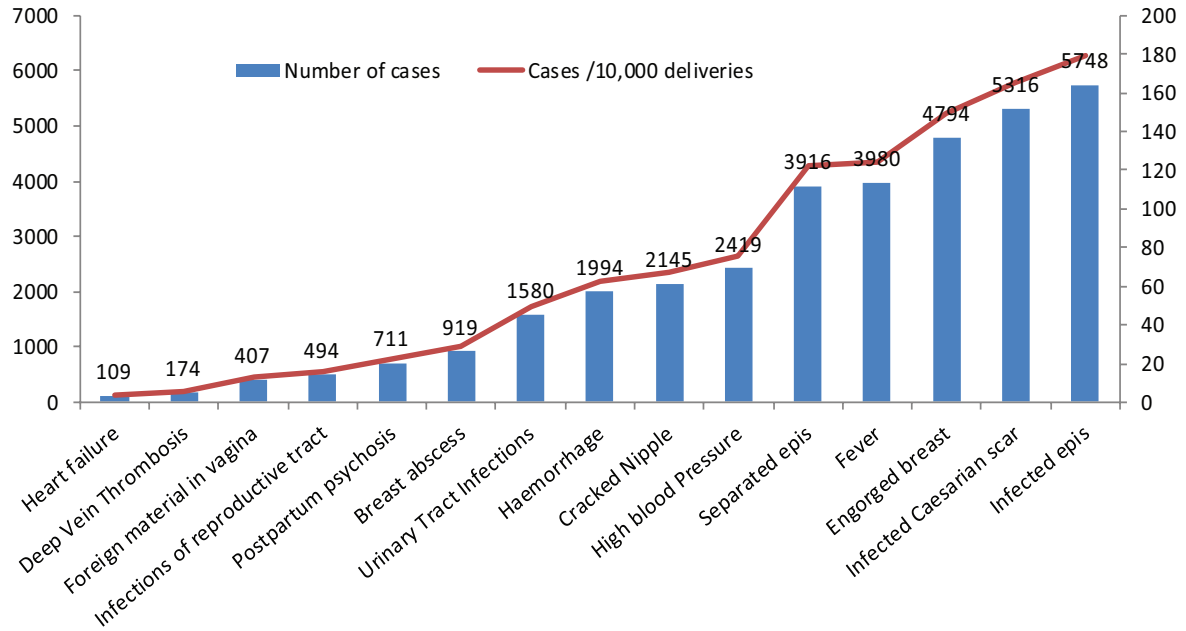
first postpartum visit during the first 10 days following delivery. Only 78.2 % of mothers have received such care when assessed for the estimated births. Colombo MC (49.5%), Mannar (55.3%), Killinochchi (60.1%), Vavuniya (68.35) and Ampara (69.0%).were among areas with very low delivery reporting for estimated births.

The above analysis shows that domiciliary care provided during postpartum period is relatively poor compared to that during antenatal period. Annexure 5 and Figure 19 show the district disparities in the postpartu care provided to mothers with in first 10 days following delivery as a percentage of estimated deliveries.

7.4.2 Postpartum morbidity

PHMs are instructed to record new cases of postpartum morbidities. In 2013, PHMs reported 36,970 mothers with postpartum morbidities. This amounts to 11.5 % of the total reported deliveries. Figure 20 shows the cause specific postpartum morbidity rates for 10,000 reported deliveries. Most common postpartum problems include infections

Figure 20: Number of postpartum morbidities and cases per 10,000 deliveries reported in 2013



either in episiotomy or caesarean scar, engorged breast, fever, separated episiotomy, haemorrhages and cracked nipples. Infections were calculated for respective type of delivery. The mostly reported morbidities could have been prevented by proper infection control and breast feeding practices. However, high infection rate at episiotomy or caesarean scar also indicate the need for examining the PHM's ability to identify those.

7.5 Maternal Mortality

Sri Lanka has shown a tremendous success in bringing down maternal mortality over the years. Around 2680 out of every 100,000 mothers died due to a cause related to pregnancy during early 19s. Various interventions have reduced this number to 32.5 per 100,000 live births in 2013. Factors such as socio-economic development, free education and related high literacy rate of population, free health services, better transport, control of communicable diseases, well organized primary health care systems etc have been attributed to this success. Currently Sri Lanka is on par with industrially-developed countries with low levels of maternal deaths and the contribution made by the National FHP in this regard is substantial.

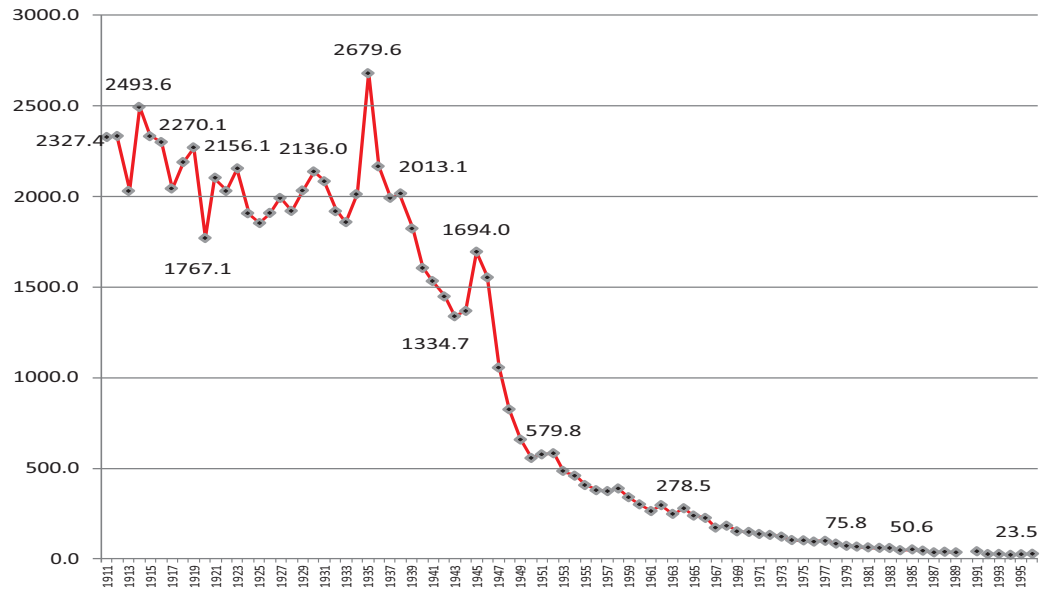
Following graphs demonstrate the gradual reduction of maternal mortality ratio (MMR) over the years, based on data from Registrar General's Department (1911-1995), when there was no organized surveillance system- (Figure 21) and from Family Health Bureau data (1995—2013) after the Surveillance system was established (Figure 22).

Maternal deaths were reported directly to the FHB since 1985, and by 1995 a methodical process was established to capture all maternal deaths in the country. FHB has been recognized as the official source of maternal mortality information thereafter.

7.5.1 Maternal Death Surveillance and Response (MDSR) system of FHB

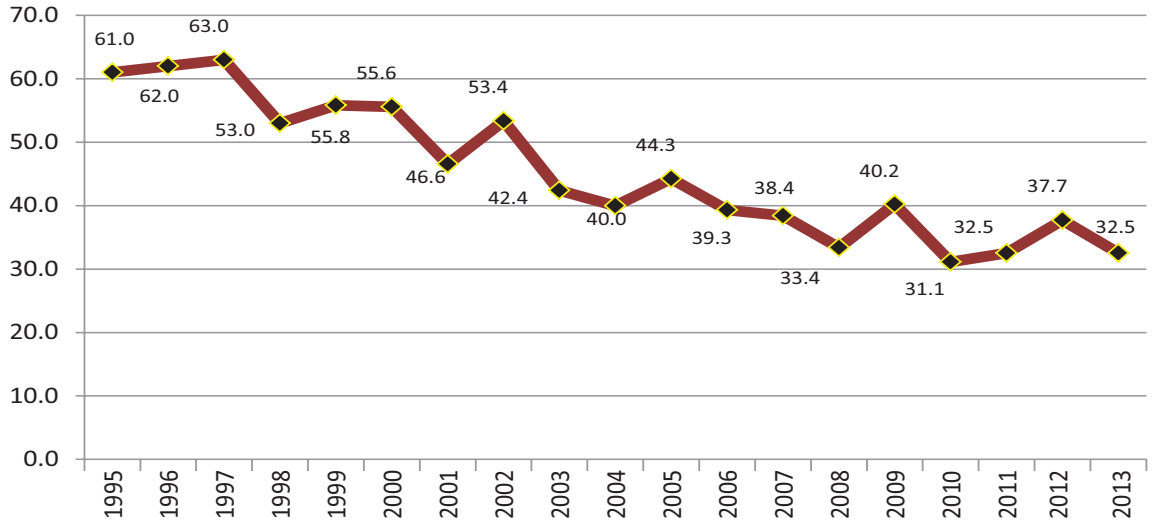
The present surveillance system identifies almost all maternal deaths in the country. Each and every probable maternal death

Figure 21: Maternal Mortality Ratios 1911 —1995



Source: Registrar General's Department

Figure 22: Maternal Mortality Ratio 1995 - 2013



occurring throughout the country is notified to the Family Health Bureau within 24 hrs of occurrence which is reviewed at field, institutional, district and national levels subsequently. At the National Maternal Mortality Reviews conducted at district level by Family Health Bureau in collaboration with technical experts from the Sri Lanka College of Obstetricians and Gynaecologists and other relevant professional bodies, the cause of death is confirmed and the associated factors that may have contributed to the death are discussed to prevent such death in the future. This provides a platform to learn lessons from the mistakes and translate the findings into action both at national and sub-national levels.

The system is continuously reshaped to maintain the timeliness, data quality and coverage. FHB received 99% of field (H 677a) and institutional (H 677) maternal death investigation reports in 2013. Data quality of reports improved gradually with the introduction of a mechanism to obtain data gaps in a structured format to MOOH and hospital heads. Conducting post-mortems on maternal deaths was made mandatory with the issue the circular by Secretary—Ministry of Justice and Law Reforms to all coroners in 2009. The process was further streamlined in the health sector by instructions given by Director (Maternal and Child Health) in 2009. The dissemination of the above circular to all relevant personnel and close follow up by FHB, improved the coverage of conducting of post-mortems on maternal deaths from 94% (2012) to 96% in the year 2013. The national maternal mortality review meetings were restructured with presentation of case scenarios by FHB to initiate the discussion on the index maternal death leading to more in-depth discussion. A maternal death case scenario is a comprehensive account on maternal death developed for each and every notified death based on field (H 677a) and institutional (H 677) maternal death investigation reports, pregnancy records and other field records and post-mortem reports.

7.5.2 Analysis of maternal deaths — 2013

188 probable maternal deaths were reported to FHB during 2013 but 119 were confirmed as maternal deaths. The following figures (23

Figure 23: Maternal deaths by type of cause

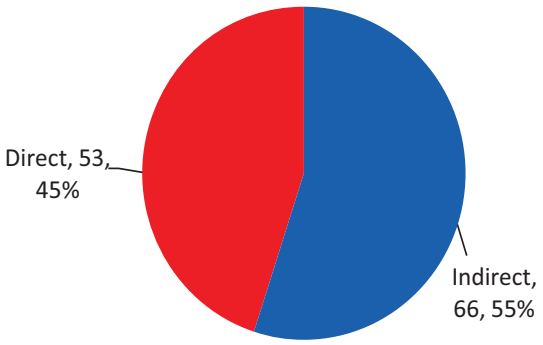


Figure 24: Maternal deaths by pregnancy Period

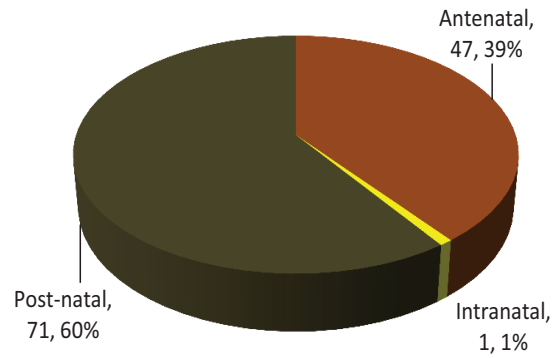
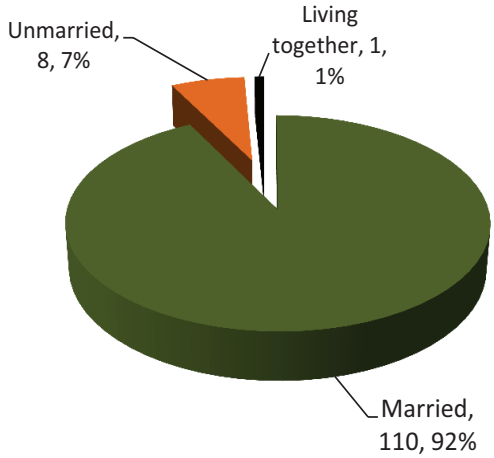


Figure 25: Maternal deaths by marital status



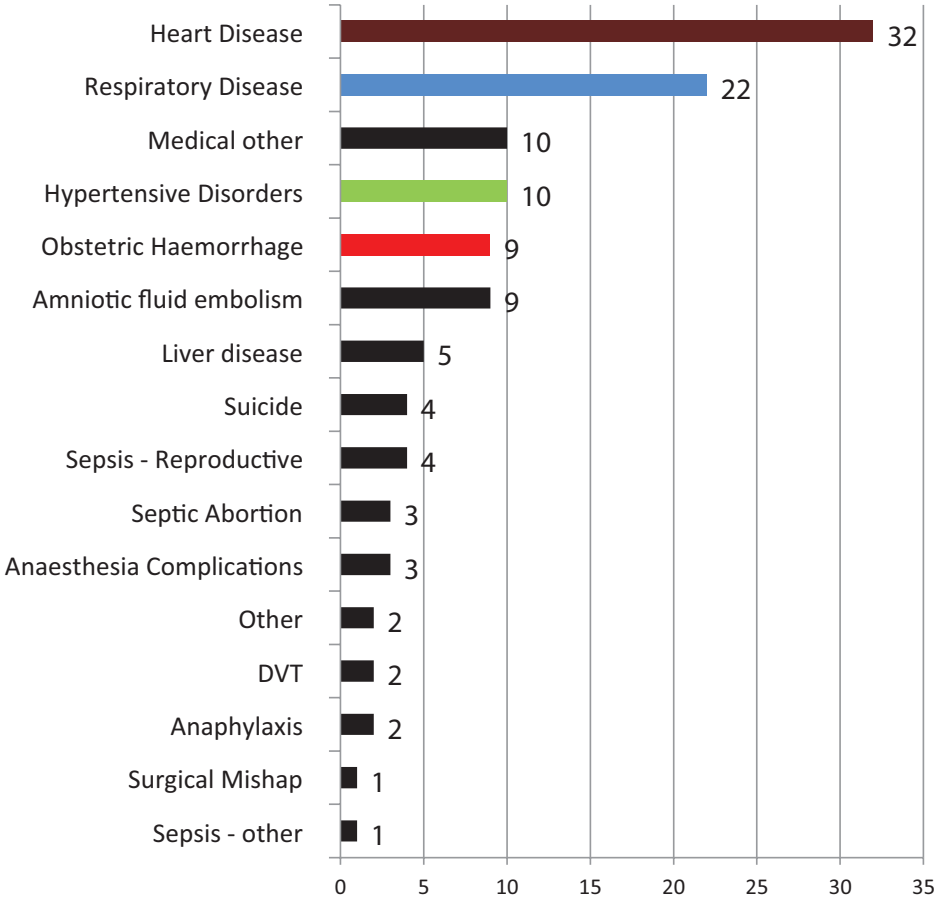
— 25) show the maternal deaths by direct / indirect causes, antenatal / intranatal / postnatal period, and martial status.

A majority of the deaths (5.5%) were indirect maternal deaths and indirect causes accounted for 45% of deaths in the year 2013 (Figure 23). Many of the maternal deaths occurred during postpartum period (60%), highlighting the need of focusing on postpartum interventions to prevent such deaths (Figure 24).

Table 11: Maternal Mortality Ratio by type of cause, pregnancy period, parity and maternal age 2007-2013

Maternal Mortality Ratio by		2007	2008	2009	2010	2011	2012	2013
Type of cause	Direcr	25.7	17.8	25.2	18.0	19.3	23.6	14.5
	Indirect	10.4	14.3	14.6	12.8	12.7	14.0	18.0
Time	Antenatal	10.3	12.6	13.6	12.8	11.3	10.4	12.8
	Intrapartum	1.4	3.5	0.8	1.2	1.4	1.4	0.3
	Postpartum	14.1	18.0	23.7	17.0	19.8	25.8	18.9
Parity	P1	11.6	10.1	10.6	12.4	10.7	10.7	12.0
	P2 - 4	15.4	16.3	16.6	15.8	14.6	20.8	20.2
	>P5	6.5	3.0	2.8	3.0	2.5	3.9	0.3
Maternal age	<19	1.4	1.2	2.0	1.2	3.3	1.4	2.2
	20 - 35	27.3	24.4	27.4	21.5	20.9	27.0	24.6
	>36	9.2	7.2	10.6	8.4	8.3	9.3	5.7

Figure 26: Number of maternal deaths from different causes - 2013



High proportion of maternal deaths occurred among primies (37%) while 1% occurred among mothers in parity 5 and above. Approximately one forth of mothers died belongs to high risk age groups: more than 35 years and less than 20 years of age. More or less in line with the ethnic composition of the country the majority (61%) of the diseased were Sinhalese followed by Tamils (21%) and Muslims (18%). In contrast to the customary pattern of maternal deaths in marital frame works, 8% of the dead mothers were either not married or single mothers (Figure 25) signifying the needs for innovative approaches in promoting family planning methods to all women in the reproductive age group.

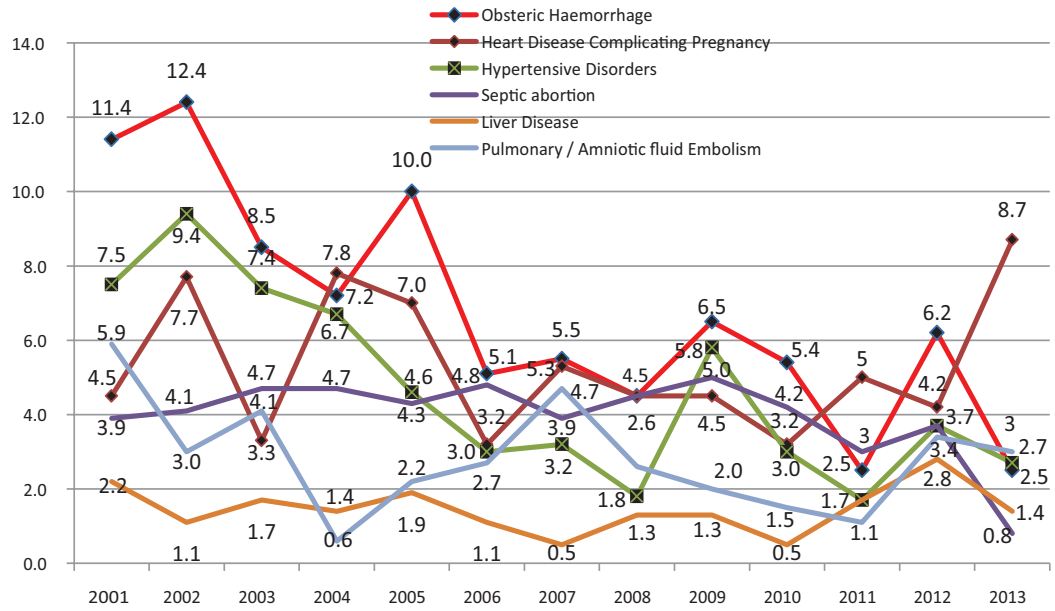
Table 11 includes the trends in selected parameters related to maternal mortality over the past 7 years.

The leading causes of maternal deaths were Heart disease complicating pregnancy, respiratory disease, Hypertensive disorders and other medical disorders. Figure 26 and 27 draw the attention for need for cause-specific preventive strategies to reduce maternal deaths further in the country.

Cause-specific maternal mortality ratios (CSMMR) also reduced over the years to lower levels in 2013 especially in obstetric hemorrhage (2.5), hypertensive disorders (2.7) and Amniotic fluid embolism (3.0). However CSMMRs for septic abortion and liver disease remain more or less stagnant over the years.

Figure 28 shows the district variations in MMR in 2013 highlighting the need for district specific preventive strategies.

Figure 27: Cause-specific Maternal Mortality Ratios 2001 —2013



7.5.3 Care provision for the deceased mothers

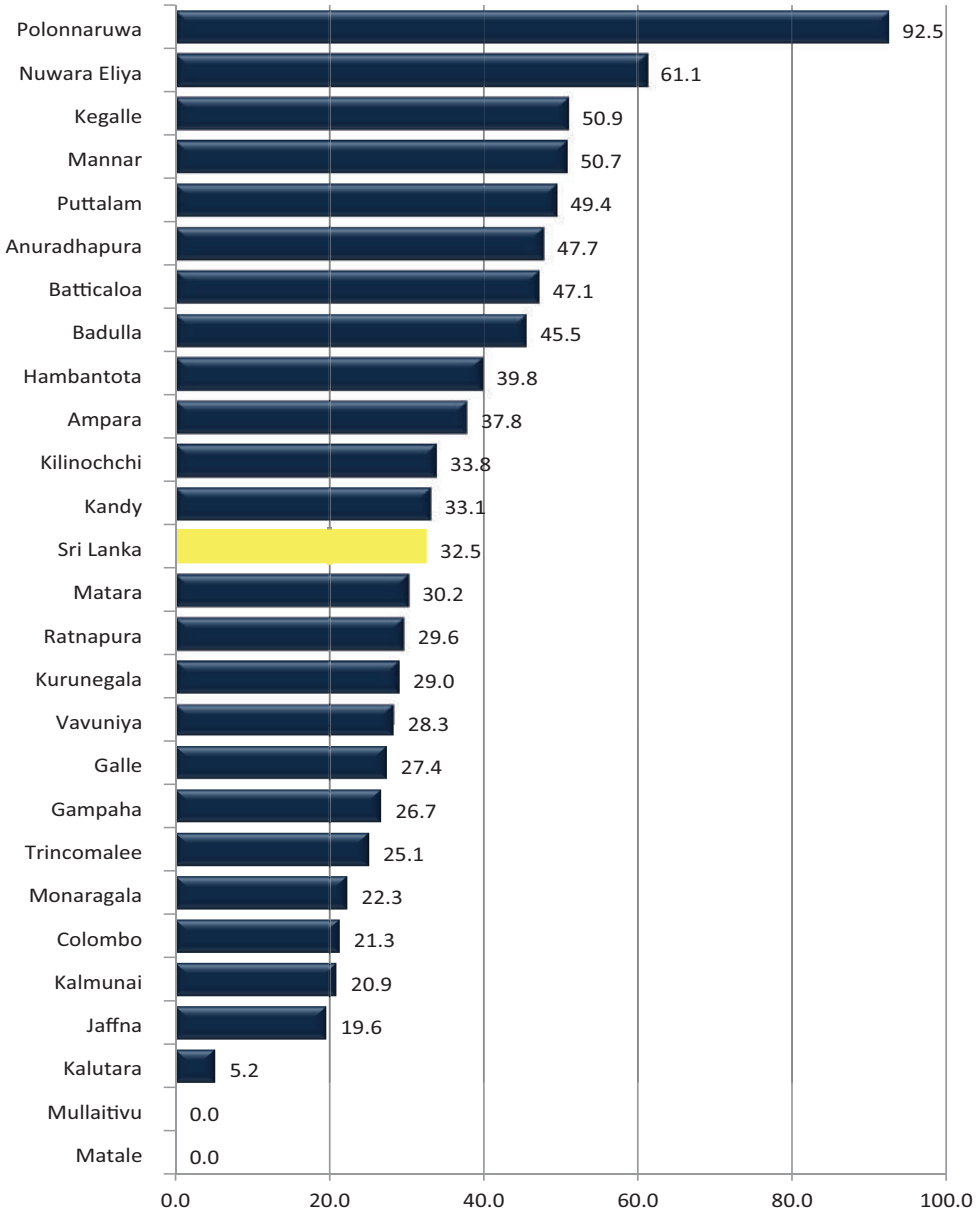
The analysis of the maternal deaths in relation to the care received provides an opportunity to rectify deficiencies at different service delivery points.

Above 90% of the pregnant mothers who died in the year 2013 died in hospitals (Figure 29) and of them 97% died at a base, general or teaching hospital where specialized facilities are available (Figure 30). This indicates that there might have been an adequate opportunity for interventions.

Provision of family planning services to needy women is a priority in preventing unwanted pregnancies. However, Figure 31 shows that one fourth of the maternal deaths in 2013 could have been prevented if unmet need for family planning had been addressed by relevant health care personnel.

At the national maternal mortality review, the experts assessed the preventability of the index maternal death. 71% of the maternal deaths were preventable in the year 2013 (Figure 32). Further analysis of maternal deaths based on modified three delay model "The original 3-delay model conceptualized by Thaddeus and Maine (1994) modified for Sri Lankan contexts as Delay 1 -non-using of ANC / not practicing family planning services or Delay 3 Health system failures in preventive and curative services" (whether there is a deficiency in seeking (D1), reaching (D2) or treating (D3)) revealed that delays were there in 82% of deaths in the year 2013 (Figure 33). Figure 34 shows that 67% women did not seek care in time (D1) for their illnesses and also health care workers (both field and hospital) did not provide adequate care (D3) in 67% of the cases. This should alarm health care workers and administrators in both preventive and curative sectors since making women aware of health conditions which need timely care seeking is a fundamental in providing care for the reproductive age women and missed opportunities in receiving appropriate care once they accessed the health facility are of major concerns.

Figure 28: Maternal Mortality Ratio by RDHS areas — 2013



A fundamental aspect of maternal mortality surveillance is the utilization of the findings which are of policy concerns to relavent technical and administrative groups and providing feedback to the all who provide services to women for corrective actions. Minutes of the each national maternal mortality review of the relevant district is disseminated to a heterogeneous group of stakeholders. At present, several mechanisms are available to put the recommendations into action starting from the ground level (PHM level) up to national level (Secretary Health) though two advisory committees (Technical advisory Committee on Maternal Health and Family Planning and Newborn Care and Child Health) and National Committee on Family Health.

Figure 29: Maternal deaths by place of death

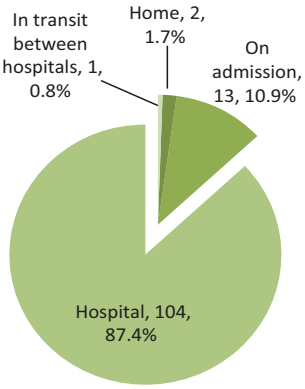


Figure 30: Maternal deaths by type of Hospital

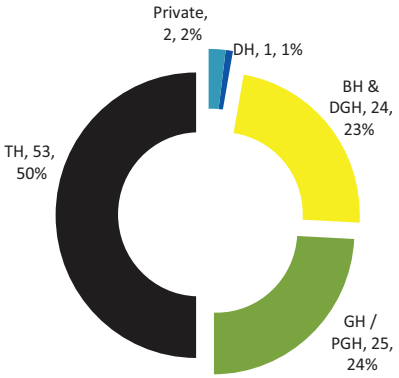


Figure 31: Maternal deaths by unmet need for Family Planning

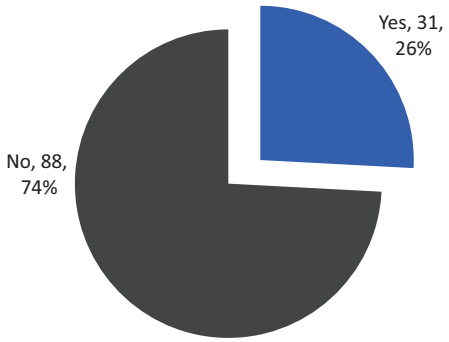


Figure 32: Maternal deaths by preventability

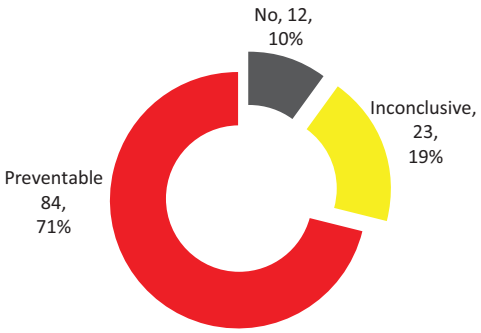


Figure 33: Maternal deaths by presence of delays in service provision

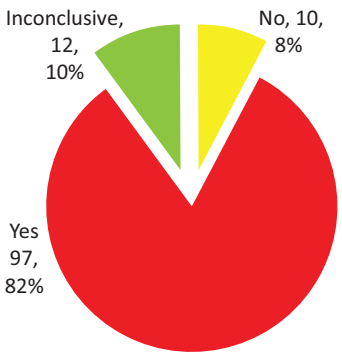
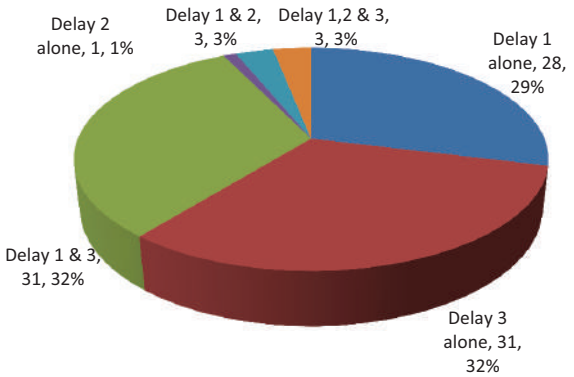


Figure 34: Maternal deaths by three delays



8 Child Care

Family Health Programme is organized to ensure the continuum of care during pre pregnancy, pregnancy, neonatal period, infancy, young childhood preschool, school and adolescent years. During initial postpartum visits conducted within first 42 days, the PHM should provide basic domiciliary care to newborn children. These include, assessment of general health, breast feeding, screening for illnesses, followed by advising mothers accordingly and making necessary referrals. Subsequent interventions for children include immunization, growth assessment and promotion (which includes promotion of breast feeding and complementary feeding), assessment and promotion of development, food and vitamin supplementation, deworming and health education to mothers. In addition, all children are expected to be registered in the Birth and Immunization (BI) register (EPI 3/79) which is a unique document. It could be considered as one of the most comprehensive community based registers of the country, which records details of all children permanently residing in the PHM area.

8.1 Registration of children

Ideally total number of infants registered (permanent residents of the PHM area) should approximate the total number of estimated births of the country. Figure 35 presents the percentage of total estimated children who were registered by PHMs, from 2007 to 2013. It shows that relative to the estimated births approximately 13 % of newborns are not registered.

Table 12 shows infants and 1-5 year children under care of PHMs as a percentage of estimated births in corresponding years. Reaching the target group seems to be highest in the second year of life.

8.2 Field and Clinic care

Following infant registration, care is given to the infant until 5 years of age at clinic and in the field. Home visits carried out after 42

Figure 35: Trends of infant registration out of estimated births 2007 to 2013

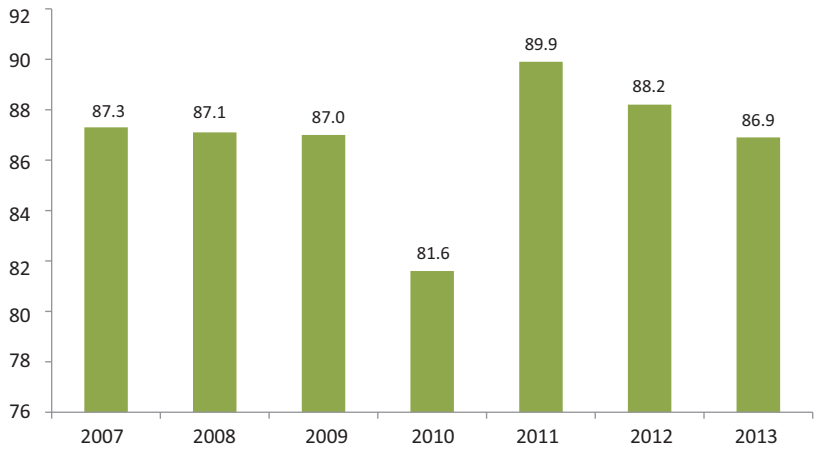


Table 12: Percentages of infants and children under care out of estimated number from 2007 -2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% Infants under care	87.3	87.6	81.8	81.7	82.4	88.4	94.6
% of young children under care (2nd year)	99	96.5	91.9	90.8	87.4	93.1	96.5
% of Preschoolers under care (3rd to 5th year)	80.1	81.7	82.3	84.7	86.1	90.2	92.8

days of delivery are specifically aimed at the infant. The infants are expected to be brought to the field clinic for postnatal examination by the MOH at 4 weeks and subsequently for health screening, growth monitoring, immunization and development assortment according to the schedule. The weighing is mainly done at child welfare clinics and field weighing posts conducted by PHMs which are for 30-50 children. During these health contacts immunizations, assessment of their growth and developmental status, vitamin supplementation and health awareness are being done. Table 13 presents some of the indicators that reflect the field care performances of PHMs.

The field visits made for infants during the year were not optimal. Nearly 36% of infants registered have not had at least a single home visit by the PHM after 42 days, which should be the visit dedicated for the infant. However, those who received home visits of PHMs had about 7 visits during first year of their life. More than 80% of registered infants in Monaragala (95.2%), Matara (81.7%) and Kalmunai (81.0%) RDHS areas, had been visited at least once by PHM at home and the lowest reported percentage was from the district of Mannar (18.1%). Colombo Municipal Council area (42.0%) and districts of Vavuniya (47.7%), Puttlam (51.9%), Trincomalee (53.8%), and Rathanpura (54.6%) had also reported very low coverage of infant home visits.

Children under two years should be weighed once a month. Accordingly, infants should have been weighed 12 times during infancy. Children above two years are weighed once in three months and if they are malnourished monthly weighing is recommended. However, the data for individual children are not included in the RH-MIS. What is available is the total numbers of infants and 1-5 year children weighed during the year. Hence, only an approximation of average number of weighing for a child per year could be obtained.

If an assumption is made that average number of infants under care is more or less equal through out the year, average number of weighing for an infant remains around 8-10 per year during last 7 years. This could also be viewed as the percentage of total expected number of weighing carried out by PHMs. Table 13 shows around 86 % of total expected infants weighing were carried out by the PHMs. Every infant and young child is supposed to get their length measured at birth, 4, 9, 12 and 18 months and thereafter height every 6 months if growth occurs according to the recommended trends. If the child is malnourished during first two years of their life length measurements need to be done every two months and every three months

Table 13: Indicators of field and clinic care performance for under 5 children from 2007 - 2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% Infants having at least 1 home visit after 42 days out of registered infants	63	63.9	64.3	61.8	72.3	69	63.9
Average number of home visits per infant	8.6	9	8.8	8.7	6.6	7.1	7.4
Average number of weighing per infant during a year	8.4	9	9.8	9.8	10.1	10.2	10.0
% of infant weighings	70	75.2	82	79.9	84	83.2	85.7
% of young children (1-2 years) weighings	63.7	67.8	73	72.7	77.1	76.1	79.3
% of infants making at least one clinic visit (of registered infants)	96.7	99.7	99.6	98.3	97.9	100	99.6
Average number of clinic attendance for an infant	4.8	4.7	5.2	5.2	5.2	5.3	5.2
% of estimated infants given Vitamin A at 6 months	93.3	93	79.5	75.4	80.3	76.4	67.3
% of estimated children given Vitamin A at 18 months	93.1	88.9	85.2	84	82	74.7	69.1
% of estimated children given Vitamin A at 3 years	87.2	86.5	83.7	87.5	85.3	78.8	69.7

height measurement is recommended if the child continues to be malnourished after two years.

The clinic visits for infants are for the provision of a package of interventions; the first postnatal examination at 1 month of age, vaccinations at 2, 4, 6, and 9 months and growth and developmental assessments. This indicates, ideally at least 5 clinic visits are required during infancy. Table 13 shows the average number of clinic visits by an infant is around 5 during past 7 years. This reflects the almost universal health seeking behaviour of Sri Lankan mothers. Children under five years are being given Vitamin A mega dose every six months from the age of six months onwards. Considerably higher percentage of estimated infants and children received their Vitamin A mega doses. District differentials are given in Annexure 6.

8.3 Child Nutrition

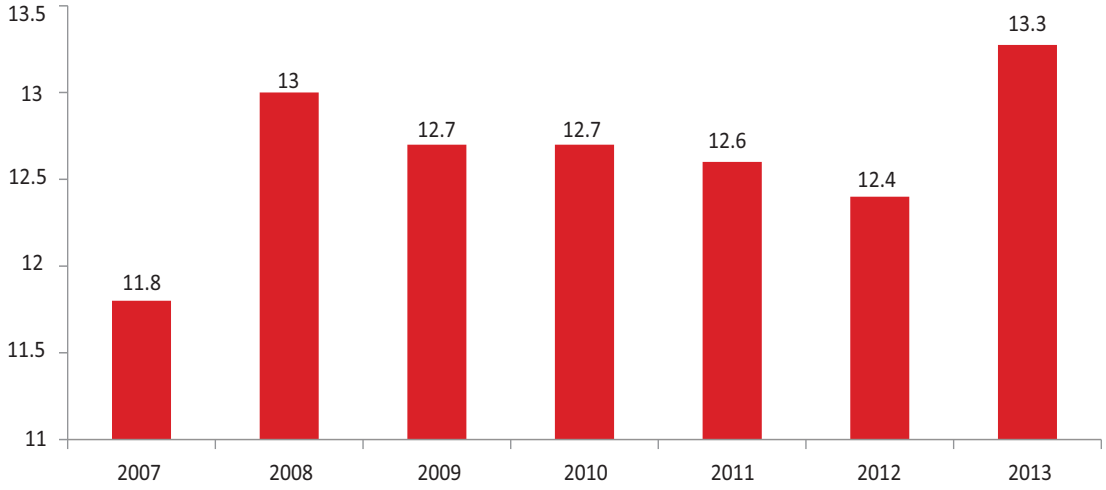
Child under nutrition is a major public health problem in Sri Lanka. RH-MIS gather data on low birth weight and weight for age of infants, young children and preschool children.

8.3.1 Low Birth Weight (LBW)

According to the reporting of PHMs throughout the country, since 2007 up to 2013, nearly 12-13 % of newborns weighed less than 2500 grams at birth. This figure is lesser than the percentage of LBW; 16.6, reported by the Demographic and Health Survey (DHS) 2006/07.

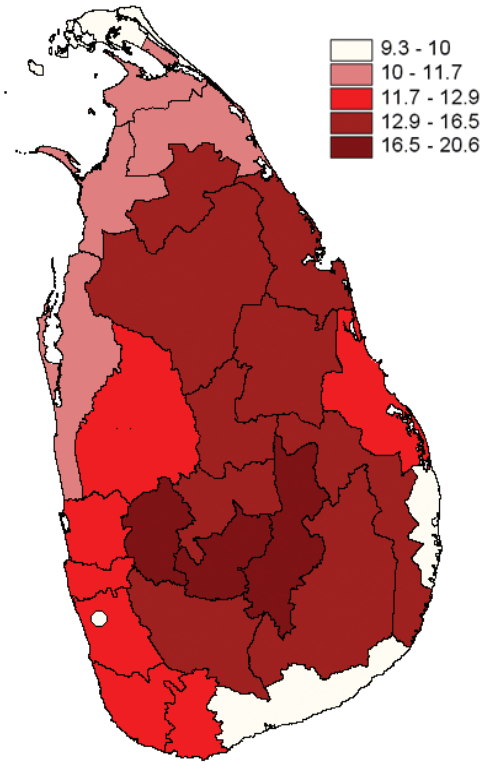
Figure 37 shows the district disparities in LBW percentages. Nuwara Eliya (20.6%) reported the highest percentage of newborn with LBW. Districts with higher percentages of estate population (Badulla 17.5%, Kegalle

Figure 36: Distribution of percentage of LBW since 2007-2013



16.9%, Ratnapura 16.3%), along with Ampara (15.8%) and Polonnaruwa (15.3%) districts also reported higher percentage of newborns belonging to LBW category (Annexure 7). Percentage LBW was calculated for the number of singleton births reported through RH-MIS.

Figure 37: District disparities in LBW percentages 2013



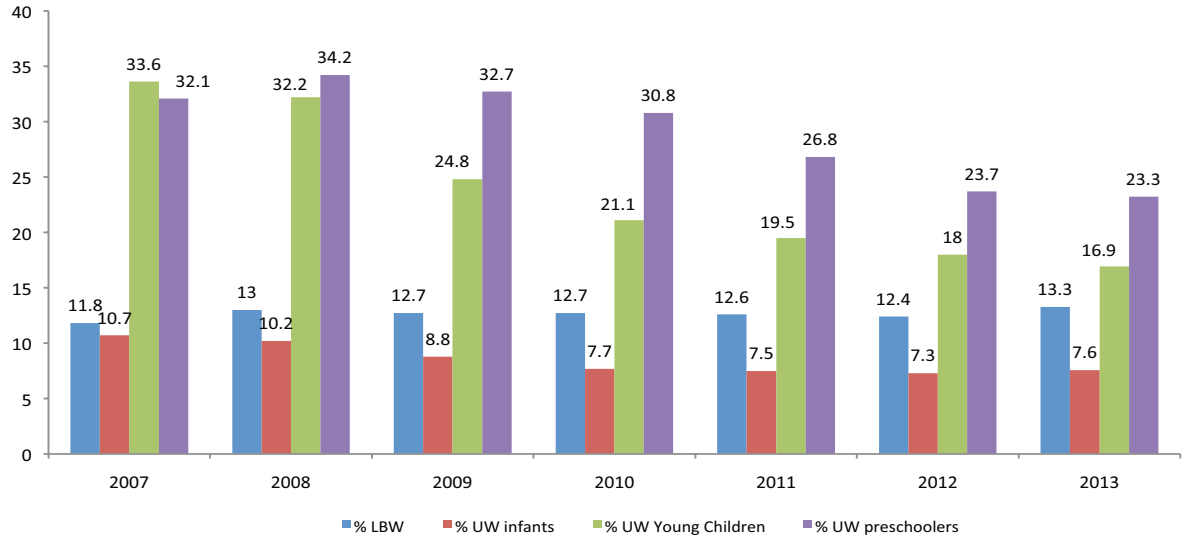
8.3.2 Malnutrition among infants and preschool children

Growth monitoring is mainly done through serial weight measurement of infants, young children and preschoolers, comparing their age specific weights with that of WHO new growth standards in the CHDR. Nutrition counseling, more frequent weighing and increased field and clinic follow ups are indicated when any form of malnutrition is identified. Though the measuring of height / length is being done at the field, data with reference to length / height are not yet been collected through the routine information system except annually for nutrition month. Hence, only the percentage of children belonging to underweight category is being used as an indicator to assess the nutritional status of the children less than 5 years of age routinely. Figure 38 shows the different under nutrition indicators. The percentage of LBW among singleton births remained more or less static around 13% during last 7 years. Reducing trends are seen in other malnutrition categories over the years. A cumulative effect is seen in the percentage of infants and children malnourished with advancing age. In 2013, the percentage of children belonging to

Table 14: Percentages of LBW, underweight infants and preschoolers from 2007 to 2013

Indicator	2007	2008	2009	2010	2011	2012	2013
% LBW	11.8	13	12.7	12.7	12.6	12.4	13.3
% moderately underweight infants	9.2	8.6	7.4	6.5	6.3	6	6.3
% severely underweight infants	1.5	1.6	1.4	1.2	1.2	1.3	1.3
% moderately underweight young children (2nd year)	27	26.1	19.9	17.2	15.9	14.7	13.9
% severely underweight young children (2nd year)	6.6	6.1	4.9	3.9	3.6	3.3	3.0
% moderately underweight preschoolers' (3rd to 5th year)	24.9	27.5	27.3	26	22.6	19.8	19.5
% severely underweight preschoolers' (3rd to 5th year)	7.2	6.7	5.4	4.8	4.2	3.9	3.8

Figure 38: Trends in LBW, infant, young child and preschool underweight (moderate and severe) from 2007 -2013



under weight category (both moderate and severe) has increased from 7.6% in infancy through 16.9% in 2nd year to 23.3 % in 3rd to 5 th year of life. District differentials of child malnutrition are given in Annexure 7.

8.3.3. Nutrition Month 2013

Having understood the need to uplift the nutritional status of mothers and children, the concept of "Nutrition month" was introduced to the system by the Family Health Bureau in year 2006. Routine activities implemented through the Family Health Programme for growth monitoring and promotion were given emphasis during the month and usually the month of June is declared as the "Nutrition Month" annually. The theme for Nutrition Month 2013 was "A Healthy Nation through Proper Nutrition" and it was officially launched by the Nutrition Coordination Division of the

Figure 39: Under nutrition status among under five children from 2009 to 2013

Ministry of Health in collaboration with Family Health Bureau and other stakeholders. All MOHs are required to send a return on the summary of activities done during the month which is introduced to the Public Health Staff during a technical update for them at the FHB. The nutritional status of the under five children whose weight and length/height was measured during the month are included in the standard formats given to the MOHs to submit data on child nutrition to FHB.

During 2013, 99.7% of the MOHs have sent their returns on nutrition month activities. Nutrition status of 91.3% under five children in these areas has been assessed during the month and figures for nutrition status for 2013 along with that for previous years are given in the Figure 39.

8.4 Child Development and care for children with special need

The concept of early child care and development (ECCD) has been introduced to the Child health component of Family Health programme in 2000. Subsequent policy and strategic reviews indicated the need of a comprehensive revision of child development and special need care interventions. In response, initiatives were taken to revamp the relevant components of the child health component with the following objectives:

1. Enable all children under five years of age to reach their full potential for development through provision of optimal care

2. Enable children with special needs to optimally develop their mental, physical and social capacities to function as productive members of society

Family health programme aims to ensure that all children receive appropriate early child care and stimulation by their parents and other care givers, so that children have an optimal environment that facilitates the realization of their genetic potential. The programme also tries to address the health needs of children with special needs by incorporating a package of intervention to existing child health program.

The main strategy used to achieve the aim is the enhancing of the capacity of parents

on provision of appropriate early child care and psychosocial stimulation. This will be accomplished by providing the relevant knowledge and skills to parents through an instructional guide compiled in to a booklet given to each mother and interactive educational sessions conducted in mother's classes. PHC workers are supposed to boost these initial knowledge and skills in subsequent field visits.

Integrating a systematic development screening system to the present child care programme is the first strategy that initiates the care of children with special needs. Measures are being taken to develop a series of country specific developmental indicators that will be included in the Child Health Development Record, and screening check lists of PHC workers. The second strategy relevant to special need care is the establishment and integration of a new institutional arrangement comprising of Primary and Secondary Child Development Centers. These institutions are supposed to provide appropriate care for the children diagnosed of social need conditions.

8.5 Infant and Child deaths

Family Health Programme gathers data on number of infants and under 5 years child deaths, whether or not infant deaths were investigated and if investigated the causes of deaths. PHMs report infant and under 5 years child deaths occurring in their field. Table 15 presents the infant and children under five mortality rates and the proportion of reported infant deaths investigated by PHNSs. Calculations were based on the number of deaths and live births reported through the RH-MIS. Nearly three quarter of infant deaths occurred during neonatal period (Figure 40).

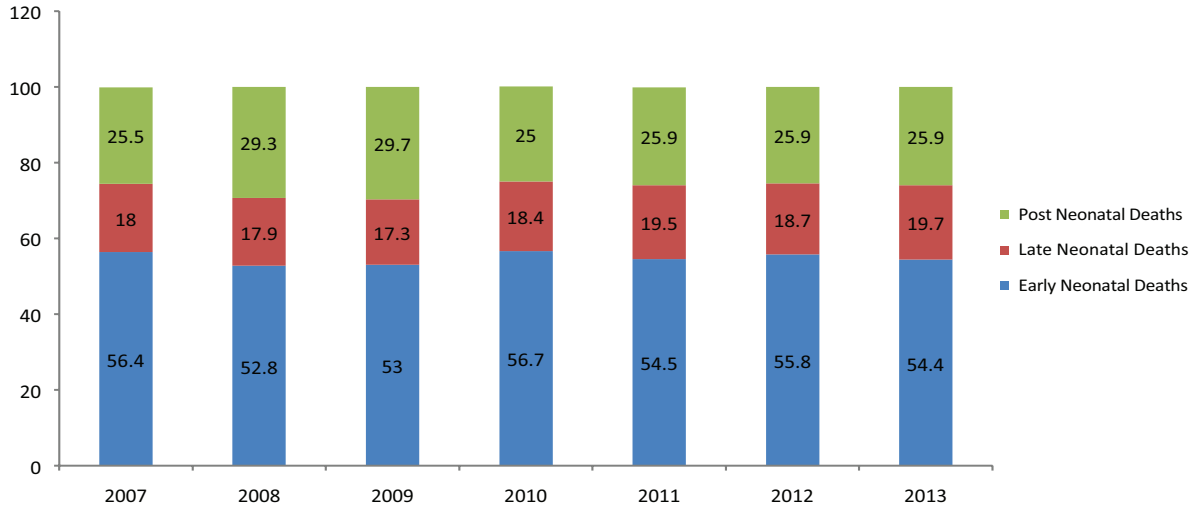
Nearly 90 % of reported infant deaths were investigated by the PHNS. This investigation includes verbal autopsy, examination of death certificates and hospital documentation. Therefore reasonably accurate causes of death could be ascertained. Figure 41 presents the causes of deaths of investigated infant deaths in 2013.

The most of the infants succumbed to the congenital abnormalities and prematurity.

Table 15: Mortality rates based on reporting through RH-MIS and percentage of infant deaths investigated from 2007 to 2013

Indicator	2007	2008	2009	2010	2011	2012	2013
Neonatal mortality rate(1000 live births)	8.1	7.6	7.3	8	7.6	6.8	6.5
Post neonatal mortality rate (1000 live births)	2.8	3.1	3.1	2.6	2.7	2.4	2.3
Infant mortality rate (1000 live births)	11.0	10.8	10.5	10.7	10.2	9.2	8.8
Peri-natal mortality rate (1000 births)	14.6	14.3	13	13.7	12.6	12	11.2
Under five mortality rate (1000 live births)	12.6	12.4	12.2	12.2	11.6	10.4	9.9
Number of infant deaths reported	3500	3501	3263	3293	3269	2938	2835
% of reported infant deaths investigated	89.9	93.5	93.4	89	92	96	89.8
Still birth rate (1000 births)	8.5	8.7	7.5	7.7	7.1	6.9	6.4

Figure 40: Percentage distribution of infant deaths according to age at death from 2007-2013



Asphyxia happened to be the next common cause of infant deaths. Sepsis also contributed to one tenth of infant deaths (Figure 43). Congenital abnormalities remained the most frequent cause of 1 to 5 year mortality as well. Accidents, respiratory illnesses and diarrhoeal diseases were identified as next common causes of 1-5 child mortality (Figure 42).

Figure 41: Percentage distribution of causes of infant deaths in 2013

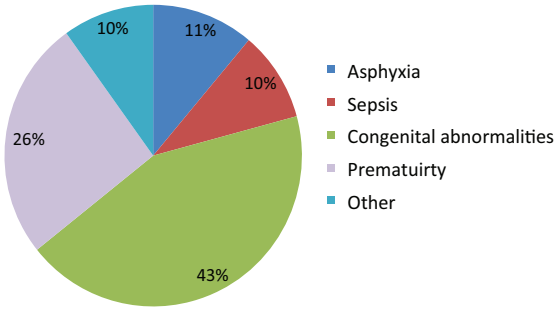


Figure 42: Percentage distribution of causes of 1- 5 year child deaths 2013

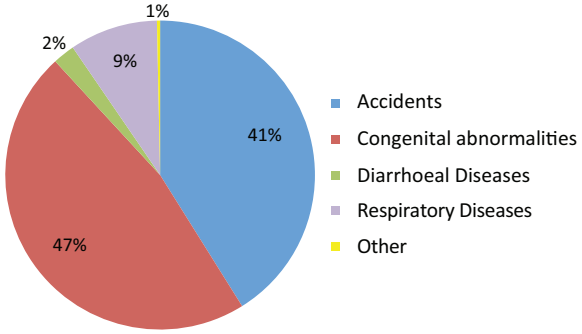


Figure 43: Geographical variations in Infant Mortality Rate (RH-MIS)

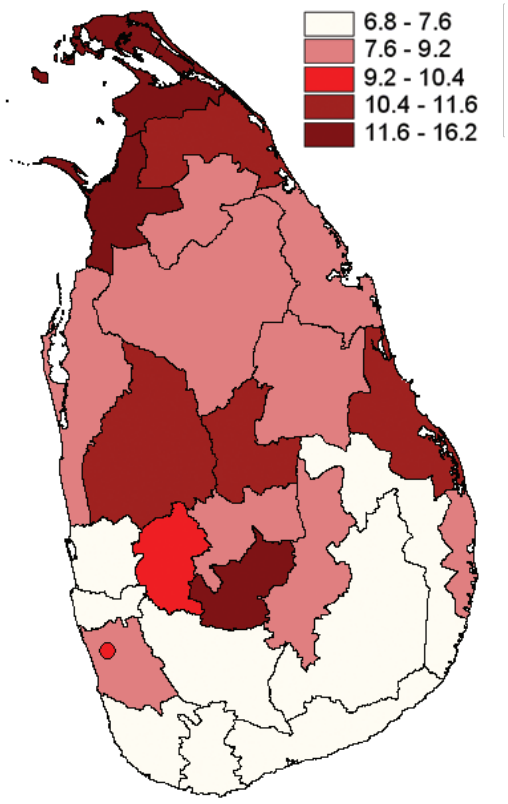


Figure 44: Comparison of trends in National IMRs determined from RH-MIS and Registrar General's

Reporting of infant deaths by PHMs during year 2013 has amounted to an Infant Mortality Rate of 8.8 per 1000 live births. The districts reporting very high mortality rate include Jaffna (13.9), NuwaraEliya (13.0), Mannar (12.8),Killinochchi (11.7), Batticaloa (11.1), Mullaitivu (11.1) and Matale (11.1) .

Figure 44 compares the National Infant Mortality Rate (IMR), calculated from the RH-MIS with the IMR reported by the Registrar General's Department. A clear difference is seen in the IMR calculated from 2 sources of information. Five years preceding 2001, the Registrar General's IMR reporting was systematically higher than that reported from RH-MIS. The trend had reversed since that year and both sources however, demonstrate a clear declining trend. Reporting of infant birth and deaths are low through RH-MIS compared to Registrar General's Department reporting. However, the reporting gap between two sources was higher for birth compared to death. This could be a reason for the discrepancy in the mortality figures given by two sources. However, reporting of births through RH-MIS had been improving in recent years and in year 2013 88.0% of the live births reported through Registrar General's Department, had been reported through RH-MIS. Infant death reporting could not be calculated due to non availability of infant mortality data for year 2013 by Registrar General's Department.

9 Care for School Children and Adolescents

Approximately 4.0 million children attend 9905 government schools around the country. Primary school completion rate of these children reaches 97%, while only 89% complete up to grade 9. Adolescents (10-19 years) comprise 19% of total population in Sri Lanka and of them 70% attend schools. School health programme targets children and adolescents attending schools.

However a successful programme to reach out of school adolescents is yet to be established. Provisions are included in Family Health Programme to deliver preventive health care needs of school children and adolescents. Constellation of these provisions is identified as school health programme. Ministries of Health and Education share a joint responsibility of implementing the school health interventions. Family Health Bureau, being the focal point of the school health programme, is involved in planning, providing technical guidance, monitoring, evaluating and conducting research and management of logistics relevant to school health activities.

The Medical Officer of Health is the responsible for implementation of the school health Programme in collaboration with the Zonal Educational Officers and School Principals. The Public Health Inspector organizes the school health activities at the local level. In the Municipality areas of Colombo, Kandy, Galle and Jaffna, School Medical Officers implement the School Health Programme.

The National Working Group on School Health which was established in 2001 with the participation of relevant officials from the central and provincial health and educational ministries overlooks the salient issues related to the School Health Programme.

At present the school health programme focuses 5 major thematic areas. These include:

1. School medical services including counseling
2. Maintenance of Healthy School Environment
3. Life skills based Health Education (includes Sexual and Reproductive Health)
4. School Community Participation
5. Healthy school policies

School medical services include School Medical Inspection (SMI) of children and making relevant referrals. Public Health Inspectors carry out the initial screening of children and MOH then conduct Medical inspections. In small schools (with enrolment less than 200 children), all the children are examined once a year while in the larger schools (with enrolment more than 200 children) all students in grades 1, 4, 7 and 10 are examined annually. This service was recently extended to children in Grade 10 with a view to capture adolescents attending schools. Assessment of nutritional status, detection and correction of health problems, providing immunization and worm treatment, provision of micro nutrient supplementations to children are focused during the School Medical Inspections. Treatment with anti-helminthic is followed by weekly treatment

with iron, folic acid and vitamin C tablets for a period of six months with the assistance of the class Teachers of all grades. The children detected with any defects are either treated locally or referred to the closest specialist clinics for necessary management. Thereafter, they are followed up by the Public Health Inspectors to ensure the correction of defects. In addition MOHs are supposed to organize Behaviour Change Communication programmes aimed at children with a view to promote their health with special reference to sexual and reproductive health concerns, reduction of risk behaviours for tobacco, alcohol, drugs abuse and HIV/AIDS.

Apart from the SMI, The Public Health Inspectors conduct an annual sanitation survey in the schools, findings of which are used for making the school environment safe and healthy. The necessary recommendations are thereafter sent to the school principals for corrective actions. These officers work closely with officials of the Education Ministry and other Government and Non-Governmental Organizations to provide services such as safe water, sanitation and refuse disposal at school.

The reporting of school health related data is not optimal. In 2013, only 300 (90.1 %) MOH areas submitted Quarterly School Health Returns (H 797) for all four quarters. Hence, school health activities described in this report is limited to school health performance of MOH areas reporting the progress. Annexure 9 shows the proportion of MOH areas in each health area sent H 797 for all quarters during 2013.

9.1 School Health Surveys

It is a responsibility of area PHI to complete School health survey annually. It is supposed to be completed preferably within first two quarters of the year for timely action. During 2013, health surveys of 90.0% of the schools had been conducted island wide. Health surveys were completed in all the schools belong to NIHS, RDHS Matale, Galle, Hambantota, Mannar, Puttlam and Monaragala (100%). RDHS areas Jaffna (99.8%), Vavuniya (98.9%), Ratnapura (98.7%) and Anuradhapura (97.5%) also reported to complete higher percentage of health surveys (Annexure 9). These areas have also sent all four quarterly returns on School health for 2013. Therefore statistics of them reflects the total performances of the RDHS areas.

9.2 School Medical Inspection Coverage

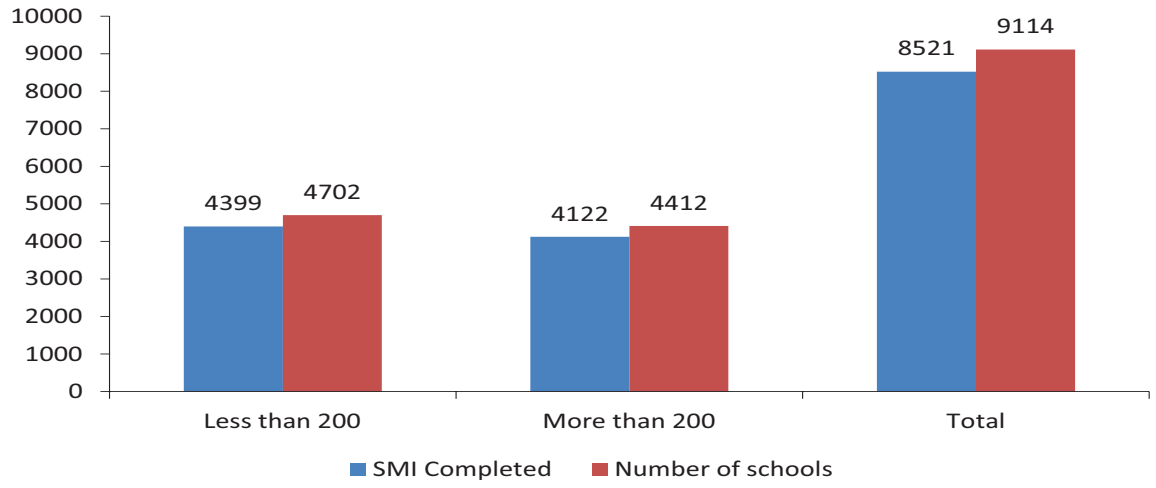
Table 16 presents the distribution of schools and number of students to be examined in all reported MOH areas.

MOH areas that submitted H 797 in all 4 quarters had 9114 schools and 3,498,582 children enrolled. Of them 1,481,856 were to be examined. In 2013, SMIs were conducted in 8,521 schools resulting in overall school coverage of 93.4 %. The coverage of schools with less than 200 and more than 200 students were 93.6 % and 93.4% respectively (Figure 45). Approximately 90.8% of the children that

Table 16: Percentage of children examined during School Medical Inspection 2013

Less than 200		More than 200		Total	
Students to be examined	Students to be examined %	Students to be examined	Students to be examined%	Students to be examined	Students to be examined %
380,529	92.5	949,879	90.1	1,330,408	90.8

Figure 45: Total number of schools available and number of schools where SMI were conducted 2013



were to be covered by SMI had been examined during 2013 (Table 16). Annexure 9 shows geographical variations in SMI coverage.

9.3 Malnutrition among School Children

During SMIs students are assessed for their nutritional status. Stunting is assessed in grades 1 and 4 only. Around 7 to 9 % of children in grades 1 and 4 were stunted. Wasting was higher compared to stunting which ranged from, the lowest in grade 10 (16.3%) and the highest (20.6%) in grade 7.

9.4 Medical Problems detected at SMIs

School children are identified with a considerable number of health problems during SMIs. Table17 shows the percentages of children who have been examined at SMI who were reported to have these problems.

Approximately 496,737 students (41.1% of all students examined) in the SMIs have had some form of a medical problem as indicated in the table 17 and 235,117 students (19.5% of all students examined) were referred for further care.

Figure 46: Percentages of school children in different Grades who are stunted and wasted 2013

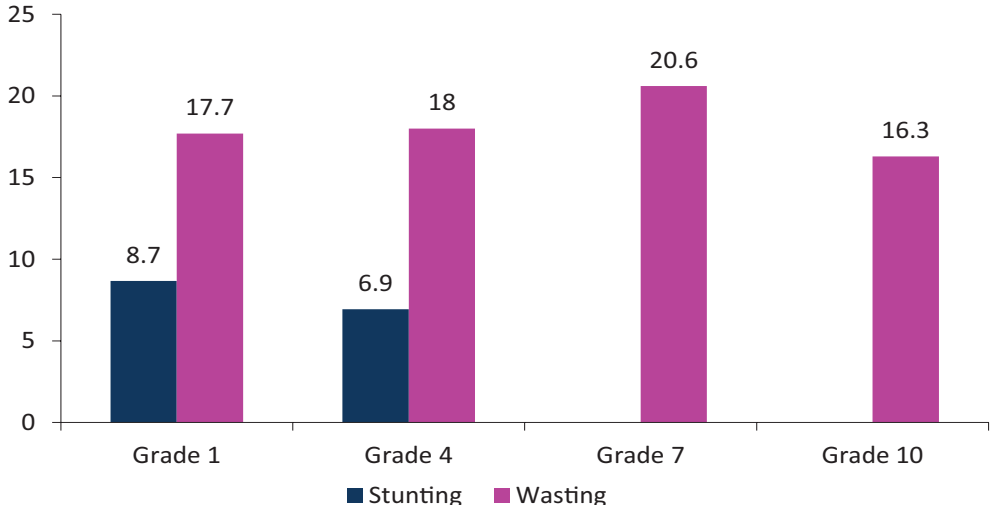


Table 17: Prevalence of health problems detected at SMIs 2013 (Cases per 1000 students examined)

Health problem	Cases per 1000	Health problem	Cases per 1000
Dental caries	245.8	Scabies	1.7
Pediculosis	60.6	Speech defects	1.6
Malocclusion	34.6	ENT problems	1.4
Visual defects	25.8	Lung disease	1.0
Pallor	15.1	Hearing defects	0.8
Fluorosis	14.9	Lymphadenopathy	0.7
Skin diseases	13.5	Goiter	0.6
Heart disease	12.9	History of fits	0.6
Gingivitis	4.0	Bitot spots	0.5
Asthma	3.4	Orthopaedic problems	0.4
Xerophthalmia	2.7	Night blindness	0.2
Glossitis	2.6	Hypo-pigmented / Anaesthetic patches	0.2
Learning problems	2.5	Rheumatic disorders	0.1
Squint	2.0	Other defects	4.3
Behavioural problems	1.8		

Figure 47: Percentages of Grade 10 children with low BMI 2007-2013

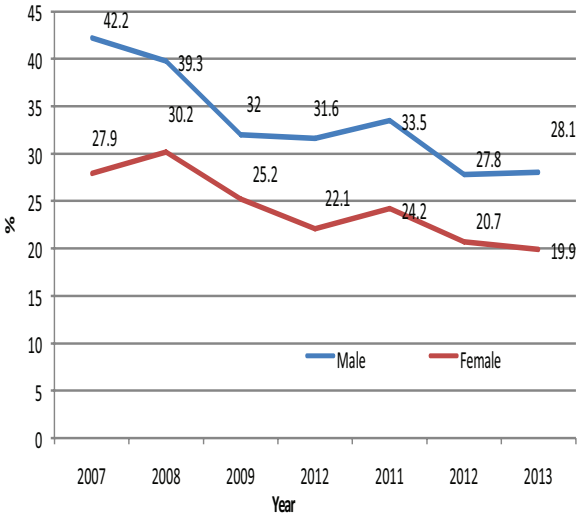
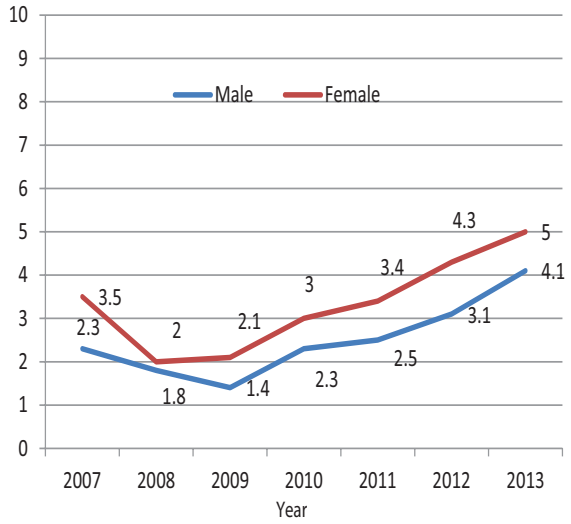


Figure 48: Percentages of Grade 10 children with overweight 2007-2013



9.5 Nutrition Month activities 2013

In addition to the activities mentioned in section 8.3.3 BMI level of all students in grade 10 was assessed by PHIs and necessary nutritional interventions were done during nutrition month. Accordingly, prevalence of low BMI among male and female students was 28.1% and 19.9% respectively. Prevalence of overweight among male students was 4.1% while that for females was 5.0%.

10 Family Planning Programme

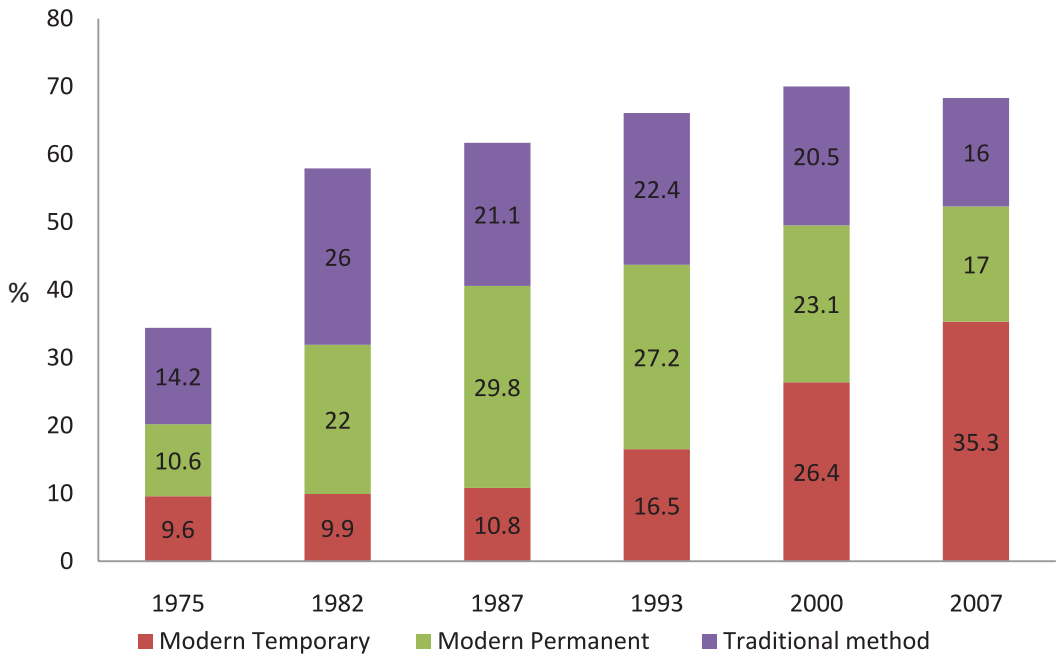
History of modern family planning services covers 60 years, where the introduction of services to Sri Lanka was done in 1953. In 1965 Family Planning was recognized as a responsibility of the Government and service delivery was strengthened by integrating Family Planning to Maternal and Child Health services.

Current goal of the Family Planning programme is to enable all couples to have a desired number of children with optimal spacing whilst preventing unintended pregnancies. Therefore it facilitates the families to make informed decisions on their desired number of children, spacing and timing. The cafeteria approach in being used to offer contraceptive methods.

Needs of community have changed over generations, so have the services the programme offers. Oral Contraceptive Pills (OCP), DMPA injections, Intra Uterine Devices (IUD), Condoms and Implants are among the modern temporary methods offered by the present-day programme. Modern permanent methods include vasectomy and female sterilization (LRT). MOHs, MOs, PHNSs, PHMs and PHIs are being trained in providing awareness and counseling for clients on family planning supported with appropriate BCC materials.

Sri Lanka records the best family planning performance in the region. Figure 49 presents the trends in Contraceptive Prevalence Rates (CPR) among married women of reproductive age in Sri Lanka over last three decades where

Figure 49: Trends in Contraceptive Prevalence Rate in Sri Lanka



Source : Demographic and Health Survey 2006 - 07

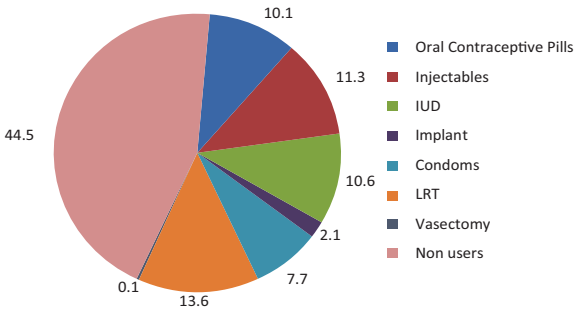
there has been a 30% increase. However, since of late, a stagnation can be observed. The issues that may have contributed to it includes insufficient supply of certain contraceptive commodities.

Two main outcome indicators are used to assess the performance of the Family Planning Programme. These are new acceptor rates and current user rate. Two definitions are used in describing the indicators.

Current user is a woman/man (eligible family) who is using any method of contraception at a given point of time. This indicator provides the CPR among eligible families for a given year. Data reported in H 509 is used for calculation of this.

A new acceptor is defined as a woman/man using a particular modern contraceptive method for the first time from any service provider belonging to the national programme.

Figure 50: Method mix of contraceptives in 2013



This indicates the change in the contraceptive method preference despite its limitation of counting the same person more than once with change in the method. Data on all modern methods except condoms are considered for this indicator and H 1200 provides data for this.

10.1 Current users: Contraceptive Prevalence Rate among eligible families

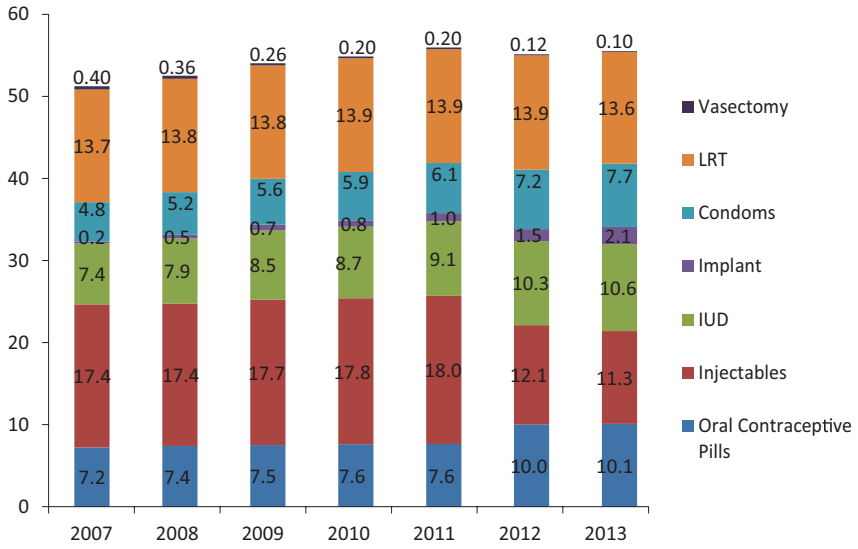
Percentage of eligible families using any contraceptive method is expressed as current user rate or CPR among eligible families. Of the eligible families registered by PHM (n=3,647,093) 64.9% had been using any method at the end of year 2013. Proportion of modern methods and traditional methods users were 55.4 % and 9.5% respectively. Current contraceptive user rate over past five years as reported by PHMs is given in Table 18. Approximately 5% increase in contraceptive use (any) was observed from year 2007 to 2013. Traditional methods account for approximately one seventh of contraceptive prevalence. District differentials of CPR are given in Annexure 10.

Preference to different methods of contraceptives varied and the variation seems to be consistent. Figure 50 presents method mix of 2013 while figure 51 presents the trends in method preference since 2007 to 2013. The most popular temporary

Table 18: Percentage of eligible families using a contraceptive method from 2007 to 2013

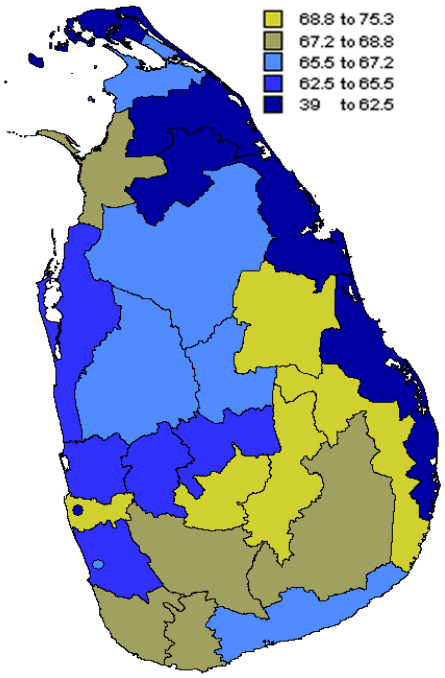
Indicator	2007	2008	2009	2010	2011	2012	2013
Modern methods	51.2	52.5	53.8	54.9	56	55.1	55.4
Traditional methods	8.9	9.3	9.4	9.5	9.3	9.5	9.5
All	60.1	61.8	63.2	64.4	65.3	64.6	64.9

Figure 51 : Current users of modern contraceptives by method from 2007 to 2013.



method of contraception in 2013 has been DMPA injections (11.3%), followed by IUD (10.6%), OCPs (10.1%) and condoms (7.7%). Approximately 13.6% of eligible families resorted to Ligation and Resection of Tubes (LRT) for fertility control.

Figure 52: Geographical variations in Contraceptive Prevalence Rate (CPR) (All methods) 2013



DMPA injections had been the most popular modern temporary method of contraceptive since 2007. However there had been a prominent 6% drop in DMPA users in year 2013 which may have been due to non-availability of the method at field clinic centers and reactions reported for certain brands. A large percentage of users had shifted to OCP, IUD and Condoms in the absence of DMPA Injections. Implant users are also on the rise with the improved service availability for Implant through the government system due to availability of the method and staff training.

Figure 52 shows the district variation in CPR. The lowest ranking areas (CPR less than 50) were Colombo M.C. (39.6%), Mullaitivu (49.0%) while Ampara (75.3%) RDHS area reported the highest CPR (over 70%) in the country. Current user rate by districts is given in the Annexure 10.

10.2 New Acceptor Rate

RH-MIS has a special registration system to record the pattern of acceptance of contraceptive methods by couples. During 2013, family planning services throughout the

country, had recruited 181,645 couples for various contraceptive methods.

Figure 53 shows that there is a gradual increase in the proportion of couples choosing modern temporary methods during last 20 years. An opposite trend is seen in the choice of permanent methods of contraception. Out of total new acceptors 91.3% accepted temporary methods as a new method from the programme during 2013.

10.2.1 New Acceptors by method

The change in new acceptors as a percentage of eligible couples over the time is given in figures 53 and 54.

Figure 53: Relative proportions of newly accepted contraceptive methods from 1990 — 2013.

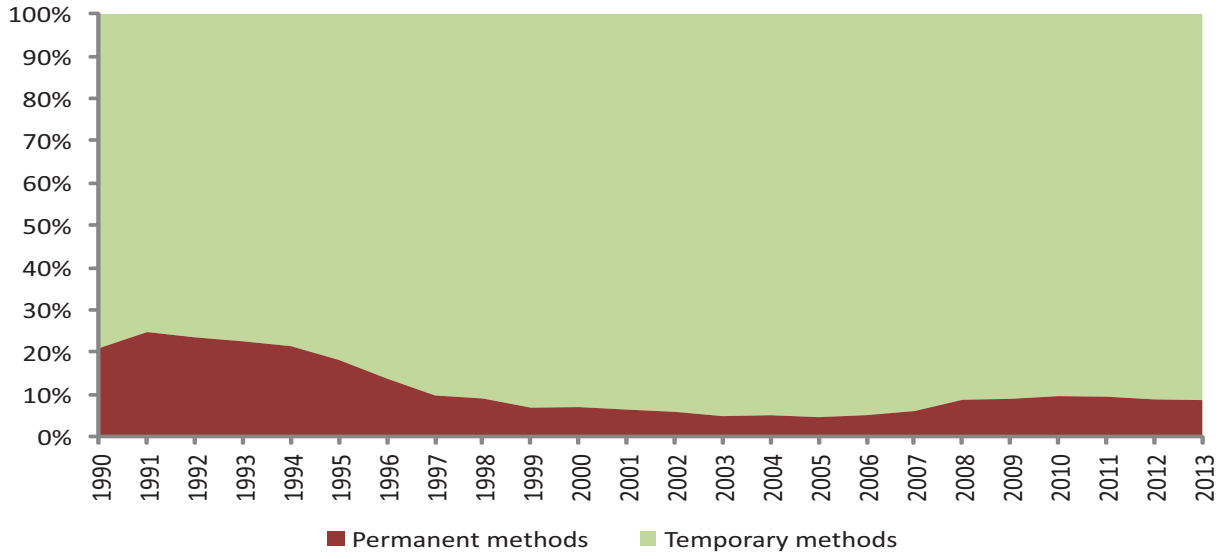
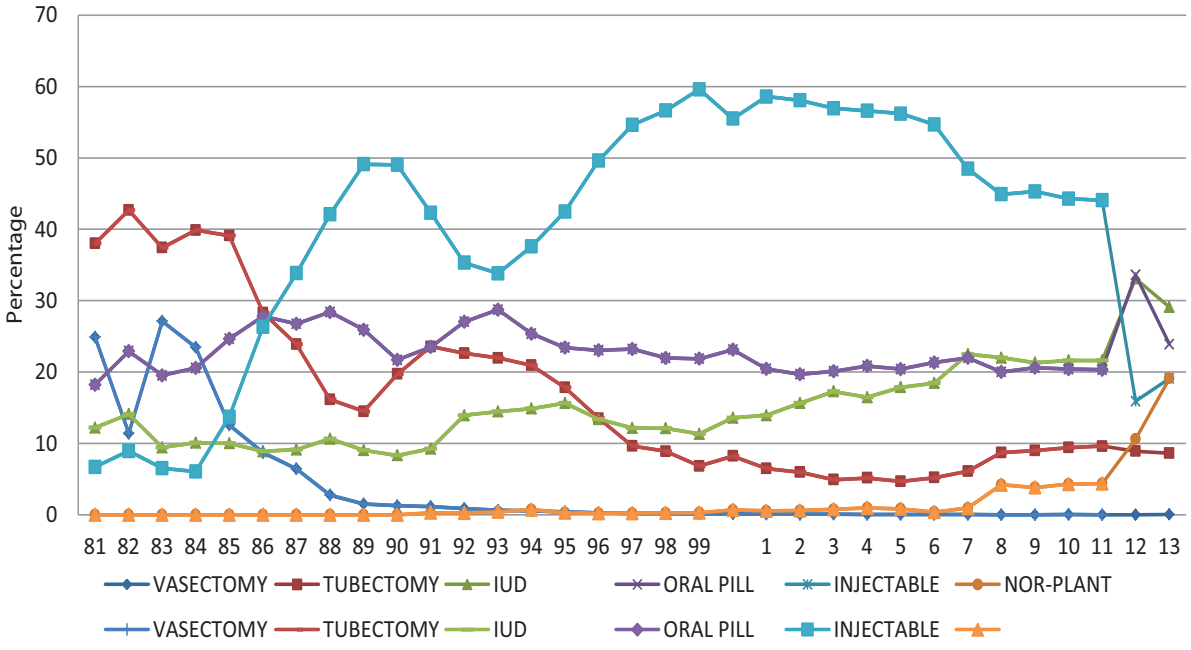


Figure 54: New acceptors of contraceptives by method 1981 — 2013.



The injectable was the most widely accepted contraceptive method for the first time from the programme while IUD and pills following that with close approximation to each other until year 2011. In compatible with the trend in current users, there had been a dramatic drop in choosing DMPA among new acceptors in year 2012. OCP and IUD had been the preffered choice among new acceptors in this particular year.

10.2.2 New Acceptors by Age

Figure 55 presents the age specific new acceptor rates from 2001 to 2013. There has been a notable reduction in contraceptive acceptance in 20-29 year and 30-39 year age groups after 2005. The contraceptive acceptance of teenage women has shown an improvement from 2006 to 2009. Overall new acceptor rate for modern contraceptives across all age groups shows a reduction towards the latter part of the decade.

There was a decline in new acceptors across all age groups in year 2013 compared to 2012.

10.3 Contraceptive failure rate and complications

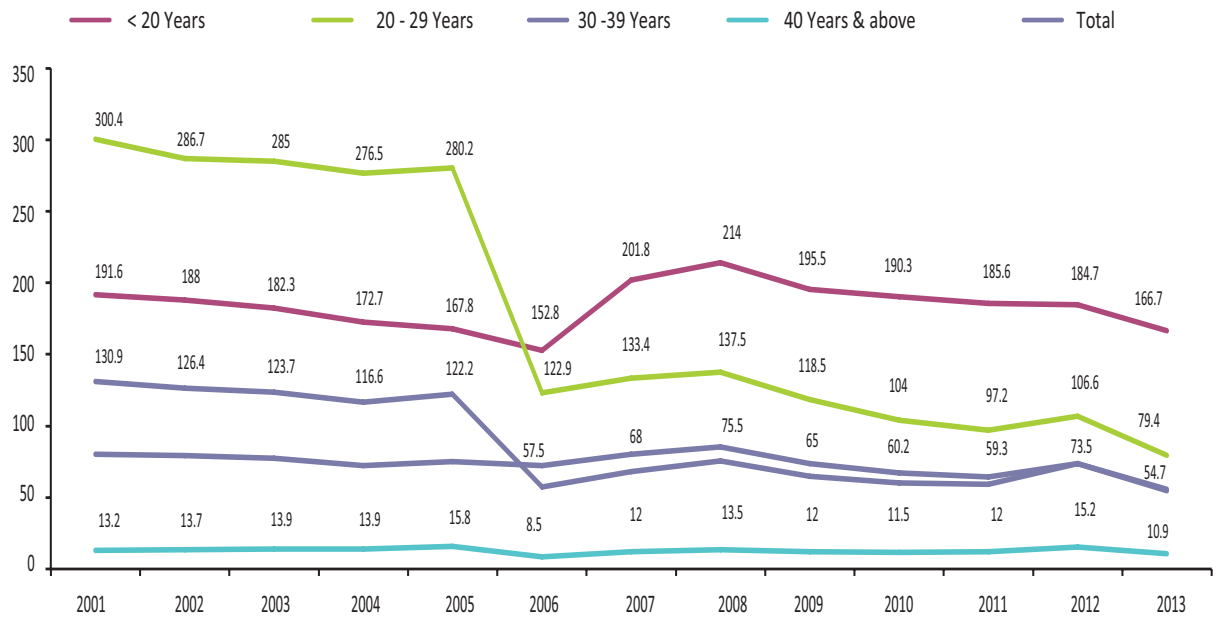
Contraceptive method failures are supposed to be reported through RH-MIS. Failure rates for different methods are given in the Table 19. A total of 1321 method failures were reported and the highest failure rate was among IUD users which was 15 per 10,000 users.

10.4 Unmet need for Family Planning

Unmet need for family planning means the presence of sexually active couple who are not expecting a child in next 2 years and yet not practicing any family planning method. PHMs are gathering this information from their eligible families. Figure 56 presents the trends in unmet need for family planning from 2007 to 2013.

Unmet need for family planing among eligible couples over last 7 years has varied from 9.2% to 7.1%. However, further reduction in unmet need is expected to reduce maternal

Figure 55: Age specific new acceptor rates for modern contraceptives: from 2001 to 2013



mortalities attributed to this. District variation in unmet need for family planning is given in Figure 57 and Annexure 10. The Unmet need is in general high in districts where CPR is low.

10.5 Services for sub fertile couples

Provision of services for sub fertile couples is an important competent of the Family Planning programme which has not yet been established well. However, field staff should identify sub fertile couples among the families registered with her for care in the Eligible Family Register. Staff is expected to direct the couples identified for management. Further the couples with risk factors also need to be identified and direct them for early interventions.

Table 19: Contraceptive failure rates for different methods 2013

Contraceptive Methods	No of failures	Failure rate per 10,000 users
Injectables	201	4.9
Oral Pills	386	10.5
IUD	580	15.0
Condoms	78	2.8
Implants	4	0.5
LRT	72	1.5
Vasectomy	0	0

Figure 56: Percentage of eligible couples having unmet need for family planning 2007-2013

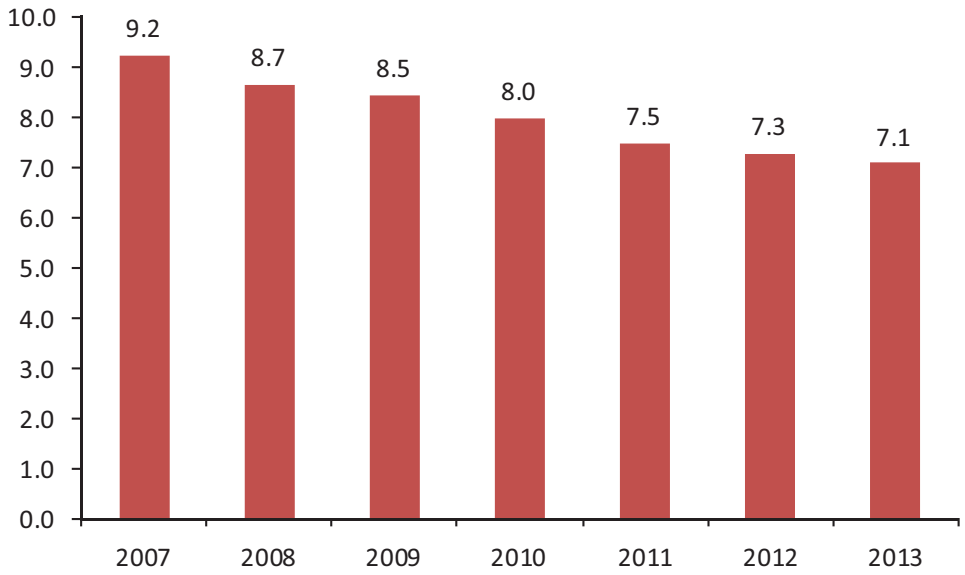
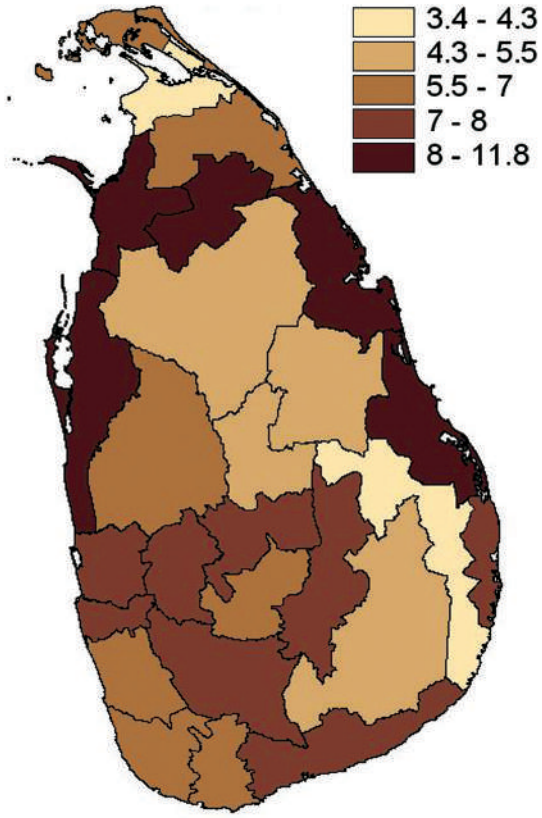


Figure 57: District variations in unmet need for family planning 2013



11 Gender and Women's Health

The Government of Sri Lanka was a signatory to the Program of Action adopted at the International Conference of Population and Development (ICPD) in Cairo in 1994. The concept of Reproductive Health (RH) has been introduced to the Family Health programme since then and the programme was reorganized to address gender equity and equality in RH and specific reproductive health issues of women and their partners throughout the life course and women with special needs.

11.1 Well Woman Clinic Services

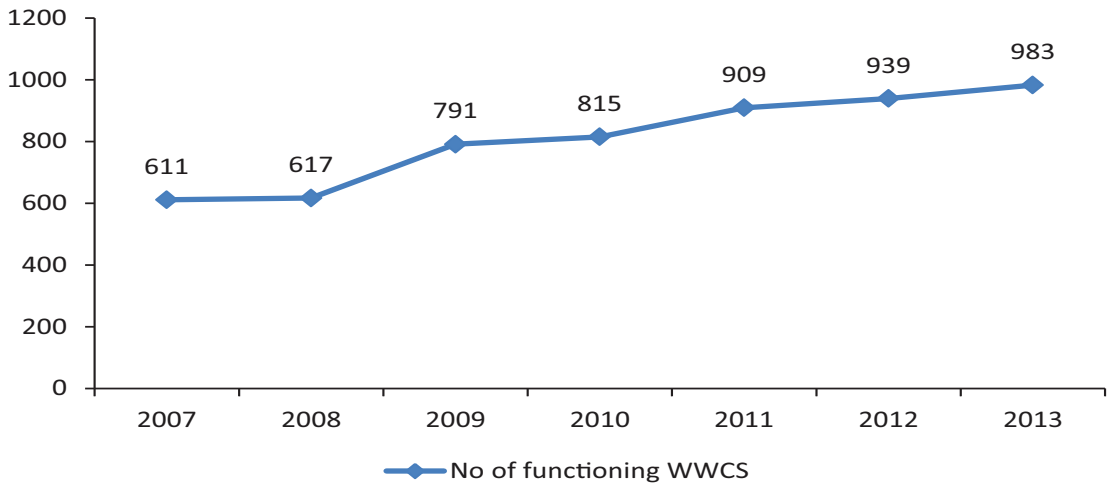
Well Woman Clinic (WWC) services were incorporated into the Family Health Programme in 1996. The aim was to screen peri menopausal women for reproductive illnesses. These included breast and cervical malignancies and non-communicable diseases; diabetes, hypertension. Obtaining cervical smears for cytology (PAP test), breast examination, testing urine for sugar and blood pressure measuring are being done for this. At its inception, women over 35 years were considered as the principal target group of WWCs. In 2007 focus of pap smear taking was changed to women at 35 years of age considering the epidemiological evidence of cervical cancer occurrence. Since that year, the PHMs are specifically supposed to recruit the women in 35-year age cohort in their area for WWC screening. However, the screening was not restricted to this cohort.

WWCs are held fortnightly or once a month. Trained Medical Officers screen the women attended the clinic for the above conditions. The identified problems are referred to appropriate centres in the health system. The follow up is carried out by area PHM.

11.1.1 Number of WWCs

Number of WWC has increased by 372 over 2007 to 2013 period. In 2013, there were 983 WWCs functioning throughout the MOH

Figure 58: Number of WWC from 2007 to 2013



divisions of the country. Figure 58 shows the trend in number of WWCs since 2007 to 2013.

11.1.2 Target population coverage

Though, the focus of target population of cervical cancer screening changed to 35 year age cohort in 2007, still women in wider age group obtain this service from WWC clinics. Table 20 and Figure 59 present the numbers and percentages of women participating WWCs by age groups for the first time respectively.

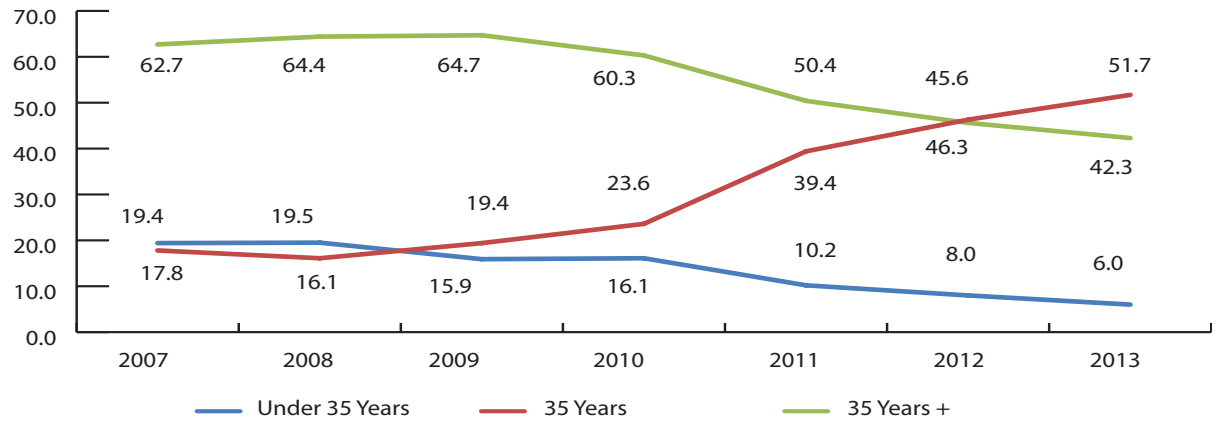
The target population of WWCs principally towards the 35-year age cohort has begun to take place. In year 2013, out of total attendees proportion of 35 year age cohort attending clinic (51.7%) has exceeded that of above 35 years (42.3%).

According to its new focus, the percentage of women in 35 year age cohort who were screened in WWCs for cervical malignancy with Pap smear becomes one of the main indicators of the WWC program coverage. Figure 60 presents the percentage coverage of 35 year age cohort with Pap smear in WWCs since 2007 to 2013.

Table 20 : Number of women attending WWCs for the first time since 2007 to 2013 by age groups

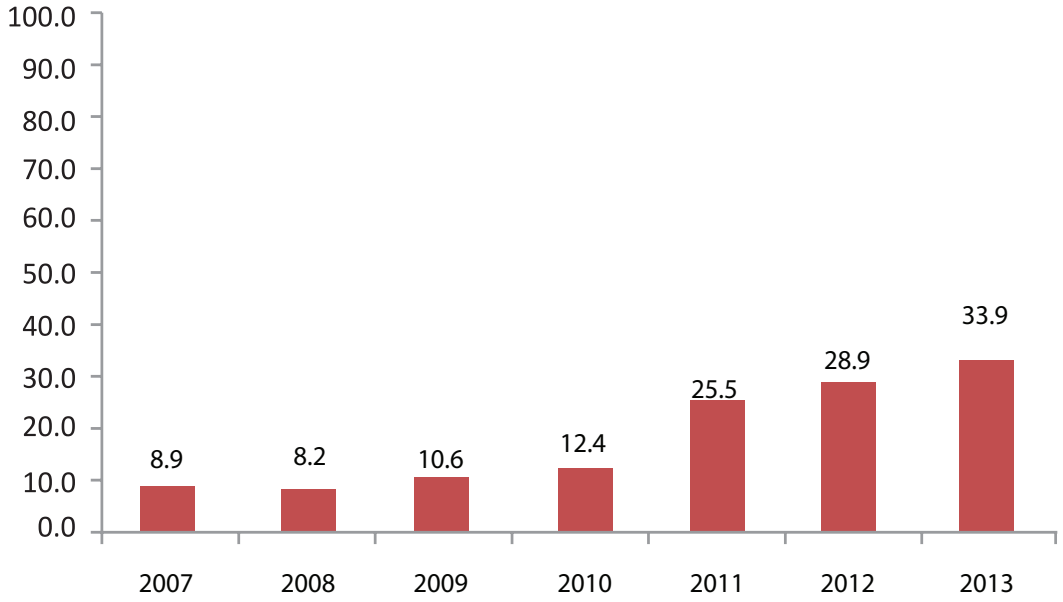
Indicator	2007	2008	2009	2010	2011	2012	2013
Under 35 Years	20320	21818	18517	18281	14402	10884	8585
35 Years	18669	17948	22490	26762	55413	62833	73359
35 Years +	65665	72023	75127	68319	70841	61872	60054
Total	104654	111789	116134	113362	140656	135589	141998

Figure 59 : Percentages of women attending WWCs in different age groups from 2007 to 2013



A gradual increase is seen from 2007 to 2013 in the percentage coverage of screening 35 year age cohort for cervical malignancy in WWCs. One percent of the population is considered as the target for this calculations. Only 33.9% of the national 35 year age cohort was subjected to screening in WWCs in 2013. This coverage ranged from 1.5% in Vavuniya to 63.9% in Ampara RDHS area (Annexure 8). However, the screening coverage of target

Figure 60 : Percentage of 35 year age cohort screened with Pap smear in WWCs since 2007



group was less than twenty percent in 05 out of 28 health areas under concern.

11.1.3 Screening Services at WWC

A group of 152,685 women attended WWCs around the country in 2013. Of them 141,998 were first visits. Figure 62 shows the percentages of women who are subjected to different types of examinations when they attended WWCs.

More than 97% of women attending WWCs were screened for Hypertension and breast problems. Only 90.2% women had their cervices examined visually and 86.7 % had Pap smears taken. Hypertension was found among 3.7 % of women while 2.0 % of them were identified having Diabetics.

In 2013, 132,389 pap smears were taken in WWCs throughout the country. Of them 2.2% was identified as unsatisfactory smears while 0.4% had a diagnosis (LSIL (n=269), HSIL (n=62), Glandular (n=22), ASCUS (116), Malignancies (N=56)).

Figure 61 : Percentage of 35 year age cohort subjected to pap smear testing 2013

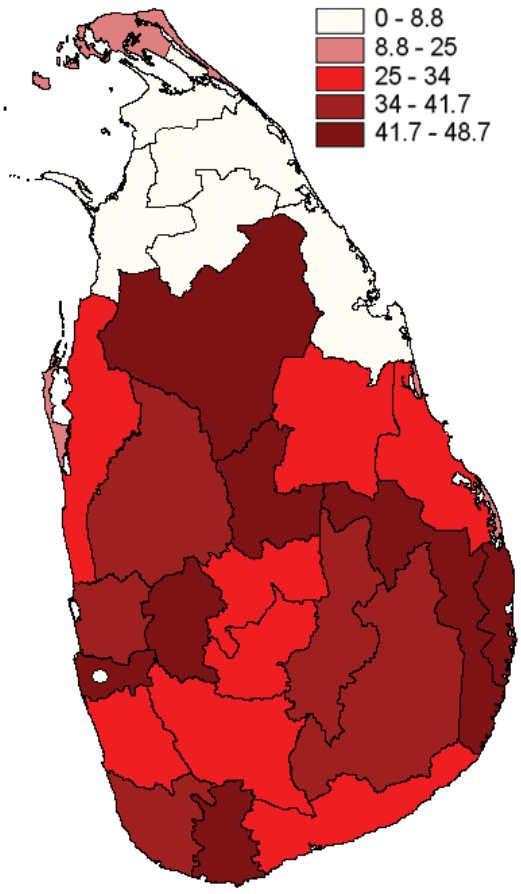
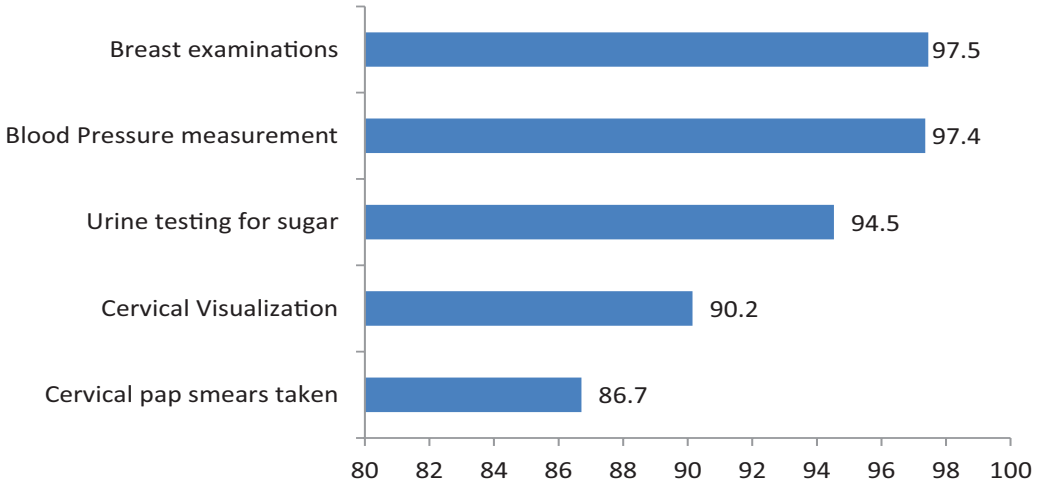


Figure 62 : Percentage of women screened for different non- communicable diseases at WWC 2013



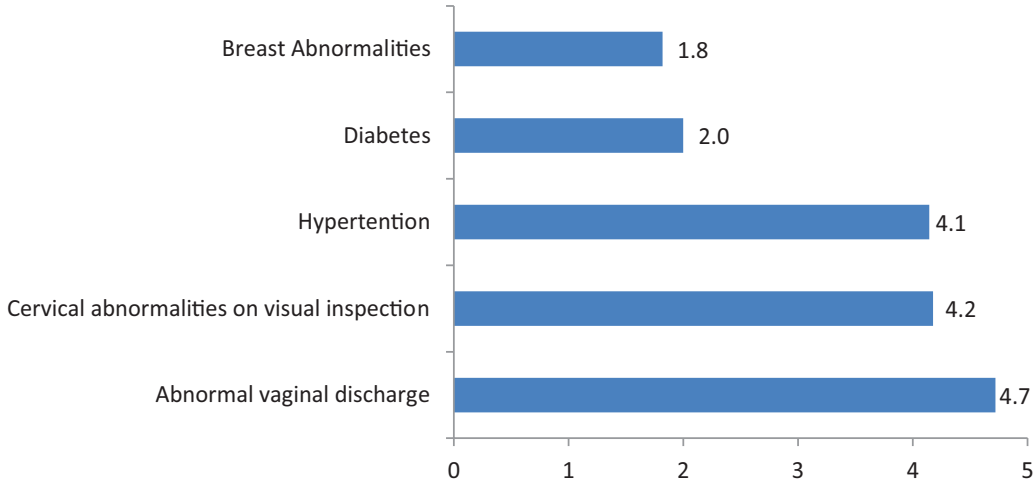
11.2 Care for women with special needs

There is an important group of women with special needs, who do not have access to the routine reproductive health services, but requiring special attention and care. This group includes institutionalized women, migrant women, displaced and marginalized women etc. A programme has been developed to address the reproductive health issues of migrant women and their family members, and this programme will be implemented in the field by the primary health care team.

11.3 Health Sector Response to Gender-Based Violence (GBV)

Establishment of Gender-based Violence (GBV) care centres by the name of "Mithuru Piyasa" at state hospitals, which provides

Figure 63 : Percentage of women with positive screening 2013



essential services for GBV survivors was a major step taken towards addressing Gender-Based Violence. The term “Mithuru Piyasa” in Sinhala means “Friendly Haven” and was selected after much thought, and the aim is to establish such centres in all the state hospitals throughout the island.

Also, the primary health care teams are trained on their roles and responsibilities on prevention and management of GBV. On this aspect, the team members are sensitized on gender issues and gender stereotyping and creating awareness among individuals, families and the community as a whole on these issues so as to prevent or minimize such issues, which would lead to the prevention of gender based violence. Further, the team members are trained on identifying GBV survivors and providing befriending services and referring them for other services. etc.

12 Oral Health Services

Since 2007, an Oral Health component was integrated into the Family Health Programme and the services are delivered through Maternal and Child Health and School Health services. Advocacy for policy formulation, provision of technical expertise and national level monitoring and evaluation also comes under Oral Health Services.

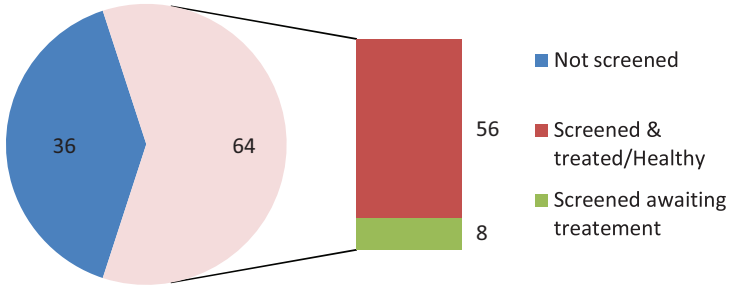
An outline of the activities carried out by the unit in the year 2013 is as follows;

and all students below the age of 13 years in schools with less than 200 students.

SDCs are mainly situated in primary schools and it provides services for the base school as well as for other satellite schools in the vicinity. Out-reach clinics are conducted by the SDTs to cover schools in remote areas.

School Dental Therapists work under the administrative supervision of MOH. But their technical supervision and coordination of the

Figure 64 : Percentage coverage of target population by SDTs 2013



12.1 School Dental Services (SDS)

The main objective of the School Dental Services is to reduce morbidity due to common oral diseases in preschool and school children between the ages of 3-13 years by provision of oral health care services with emphasis on prevention.

The services are delivered by the School Dental Therapists (SDTs) who work in School Dental Clinics (SDCs). At present around 380 School Dental Therapists (SDTs) are in service. Their target group includes students of grades 1, 4 and 7 in schools with more than 200 students

service within the districts are carried out by the Regional Dental Surgeons (RDSs) and the Supervising School Dental Therapists (SSDTs).

12.1.1 Work performances of the School Dental Services —2013

The 380 SDTs in the country could screen 64% of the total children in the target group. Of the target group, 56% of children were identified as either healthy or their dental problems were successfully treated by SDTs. Therefore the unmet need in terms of screening and those awaiting treatment after screening is around 44% of the target group (Figure 64).

Table 21 : Provision of oral health care services to antenatal mothers – 2012 and 2013

Year	Number of SDTT	Number of children per SDT	% of schools screened	% of caries				% of calculus			% of children screened[2]	Coverage perce-ntage[3]
				Gr 1	Gr 4	Gr 4[1]	Gr 7[1]	Gr 1	Gr 4	Gr 7		
2012	393	3085	63%	57%	61%	9%	20%	3%	15%	23%	65%	56%
2013	380	3323	62%	57%	59%	10%	19%	2%	15%	22%	64%	56%

[1] Permanent teeth

[2] Percentage of children screened out of the target group

[3] Percentage of children who are healthy & whose treatment has been completed out of the target group

Percentage of target children screened in each district is given in Figure 65.

Stated above in Table 21 is the summary of the annual statistics of the School Dental

Figure 65 : Percentage of students screened by School Dental Therapists 2013

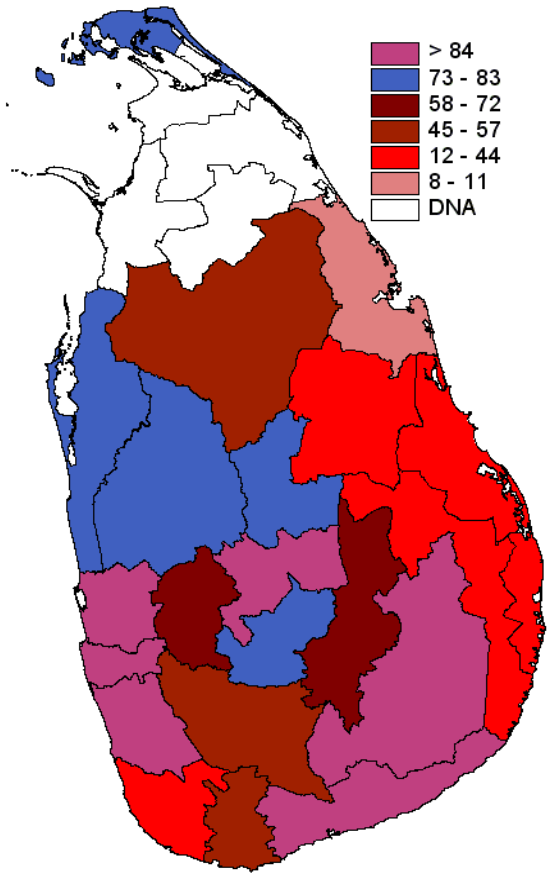
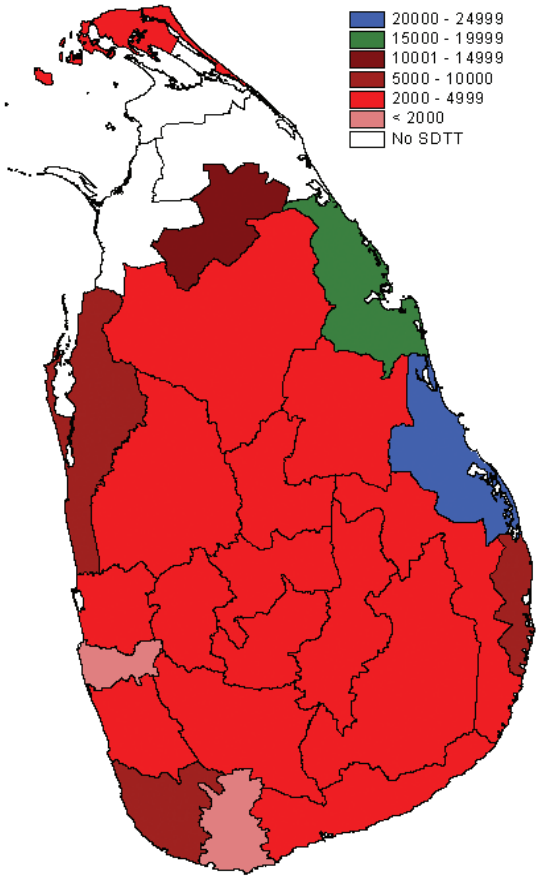


Figure 66 : SDT : Student ratio 2013



Service submitted by SDTs for 2012 & 2013. It shows that the disease pattern of school children remains same. However, the dental caries percentage of permanent dentition has been increased from grade 4 to grade 7 by 11% in 2012 has changed to 9% in 2013, which is a marginal improvement. However, the increase of caries in permanent dentition from Grade 4 to Grade 7 is still considered as a weakness of the programme, and is needed to be addressed in future. Gum diseases too show an increasing trend with age.

Reduction of SDTs in 2013 compared to 2012 was mainly due to retirement of SDTs, and those vacancies were not replaced as there were no new recruitments. Mal-distribution of SDTs within & between districts, inadequate transport facilities to conduct outreach clinics, inconsistencies in workload of SDTs and problems of identification of oral diseases by the SDTs are main challenges faced by the School Dental Services.

12.2 Provision of Oral health Care services to Antenatal Mothers

Oral health care services to antenatal mothers was introduced to the FHP in the year 2009 with an objective of improving the oral health of mothers and young children by providing comprehensive care during the prenatal and antenatal periods, in order to reduce;

- Complications of dental diseases during pregnancy
- The risk of transmission of 'harmful' bacteria to the newborn (to minimize the risk of Early Childhood Dental Caries)

To achieve the above objectives, it is expected that all antenatal mothers should receive oral health education at ANC, compulsory dental screening and necessary clinical management of existing oral diseases.

Percentage of registered pregnant mothers screened by Dental Surgeons was increased from 36% in 2012 to 41% in2013. Out of the screened mothers percentage of mothers with healthy dental hygiene, has reduced from 21% to 18%. Of the screened 58% had dental caries and 38 % had gum diseases (Table 22). Reporting of dental diseases was done through the report sent by the DSs based on the clinic attendees. Reluctance of the DSs (especially in the central ministry hospitals) in providing timely returns and inability to get the proportion of mothers receiving oral health care through the private sector are issues of concern when reporting data.

Table 22 : Provision of oral health care services to antenatal mothers —2012 and 2013

Year	Percentage screened[1]	Percentage Healthy[2]	Percentage with Caries[2]	Percentage with Gum Disease[2]	Treatment Coverage
2012	36	21	56	41	22
2013	41	18	58	38	22

[1] of all mothers registered

[2] of number of mothers screened by DSS

Figures given in Table 22 may reflect an underestimation of the screening percentage and an overestimation of disease prevalence since those calculations were done for the mothers who registered with PHM and for mothers who attended dental clinics respectively.

Inability to obtain an accurate assessment of population coverage of dental screening and prevalence of dental problems are main challenges for monitoring the programme. Including an 'oral health section' in the pregnancy record to elicit the percentage of antenatal mothers who get an oral screening done is proposed to overcome this problem.

12.3 Oral health care for infants and early childhood

It has been identified high burden of dental caries among children under 3 years. Hence it is planned to address this issue in the next year by introducing a screening programmes for infants and young children.

13 Milestones of Family Health Programme and Progress of activities 2013

Several important activities related to Family Health Programme were carried out during 2013 strengthening the programme further, focusing on quality assurance.

13.1 Maternal Care

1. Report of the national need assessment survey on emergency obstetric and Newborn care was completed. Based on the findings FHB has taken action to mobilize resources to strengthen maternal care services in the country.

2. Implementation of revised maternal care package with staff training was completed in all provinces.

3. National guidelines on management of obstetric conditions: normal labour, induction of labour, Management of Pregnancy induced hypertension, Post-partum Haemorrhage and Management of Diabetes in pregnancy were developed and disseminated in collaboration with Sri Lanka college of Obstetricians and Gynaecologists.

4. Ensure regular conduct of Technical Advisory Committee on maternal care and family planning.

5. Priority stations were identified to appoint consultant obstetricians to ensure 24x7 service for emergency obstetric care.

13.2 Newborn Care

1. In collaboration with Lady Ridgeway hospital and professional bodies a newborn transfer system was piloted.

2. Newborn Screening for Congenital Hypothyroidism already initiated in the Southern Province was extended to the Monaragala, Kalutara and Ratnapura districts. Funds allocated to strengthen laboratory services at the Medical Research Institute, for screening for congenital hypothyroidism to all the districts in the country.

3. Ensure regular conduct of Technical Advisory Committee on newborn and child Health.

4. Facilities in 39 hospitals to provide neonatal care including Newborn corners, Special care baby units, Neonatal intensive care units improved. Infrastructure facilities improved and equipment provided.

13.3 Child Health - Child Nutrition

1. Close monitoring of Sri Lanka Code for the Promotion, Protection and Support of Breast Feeding and Marketing of Designated Products was ensured with regular meetings of the monitoring committee chaired by Secretary Health.

2. Regular conduct of Maternal and Child Nutrition Subcommittee meetings.

3. Conduct of update on Nutrition month based on the theme for year 2013 **"A healthy nation through proper nutrition"** focusing on prevention of non communicable diseases through proper nutrition highlighting the important role played by the Maternal and Child

Health Programme in the primordial and primary prevention of NCDs.

4. The national strategic document on Infant and Young Child Feeding was developed and the final draft were circulated among all stakeholders to get the consensus. This will guide to streamline and strengthen programmes for promotion of child nutrition.

5. Printing of training manuals on Growth Monitoring (WHO new growth standards) and the Child Health Development Record (CHDR).

6. Procurement of anthropometric equipment for the establishment of nutrition clinics in MOH areas.

13.4 Child Health - Child Development and Special Needs

1. Initiation of revision of the early child care and development package along with the IEC materials and strategic approaches.

2. Development of early child care development standards to screen children at community level by parents was completed.

13.5 School Health

1. Collaborative field services were initiated with the National Child Protection Authority for provision of child protection and counseling services at MOH offices.

2. Ensure regular conduct of working group meeting on School Health.

3. Weekly iron folate supplementation programme for grade 7 to 10 students was expanded to cover all school students from grades 1 to 13 since 2013 to prevent anaemia. Along with this antihelminthic treatment is given to all school children annually to reduce the worm load in view of improving health and nutritional status of school children.

4. Curriculum was revised and developed a new curriculum together with Ministry of Education and National Institute of Education.

5. Assisted the director / primary education at Ministry of Education to develop child friendly schools.

6. Psycho social guide for carers of adolescents is being edited.

13.6 Adolescent Health

1. Establishment of Technical Advisory Committee on Health of Young Persons under the chairmanship of DGHS and regular conduct of meetings.

2. Conducted a stakeholder workshop to explore service delivery models reaching out of school young persons.

3. National Strategic Plan on Adolescent Health (2013-2017) was finalized to guide the districts and other stakeholders to develop their plans on improving adolescent health.

4. Completion of the “National Youth Health Survey” which explored health problems among youth of 15-24 years.

5. Capacity building of counseling assistants attached to Social Service Ministry on Adolescent health.

6. Capacity building of instructors attached to Youth Corps, Ministry of Youth Affairs on Adolescent health.

7. Provincial Reviews and Advocacy meetings on Adolescent health in Central province, Western Province, Kurunegala district.

8. Printing of leaflet for adolescents on Weekly Iron Supplementation.

13.7 Family Planning

1. A special project was initiated in collaboration with Sri Lanka college of Obstetricians and Gynecologists and South Asian Federation of Obstetrics and Gynecologists on "Post partum insertion of IUD". This project was initiated in 12 teaching and Provincial General Hospitals. Contraceptive commodities and necessary equipment and supplies were provided to required Family planning clinics through GoSL funds.

2. Developed an advocacy material on family planning.

3. Reviewed and revised the existing family planning IEC material.

4. Revised and reprinted the WHO Medical Eligibility Criteria (MEC) wheel adapted for Sri Lanka.

5. Revised the formats to notify and investigate adverse events following contraceptive usage and initiated piloting of the newly developed formats.

6. Developed a format to investigate contraceptive failures and initiated piloting of the newly developed format.

7. Reviewed and updated the Reproductive Health Commodity Security (RHCS) plan.

8. Developed a family planning clinic supervision check list.

9. Established new clinics and provided equipment to the already established clinics according to the identified norms and ensured the regular distribution of contraceptives to all districts.

13.8 Women's Health including pre pregnancy care

1. Two workshops were held at Pegasus Reef Hotel, Wattala and Mahaweli Reach Hotel, Kandy for sharing experiences among Mithuru Piyasa Staff.

2. One review was held for cyto screeners to discuss their issues and problems.

3. An award ceremony was held to reward for best performance in well woman clinic programme.

4. Mithuru Piyasa' centres were established and launched at B/H Mullaitivu, B/H Kilinochchi, Kethumathie Maternity Hospital Panadura, B/H Avissawella, De Soyza Maternity Hospital and Castle Street Hospital for Women.

5. Tamil translation of "Soduru Keddallakata Suwahasak Subapathum" was printed focusing on creating awareness of the newly married couples on how to lead a happy married life. Pre conception care programme implemented in 14 districts of the country.

13.9 Oral Health

1. Conducted School dental review meetings: 05 District and 02 National meetings.

2. Production and distribution of IEC materials (with TOT programme)

3. Development of two wall charts on oral health care for early childhoods (one set for each PHM, SDTs & Dss)

4. Development of booklet on oral healthcare for pregnancy and early childhood (one for each PHM, and MOHs)

5. Essential oral health messages for infants and young children were developed and included into CHDR. A hand book, IEC materials were developed for PHC staff and training programmes conducted to cover all districts.

13.10 Planning, Monitoring and Evaluation

1. Five day program planning work shops for district level planning team was done using adopted version of WHO program planning modules.

2. Records, Registers and Returns of existing Management Information System were revised and newly introduced formats were pilot tested in Gampaha and Matale districts.

3. Maternal and Perinatal Information System for Maternity Care Institutions was developed, pilot tested in several hospitals where maternity units are functioning. Revised records are being piloted in a major Maternity Hospital (De Soyza Maternity Hospital—ward 3 and 15) introducing Obstetric module to eIMMR. Newborn care model is being developed currently.

4. Ensure regular conduct of National Steering Committee meeting on Family Health.

5. National MCH reviews were conducted in all districts with the participation of FHB staff. At these reviews performance of every MOH area is evaluated and actions are recommended to address the issues identified.

6. Nutrition Review 2013 was conducted assessing the progress of nutrition related activities conducted by districts.

7. Biannual conferences for Medical Officers of Maternal and Child Health (MO/MCH) were held during 2013. All MOH areas in Batticaloa districts were supervised as an activity during the first conference.

8. Annual review workshops for Regional Supervising Public Health Nursing Officers (RSPHNO) and Programme Planning Officers (PPO/PPA/SSO) were conducted. Review workshop for District Supervising Public Health Inspectors (SPHID) on school Health activities was initiated during 2013

9. Preparation of the Supervision tool to supervise PHIs was done with all relevant stakeholders.

10. Performance Evaluation of the Public health teams was done in a phase wise manner at regional, provincial and national level. Phase one and two of the evaluations were completed in year 2013 under GAVI HSS. Tools developed for the process are available for future used by provincial and regional level assessments.

11. "MCH quarterly" newsletters of Family Health Bureau are sent alone with the feedback report on timeliness and performances to every MOH in each quarter. Annual Report on Family Health 2012 was published.

12. Timely printing and regular distribution of registers, returns and record of Reproductive Health Management Information System Island wide were done.

13. Coordinated undergraduate and postgraduate teaching sessions of FHB and FHB component of in-service training of MOHs conducted by NIHS.

13.11 Maternal and Child Morbidity and Mortality Surveillance

1. During the year 2013, the maternal death surveillance activities were expedited and streamlined with special focus on introducing Confidential Enquiries in to Maternal Deaths (CEMD)

2. Conducting post-mortems on maternal deaths were further strengthened in liaison with Ministry of Justice.

3. All maternal deaths (126) reported from districts of analysed, case scenario developed and National Maternal Mortality Reviews were conducted.

4. Documentation of maternal death review process as a best practice was initiated.

5. Represented at the WHO Multi-country Workshop to develop country road maps to translate the recommendations of the Commission on Information and Accountability (COIA) for Women's and Children's Health. Country Accountability Framework (CAF) assessment on Maternal Death Surveillance & Response (MDSR) was completed.

6. National Foeto-infant death reviews were conducted in Polonnaruwa, Kalutara and Ampara districts.

7. Conducting Perinatal death audits in hospitals with specialized units were reorganized.

8. Preparatory work was done on National Feto-Infant Mortality Review (NFIMR).

13.12 Training programmes conducted and the fund utilization by Family Health Bureau

Family Health Bureau conducts routine training programme to increase the capacity

Table 23 : Source of funding for activities conducted by FHB year 2013

Funding source	Total expenditure (Rs.)
GOSL	211,287,689.00
UNFPA	18,138,246.00
WHO	11,954,777.00
SAARC Development Project	35,131,811.00
UNICEF	6,475,656.00
GAVI-HSS	7,228,545.00

of the public Health staff to perform their tack efficiently. Training and other activities of FHB are being implemented under different funding sources where government of Sri Lanka bearing the cost for main bulk of activities (Table 23). Training programmes conducted and the fund utilization during year 2013 are given in Table 24.

13.13 Family Health Programme related Millennium Development Goals (MDGs)

Sri Lanka was signatory to Millennium Declaration in 2000 and the FHP is geared to achieve the Goals directly related to the programme; Goals 1, 4 and 5. Table 25 gives the indicators used to assess those and the targets set for 2015.

Table 24 : Training Programs conducted by Family Health Bureau - 2013

No	Title of the Programme	No. Of Days	No. of programs done	Category of Participants eg. (PHM, PHI.PHNS etc)	No trained
1	Preconception care - TOT	02	11	All MOH staff	440
2	Essential Newborn care course with Neonatal Advanced life support - TOT	05	04	Pediatricians, VOGs, Medical Officers, Nurses, Midwives	110
3	Breast feeding counseling course -TOT	05	02	Pediatricians, VOGs, Medical Officers, Nurses, Midwives	54
4	Baby friendly Hospital - TOT	03	02	Pediatricians, VOGs, Medical Officers, Nurses, Midwives	55
5	Labor Room Management -TOT	02	01	Labor Room in charge Nurses, MOMCHs	15
6	Infant and Young Child Feeding Counseling - TOT	06	02	Pediatricians, MOMCH, MOH, Tutors, RSPHNO, PHNS, SPHM	63
7	Complementary feeding counseling	02	03	MOs, Sisters, Nurses in hospitals	70
8	Early Child Development and Special Needs programmes	05	16	MOH ,PHNS, PHMs	600
9	Adolescent Health and Life Skills	03	16	MOMCH, MOH, PHNS, SPHI, PHI, Counseling officers of social service Dept, Instructors of Youth Corp, ISA – Education Dpt	480
10	School Health Programme and School Medical Inspection- TOT	02	06	MOH Staff, MOMH	180
11	Insertion of IUDs -TOT	01	04	MOH, MO, PHNS, RMO, NO	46
12	Insertion of implants-TOT	01	05	MOH,MO	57
13	Training Programs (Mithuru Piyasa)	04	06	Hospital staff	260
14	Technical updates for service providers to strengthen hospital based FP	01	06	MOH, MO, NO, PHNS, MOIC	180
15	Training programme in Contraceptive Logistics Management	01	02	OIC, PPO, PPA, Pharmacists	36
16	Gender Based Violence (GBV) TOT	04	02	MOMCH, MOOH, RSPHNO, PHNSS, HEO, SPHMM, SPHI/D, Plantation sector	80
17	Public Health Officers on Oral Health - TOT	01	23	MOMCH, MOHs, PHNS/O, SSDT, SPHM , PHM	567
18	Programme planning	05	02	Provincial CCPs ,MOMCH, MO Planning, RE,	50
19	Training on Supervision	03	03	Provincial CCPs, MOMCH, MOH, RSPHNO, PHNS, SPHM	180
20	MLTT training	05	01	MLTTS	40
21	Migrant Health-TOT	01	01	MOMCH, MOOH, RSPHNO, PHNSS, HEO, SPHMM, SPHI/D	40

Table 25 : Targets for Millennium Development Goals 1, 4, and 5

Goal		Target	Indicator	Baseline	Current	Target (2015)
Goal 1	Eradicate extreme poverty and hunger	1C: Halve, between 1990 and 2015, the proportion of people who suffer from Hunger	Prevalence of underweight children under age 5 (%)	38 %	26.9 %(NCHS) 2 21.1% (WHO) (2006/7)	19%(NCHS) 15% (WHO)
Goal 4	Reduce Child Mortality	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	Under-five Mortality rate (Per 1000 live births)	(NCHS)(1993)	12.1 (2009)[1]	8.0
			Infant Mortality rate Per 1000 live births)	22.2 (1991)	9.7(2009)[1]	6.0
			Proportion of 1 year-old children immunized against measles	17.7 (1991)	97.2% (2006/7)[2]	100%
Goal 5	Improve Maternal Health	5A : Reduce Maternal Mortality	Maternal Mortality ratio (per 100,000 live births)	84 % (1990)	37.7 (2012)[3]	23.0
			Proportion of births attended by skilled health personnel	92 (1990)	98%(2006/7)[2]	99%
		5B : Achieve, by 2015, universal access to reproductive health	Contraceptive Prevalence rate	94%(1993)		
			Modern Method		52.5% (2006/7)[2]	57%
			Any Method		68% (2006/7)[2]	72%
			Adolescent birth rate (ASFR 15-19)	45% (1993)	28 per 1000 women (2007)[2]	24
			Proportion of Teenage pregnancies	66%(1993)	5.3% (2013)[3]	5%
			Antenatal care coverage	35 (1993)		
			At least one visit		96% (2006/7)[2]	100%
			4 or more		93%(2006/7)[2]	100%
			Unmet need for family planning		7.4.% (2006/7)[2]	7.0%

Source: [1] Registrar General's Department

[2] DHS 2006/7

[3] Family Health Bureau

Annexure 1 : Population, birth rates, eligible families, pregnant mothers, reported number of deliveries and first antenatal clinic visits by health district 2013

RDHS/Health Area	Population	Birth Rate	Estimated eligible families	Eligible families registered by PHMs		Estimated Births	Estimated pregnancies (Births × 1.1)	Pregnant mothers registered by PHM (out of estimated pregnancies)		Number of first antenatal clinic visits	Number of reported live births	Number of reported live births
				No.	%			No.	%			
Colombo	1721720	16.1	275475	280664	101.9	25531	28084	26779	95.4	25030	22099	21684
Colombo M.C	553239	16.1	88518	92087	104.0	8907	9798	8816	90.0	9040	6767	6782
Gampaha	2405381	14.6	384861	393505	102.2	26339	28973	31289	118.8	29994	24805	24833
Kalutara	993540	15.8	158966	164465	103.5	15698	17268	16789	97.2	15797	14951	14996
N.I.H.S	310175	15.8	49628	52111	105.0	4901	5391	6033	111.9	5701	5147	5173
Kandy	1449420	19.6	231907	241864	104.3	28409	31249	28187	90.2	26465	23113	23230
Matale	488091	19.4	78095	92051	117.9	9469	10416	10245	98.4	9642	8746	8738
NuwaraEliya	828555	20.5	132569	130944	98.8	16985	18684	14629	78.3	16442	12171	12196
Galle	1112000	17.1	177920	183441	103.1	18819	20701	18863	91.1	17435	16201	16315
Matara	838986	16.2	134238	137600	102.5	13592	14951	15483	103.6	14390	12749	12774
Hambantota	670600	20.7	107296	110604	103.1	13881	15270	12976	85.0	12076	10204	10465
Jaffna	578904	17.3	92625	90906	98.1	10015	11017	10435	94.7	8997	8822	8804
Kilinochchi	119591	25.5	19135	19484	101.8	3050	3355	2216	66.1	1972	1963	1962
Mannar	137780	19.5	22045	17540	79.6	2687	2955	2118	71.7	2152	1667	1645
Vavuniya	177660	20.3	28426	27723	97.5	3606	3967	3506	88.4	3239	3016	3023
Mullaitivu	112214	11.9	17954	16984	94.6	1335	1469	2107	143.4	1974	1625	1620
Batticaloa	563317	20	90131	93915	104.2	11266	12393	10983	88.6	10475	9998	10015
Ampara	277337	22.6	44374	51058	115.1	6268	6895	5219	75.7	4931	4535	4548
Kalmunai	443510	22.6	70962	74032	104.3	10023	11026	9399	85.2	8948	8229	8135
Trincomalee	396179	20.8	63389	71338	112.5	8241	9065	9228	101.8	8226	7299	7430
Kurunegala	1737957	17	278073	299943	107.9	29545	32500	30652	94.3	28538	26533	26712
Puttalam	840200	21.1	134432	148859	110.7	17728	19501	16336	83.8	15119	13729	13760
Anuradhapura	961779	19.3	153885	180632	117.4	18562	20419	19572	95.9	18488	15957	15989
Polonnaruwa	464398	18.6	74304	89134	120.0	8638	9502	8639	90.9	8198	7056	7070
Badulla	904785	18.7	144766	151487	104.6	16919	18611	16727	89.9	15774	14376	14519
Monaragala	516793	19.6	82687	91205	110.3	10129	11142	10577	94.9	10308	8912	9039
Ratnapura	1193152	18.5	190904	194419	101.8	22073	24281	20161	83.0	19506	16895	16920
Kegalle	837974	16.3	134076	149098	111.2	13659	15025	15419	102.6	14671	13378	13513
Sri Lanka	**21635237**	**17.9**	**3461638**	**3647093**	**105.4**	**387271**	**425998**	**383383**	**92.1**	**363528**	**320943**	**321890**

Annexure 2 : Indicators of field antenatal care and percentage of pregnant women protected by rubella vaccine 2013

RDHS/Health Area	% Pregnant mothers registered before 8 weeks	% Pregnant mothers registered 8-12 weeks	% Teenage pregnant (less than 20 Yrs) mothers registered	% of Primies registered	% Pregnant mothers P5 and above registered	% Registered pregnant mothers protected for Rubella	% Antenatal mothers having the first home visit	Average antenatal home visits by PHM	Mothers protected with T.T. at delivery	Mothers tested for Grouping Rh at delivery	Mothers tested for VDRL at delivery
Colombo	70.3	19.1	4.2	41.2	1.8	97.3	81.9	3.5	100.0	100.1	100.3
Colombo M.C	44.1	33.9	6.1	33.7	4.4	87.7	74.7	3.3	100.0	99.9	99.9
Gampaha	74.2	16.1	4.0	37.4	2.2	97.6	82.5	4.1	99.4	99.5	99.4
Kalutara	76.2	17.0	4.6	34.2	2.3	99.0	88.8	4.2	99.6	99.8	99.6
N.I.H.S	82.6	13.1	4.2	30.6	3.9	98.8	95.0	3.7	99.9	100.0	99.9
Kandy	72.4	20.1	4.2	31.5	2.9	97.0	90.8	4.1	99.9	99.5	99.9
Matale	81.1	15.0	5.5	32.0	2.3	99.1	94.4	4.6	100.0	100.0	99.9
NuwaraEliya	59.8	28.2	5.1	29.9	2.7	97.0	93.7	5.7	99.6	99.6	99.5
Galle	80.0	15.3	4.8	35.0	2.3	97.9	93.0	4.3	100.3	100.4	100.3
Matara	84.7	12.3	4.6	31.2	3.1	98.1	96.6	4.9	99.9	99.9	99.8
Hambantota	85.1	12.4	5.3	31.0	2.6	99.1	97.3	4.7	101.9	101.9	101.9
Jaffna	84.9	11.4	3.0	33.8	3.2	98.0	100.2	8.3	99.7	99.7	99.6
Kilinochchi	64.2	26.3	7.4	31.9	4.6	93.7	98.7	7.1	99.6	99.5	98.2
Mannar	65.6	24.6	4.5	30.2	6.5	77.7	100.2	5.6	99.2	99.4	99.4
Vavuniya	53.1	29.5	7.3	31.5	6.2	86.4	88.6	4.7	99.6	99.7	99.4
Mullaitivu	60.1	28.4	7.6	29.1	5.4	91.3	104.7	6.0	99.8	99.8	99.8
Batticaloa	73.8	19.2	9.4	34.2	4.7	93.9	97.4	4.6	100.0	100.0	94.6
Ampara	83.1	12.8	5.8	32.3	1.8	99.0	93.5	4.0	100.0	100.0	99.9
Kalmunai	81.5	14.7	6.2	32.9	5.4	91.0	96.1	5.2	99.3	99.3	99.3
Trincomalee	67.7	23.2	9.8	31.3	6.8	87.1	93.6	4.2	99.8	99.9	99.8
Kurunegala	85.1	11.2	4.1	32.8	2.1	99.3	96.4	4.6	100.1	100.1	100.1
Puttalam	75.9	17.7	8.4	32.2	3.8	98.0	93.1	3.8	99.5	99.5	98.2
Anuradhapura	78.6	15.8	6.4	30.5	2.4	99.4	94.8	4.7	99.9	100.0	99.9
Polonnaruwa	78.0	15.9	5.3	32.0	2.3	99.1	92.6	4.8	99.5	99.5	99.5
Badulla	75.9	19.3	6.1	31.0	2.3	96.6	90.0	5.0	99.9	99.9	99.6
Monaragala	83.4	13.4	5.7	29.8	2.5	99.0	96.6	4.5	100.7	99.8	100.7
Ratnapura	70.5	22.6	6.1	34.1	2.2	97.6	86.9	4.0	99.9	99.9	99.9
Kegalle	73.7	20.9	4.5	32.5	2.4	98.4	87.9	4.6	100.3	100.4	99.5
Sri Lanka	**75.4**	**17.7**	**5.3**	**33.3**	**2.8**	**97.0**	**91.3**	**4.5**	**99.9**	**99.9**	**99.7**

Annexure 3 : Indicators of clinic care, ante-natal screening, status of BMI, and anaemia by health district 2013

RDHS/Health Area	% of registered mothers attending clinics at least once	Average number of clinic visits by a mother	VDRL clinics available	% of clinic attendees (ANC) screened for VDRL	% of mothers with reactive VDRL	% of clinic attendees (ANC) anaemic out of FV	% of clinic attendees (ANC) tested for blood grouping & Rh	% of mothers BMI measured	% of mothers with BMI less than 18.5	% of mothers with BMI more than 25
Colombo	93.5	5.3	58	10.6	0.00	2.3	5.5	76.0	20.5	20.9
Colombo M.C	102.5	5.0	60	89.8	0.07	17.3	45.6	68.5	16.5	31.8
Gampaha	95.9	5.6	98	45.6	0.02	4.1	3.9	81.5	19.8	20.9
Kalutara	94.1	6.1	48	23.1	0.03	5.8	20.5	83.7	20.8	19.6
N.I.H.S	94.5	5.8	36	59.1	0.04	1.6	21.4	85.4	16.9	26.0
Kandy	93.9	6.2	312	75.4	0.02	9.6	30.7	84.2	20.2	17.1
Matale	94.1	6.6	117	85.3	0.05	10.0	34.3	90.0	22.8	16.5
NuwaraEliya	112.4	6.6	137	59.4	0.07	5.7	28.6	74.8	23.5	12.6
Galle	92.4	7.1	47	30.4	0.04	5.9	6.8	84.1	25.0	13.4
Matara	92.9	7.4	91	62.4	0.00	2.5	35.1	88.3	27.5	12.6
Hambantota	93.1	7.2	66	57.1	0.15	8.0	35.4	88.0	26.4	14.0
Jaffna	86.2	8.0	6	29.3	0.01	16.1	15.6	83.5	21.5	18.0
Kilinochchi	89.0	6.7	5	51.9	0.05	50.1	33.7	84.2	28.7	15.5
Mannar	101.6	6.2	1	49.2	0.00	14.3	53.8	84.9	22.7	19.0
Vavuniya	92.4	10.1	0	0.0	0.00	18.3	0.1	73.3	23.5	18.9
Mullaitivu	93.7	6.5	0	22.2	0.00	28.0	33.4	87.2	27.6	14.4
Batticaloa	95.4	6.4	130	83.4	0.04	17.2	53.8	85.5	20.5	18.2
Ampara	94.5	7.2	37	4.2	0.00	14.6	7.5	89.3	27.8	14.1
Kalmunai	95.2	6.9	47	77.3	0.00	19.7	50.0	86.1	16.0	22.7
Trincomalee	89.1	7.2	76	16.9	0.00	5.8	10.6	74.2	20.5	20.5
Kurunegala	93.1	7.2	93	81.0	0.12	15.3	35.3	86.5	23.8	16.1
Puttalam	92.6	6.4	49	99.4	0.02	11.4	46.1	83.1	21.6	21.3
Anuradhapura	94.5	7.6	141	83.1	0.05	6.8	32.7	84.2	24.7	16.0
Polonnaruwa	94.9	6.9	101	97.8	0.00	30.3	46.7	78.1	26.8	18.3
Badulla	94.3	7.1	8	58.8	0.14	4.2	21.8	84.5	25.3	10.2
Monaragala	97.5	7.0	9	93.5	0.24	12.1	55.6	91.2	26.4	14.3
Ratnapura	96.8	6.7	30	75.8	0.02	6.3	38.1	80.4	28.2	12.8
Kegalle	95.1	6.4	37	46.5	0.06	19.0	19.3	87.0	25.1	16.5
Sri Lanka	**94.8**	**6.6**	**1840**	**59.2**	**0.05**	**9.8**	**27.3**	**83.1**	**23.0**	**17.2**

Annexure 4 : Natal care 2013

RDHS/Health Area	% of institutional deliveries out of total reported deliveries	% of home deliveries out of total reported deliveries	% LSCS out of total reported deliveries	% of untrained deliveries out of total reported deliveries	% of deliveries reported out of total estimated pregnancies	% of deliveries reported out of total registered pregnancies
Colombo	100.0	0.02	38.1	0.01	78.7	82.5
Colombo M.C	100.0	0.01	24.9	0.01	69.1	76.8
Gampaha	100.0	0.02	38.2	0.01	85.6	79.3
Kalutara	99.9	0.07	35.9	0.03	86.6	89.1
N.I.H.S	100.0	0.04	37.9	0.02	95.5	85.3
Kandy	99.9	0.10	32.6	0.07	74.0	82.0
Matale	99.9	0.07	35.3	0.06	84.0	85.4
NuwaraEliya	99.5	0.47	21.7	0.32	65.1	83.2
Galle	100.0	0.04	31.8	0.04	78.3	85.9
Matara	99.9	0.05	32.9	0.03	85.3	82.3
Hambantota	100.0	0.02	29.7	0.02	66.8	78.6
Jaffna	99.8	0.17	28.0	0.10	80.1	84.5
Kilinochchi	99.5	0.51	13.2	0.25	58.5	88.6
Mannar	99.9	0.06	21.9	0.06	56.4	78.7
Vavuniya	99.6	0.43	23.3	0.43	76.0	86.0
Mullaitivu	99.8	0.18	14.2	0.12	110.6	77.1
Batticaloa	99.7	0.30	20.4	0.24	80.7	91.0
Ampara	100.0	0.04	25.8	0.02	65.8	86.9
Kalmunai	99.9	0.09	33.5	0.07	74.6	87.6
Trincomalee	99.7	0.30	19.9	0.22	80.5	79.1
Kurunegala	99.9	0.06	33.3	0.05	81.6	86.6
Puttalam	99.9	0.12	33.4	0.11	70.4	84.0
Anuradhapura	99.9	0.08	24.9	0.04	78.1	81.5
Polonnaruwa	99.9	0.06	32.5	0.04	74.3	81.7
Badulla	99.9	0.10	24.3	0.07	77.2	85.9
Monaragala	99.8	0.17	27.7	0.16	80.0	84.3
Ratnapura	99.9	0.10	30.2	0.07	69.6	83.8
Kegalle	99.9	0.10	36.6	0.07	89.0	86.8
Sri Lanka	**99.9**	**0.10**	**31.1**	**0.08**	**77.1**	**83.7**

Annexure 5 : Indicators of post natal care: post natal visits, Vitamin A supplementation, post natal complications by districts 2013

RDHS/Health Area	% of mothers receiving the 1st post natal visit within the 1st 10 days out of reported deliveries	% of mothers receiving the 1st post natal visit within the 1st 10 days out of estimated births	Average number of post natal visits within first 10 days	% of postnatal visits to the mother around 42 days	% of mothers receiving Vitamin A mega dose for reported deliveries	% of estimated mothers who received Vitamin A	% of reported deliveries with post natal morbidities
Colombo	90.7	78.5	1.8	75.9	93.6	73.6	14.4
Colombo M.C	65.1	49.5	1.3	44.2	96.8	66.8	5.4
Gampaha	90.7	85.4	1.6	70.2	93.0	79.6	12.3
Kalutara	90.3	86.0	1.8	79.4	94.5	81.8	11.5
N.I.H.S	93.2	97.9	1.8	78.5	100.3	95.7	5.8
Kandy	93.2	75.8	1.7	73.1	79.2	58.6	10.5
Matale	95.1	87.8	1.7	81.4	94.4	79.3	9.8
NuwaraEliya	94.0	67.4	1.8	88.6	80.2	52.3	9.0
Galle	94.4	81.3	1.8	76.4	87.4	68.4	11.0
Matara	94.9	89.0	1.8	81.2	99.5	84.9	16.6
Hambantota	100.9	74.2	1.9	87.4	88.3	59.0	14.0
Jaffna	99.4	87.5	1.8	82.3	100.9	80.8	10.2
Kilinochchi	93.4	60.1	1.9	92.4	100.8	59.0	3.1
Mannar	89.2	55.3	1.9	83.0	97.9	55.2	4.9
Vavuniya	81.7	68.3	1.6	54.2	97.2	73.9	4.0
Mullaitivu	86.3	105.1	1.8	73.0	110.9	122.7	5.0
Batticaloa	98.5	87.5	1.9	71.7	96.9	78.2	5.6
Ampara	95.4	69.0	1.7	72.3	104.2	68.6	15.8
Kalmunai	91.3	75.0	1.9	84.0	99.0	73.9	13.1
Trincomalee	90.0	79.7	1.7	71.0	87.2	70.2	4.3
Kurunegala	94.8	85.2	1.8	87.2	57.3	46.8	16.1
Puttalam	92.0	71.2	1.7	73.4	61.1	43.0	9.9
Anuradhapura	92.3	79.3	1.7	75.1	85.4	66.7	11.9
Polonnaruwa	91.5	74.8	1.5	77.4	98.1	72.8	13.2
Badulla	85.6	72.7	1.8	78.0	79.3	61.2	7.3
Monaragala	94.4	83.1	1.7	77.8	111.0	88.7	11.4
Ratnapura	92.2	70.6	1.7	68.8	100.1	69.7	13.6
Kegalle	91.1	89.3	1.6	77.1	68.4	60.9	14.6
Sri Lanka	**92.2**	**78.2**	**1.7**	**76.7**	**87.1**	**67.1**	**11.5**

Annexure 6 : Indicators of child care service provision: infant registration, field visits 2013

RDHS/Health Area	% of infants registered by PHM out of estimated births	% of registered infants received at least one field visit after 42 days	Average number of home visits per infant	Average number of weighing per infant	% of estimated infants supplied with vitamin A mega dose at 6 months	% of estimated children supplied with vitamin A mega dose at	
						18 m	3 y
Colombo	92.0	64.4	5.9	8.9	69.2	73.0	77.6
Colombo M.C	84.4	42.0	5.3	5.6	75.7	76.1	74.0
Gampaha	101.5	56.4	6.1	9.8	67.1	70.7	75.2
Kalutara	102.0	63.7	7.4	9.3	77.4	81.7	81.5
N.I.H.S	112.1	71.9	6.1	9.4	106.8	111.1	100.2
Kandy	83.3	65.7	8.1	9.6	66.4	65.2	62.7
Matale	98.0	58.6	9.4	10.6	94.1	90.7	91.5
NuwaraEliya	76.1	73.4	6.7	10.5	51.7	51.7	51.7
Galle	89.2	60.0	8.0	9.7	69.5	69.5	73.1
Matara	97.6	81.7	7.5	10.8	95.2	95.8	100.1
Hambantota	76.9	65.2	13.3	11.0	65.5	64.6	64.8
Jaffna	88.0	69.2	11.7	11.1	82.9	82.4	84.3
Kilinochchi	66.5	69.9	8.5	11.5	74.5	79.1	91.3
Mannar	78.3	18.1	30.5	10.3	71.1	76.4	75.3
Vavuniya	87.0	47.7	4.6	9.2	88.0	89.0	82.5
Mullaitivu	127.8	61.7	11.1	12.0	131.1	144.4	151.9
Batticaloa	90.3	80.0	5.6	10.1	84.5	85.2	86.4
Ampara	72.4	56.8	5.8	10.5	67.8	69.1	73.5
Kalmunai	84.0	81.0	7.0	11.0	85.3	85.9	88.6
Trincomalee	92.5	53.8	7.2	9.2	70.4	78.6	86.4
Kurunegala	91.5	64.6	7.3	10.9	42.9	43.9	44.9
Puttalam	80.2	51.9	5.8	11.0	32.6	32.3	29.8
Anuradhapura	92.1	61.8	7.0	10.0	58.3	66.3	67.5
Polonnaruwa	88.9	55.5	7.3	9.9	91.0	93.9	94.2
Badulla	90.2	68.0	7.7	10.0	66.1	65.3	65.5
Monaragala	93.4	95.2	5.9	10.4	86.9	85.5	82.0
Ratnapura	80.6	54.6	6.8	9.8	70.9	71.5	71.7
Kegalle	101.0	59.9	9.2	9.7	59.4	58.0	58.5
Sri Lanka	**89.0**	**63.9**	**7.4**	**10.0**	**68.9**	**70.7**	**71.4**

Annexure 7 : Nutritional status of infants and children 2013

RDHS/Health Area	% LBW	% moderately underweight infants	% severely underweight infants	% moderately underweight young children (2nd year)	% severely underweight young children (2nd year)	% moderately underweight pre schoolars (3rd to 5th year)	% severely underweight pre schoolars (3rd to 5th year)
Colombo	12.6	5.6	1.0	12.0	3.2	12.7	3.3
Colombo M.C	12.0	8.6	2.1	20.3	3.7	17.8	4.0
Gampaha	12.9	4.1	0.8	9.9	2.4	12.4	2.9
Kalutara	12.0	4.9	1.1	11.5	2.6	14.3	3.3
N.I.H.S	7.8	5.4	0.8	10.8	1.2	14.4	1.8
Kandy	13.6	7.4	1.6	16.9	4.3	19.7	4.8
Matale	13.7	5.4	1.2	12.4	2.5	18.2	4.0
NuwaraEliya	20.6	10.1	3.1	19.6	5.9	19.7	4.8
Galle	12.2	6.6	1.1	14.2	2.5	20.6	3.4
Matara	12.1	6.2	1.1	15.4	2.4	29.3	3.6
Hambantota	9.7	5.3	0.9	13.0	2.0	21.0	3.9
Jaffna	9.7	4.9	0.7	10.6	1.9	15.8	2.5
Kilinochchi	11.5	4.8	1.0	14.9	2.6	29.1	5.0
Mannar	10.8	2.8	0.7	9.7	2.0	12.3	2.7
Vavuniya	14.9	6.1	1.1	18.0	3.6	21.3	4.2
Mullaitivu	10.9	3.5	1.2	15.0	2.3	20.2	3.9
Batticaloa	11.9	5.5	1.4	10.7	3.3	16.8	4.1
Ampara	15.8	6.3	1.7	15.7	3.7	20.5	3.9
Kalmunai	9.8	5.3	1.7	13.0	3.8	24.1	5.6
Trincomalee	13.4	5.1	1.2	14.6	3.6	17.3	3.5
Kurunegala	12.1	4.8	0.9	12.7	2.4	16.6	3.3
Puttalam	11.0	9.8	1.4	13.7	3.5	17.8	3.7
Anuradhapura	13.3	6.9	1.3	16.3	3.0	23.1	3.9
Polonnaruwa	15.3	6.9	1.6	15.1	3.2	22.4	3.9
Badulla	17.5	8.3	2.0	18.0	4.5	23.4	5.1
Monaragala	13.6	5.5	1.3	13.8	2.0	24.6	3.7
Ratnapura	16.3	7.1	1.5	14.8	2.3	22.1	3.3
Kegalle	16.9	7.3	1.4	16.0	2.5	22.8	3.3
Sri Lanka	**13.3**	**6.3**	**1.3**	**13.9**	**3.0**	**19.5**	**3.8**

Annexure 8 : Infant child mortality, SMI coverage and WWC performance 2013

RDHS/Health Area	NNMR based on PHM reporting	IMR based on PHMs reporting	Under 5 mortality rate based on PHM reporting	No. of functioning Well Woman Clinics	% of 35 year women screened for cervical carcinoma
Colombo	5.9	7.4	7.9	99	50.8
Colombo M.C	4.0	5.9	7.2	6	3.7
Gampaha	5.2	7.4	8.3	97	41.0
Kalutara	7.2	8.9	9.5	37	26.4
N.I.H.S	6.4	9.5	10.1	17	32.9
Kandy	6.2	8.7	9.4	59	29.1
Matale	8.9	11.1	12.5	33	59.2
NuwaraEliya	9.2	13.0	14.2	35	25.8
Galle	4.4	6.1	7.1	40	39.2
Matara	5.1	6.8	7.8	31	43.0
Hambantota	5.8	7.6	8.3	16	32.4
Jaffna	10.7	13.9	15.2	123	25.0
Kilinochchi	9.2	11.7	16.8	13	8.1
Mannar	7.9	12.8	16.4	1	3.3
Vavuniya	4.6	8.6	11.9	7	1.5
Mullaitivu	4.9	11.1	12.3	3	7.6
Batticaloa	7.6	11.1	13.5	24	31.5
Ampara	5.5	7.0	8.8	16	63.9
Kalmunai	6.6	8.6	10.1	23	42.0
Trincomalee	5.9	8.9	10.5	8	7.0
Kurunegala	8.6	10.9	12.2	85	41.4
Puttalam	7.0	9.0	9.4	46	27.9
Anuradhapura	5.9	8.4	9.1	33	43.0
Polonnaruwa	6.9	9.2	10.5	9	32.7
Badulla	6.3	8.3	9.0	42	39.0
Monaragala	5.6	7.6	8.5	23	39.5
Ratnapura	5.1	7.2	8.8	33	29.4
Kegalle	7.3	9.4	11.0	24	49.2
Sri Lanka	**6.5**	**8.8**	**9.9**	**983**	**33.9**

Annexure 9 : School Health Performances 2013

RDHS / Health Area	% of MOH areas sending H 797 (all 4Q)	SMI coverage (schools)	% of schools in which Sanitary Survey Completed	% of children with defects	% of defects detected (out of children examined)										
					Visual defects	Hearing defects	Speech defects	Pallor	Dental caries	Heart diseases	Night blindness	Lung disease	Asthma	Behavioural problems	Learning problems
Colombo	91.7	68.4	64.2	26.0	2.9	0.1	0.1	0.7	14.3	0.9	0.0	0.2	0.3	0.2	0.2
Colombo MC	100.0	100.0	0.0	73.4	8.3	0.0	0.1	0.1	37.1	4.6	0.0	0.0	0.2	0.1	0.1
Gampaha	40.0	88.0	80.7	15.3	3.0	0.0	0.0	0.3	11.6	1.0	0.0	0.0	0.1	0.1	0.1
Kalutara	100.0	79.7	74.0	36.0	2.7	0.1	0.2	0.5	21.7	1.8	0.0	0.1	0.2	0.3	0.2
N.I.H.S	100.0	98.7	100.0	40.4	1.9	0.0	0.1	0.0	23.9	1.4	0.0	0.0	0.1	0.1	0.1
Kandy	95.7	92.5	92.4	40.8	2.9	0.2	0.2	0.7	20.9	0.9	0.0	0.1	0.3	0.3	0.3
Matale	100.0	100.0	100.0	34.7	1.9	0.0	0.3	2.1	18.0	1.2	0.0	0.3	0.4	0.2	0.1
NuwaraEliya	92.3	92.7	79.3	38.0	2.6	0.1	0.0	1.0	27.8	1.6	0.0	0.0	0.2	0.3	0.3
Galle	100.0	97.7	100.0	43.8	2.2	0.1	0.2	0.8	25.7	0.6	0.0	0.1	0.4	0.2	0.4
Matara	100.0	98.4	91.6	39.5	3.3	0.0	0.1	1.1	18.4	1.7	0.0	0.1	0.5	0.1	0.1
Hambantota	100.0	98.1	100.0	53.0	2.2	0.2	0.5	1.4	21.5	2.4	0.1	0.2	1.0	0.1	0.5
Jaffna	100.0	95.1	99.8	63.3	3.9	0.1	0.2	11.3	32.9	1.0	0.0	0.1	0.8	0.1	0.2
Kilinochchi	100.0	92.1	92.1	78.2	1.4	0.1	0.1	3.0	51.1	0.9	0.0	0.1	0.5	0.1	0.2
Mannar	80.0	98.9	100.0	40.9	1.5	0.3	0.2	6.0	33.5	0.5	0.1	0.2	0.9	0.1	0.0
Vavuniya	75.0	96.8	98.9	101.2	1.1	0.1	0.1	0.5	21.5	0.6	0.0	0.0	1.4	0.1	0.1
Mullaitivu	50.0	81.1	71.7	47.3	0.8	0.0	0.1	1.8	36.7	1.5	0.0	0.1	0.3	0.1	0.1
Batticaloa	78.6	100.0	88.2	30.6	0.7	0.1	0.1	3.3	22.3	0.4	0.0	0.1	0.4	0.1	0.3
Ampara	100.0	98.9	93.3	57.9	4.7	0.1	0.5	1.8	37.9	2.3	0.1	0.1	1.0	0.4	1.1
Kalmunei	100.0	92.8	94.8	41.5	2.7	0.1	0.1	4.5	37.8	0.7	0.0	0.1	0.3	0.3	0.4
Trincomalee	90.9	89.3	86.7	34.8	1.5	0.1	0.1	1.9	28.6	0.7	0.0	0.1	0.3	0.3	0.4
Kurunegala	85.2	94.8	86.7	20.6	2.3	0.0	0.1	0.4	12.7	1.1	0.0	0.1	0.1	0.2	0.2
Puttalam	83.3	85.6	100.0	33.7	1.6	0.1	0.1	1.0	19.3	1.1	0.0	0.0	0.1	0.0	0.1
Anuradhapura	85.0	85.7	97.5	37.0	1.4	0.0	0.1	0.7	21.0	1.3	0.0	0.1	0.2	0.2	0.2
Polonnaruwa	85.7	80.9	82.3	47.4	1.5	0.0	0.1	0.6	22.8	1.8	0.0	0.2	0.4	0.2	0.2
Badulla	100.0	92.8	95.7	55.7	2.8	0.1	0.3	0.6	37.3	1.3	0.0	0.1	0.5	0.2	0.1
Monaragala	100.0	93.6	100.0	53.0	2.4	0.1	0.2	1.6	28.9	1.2	0.3	0.1	0.3	0.1	0.2
Ratnapura	88.9	96.3	98.7	45.6	2.6	0.1	0.2	0.7	30.0	1.5	0.0	0.0	0.3	0.2	0.3
Kegalle	90.9	99.2	72.7	50.3	1.3	0.1	0.2	1.0	30.1	0.6	0.0	0.1	0.2	0.2	0.2
Sri Lanka	**90.1**	**93.4**	**90.0**	**41.1**	**2.6**	**0.1**	**0.2**	**1.5**	**24.6**	**1.3**	**0.0**	**0.1**	**0.3**	**0.2**	**0.3**

Annexure 10 : Family planning service performance 2013

RDHS/Health Area	Current FP user rate for modern methods	Current FP user rate for all methods	% Unmet need for family planning	Current users of IUD		Current users of Injectable	
				No	%	No	%
Colombo	57.0	68.8	7.3	34779	12.4	27631	9.8
Colombo M.C	33.5	39.6	8.0	6143	6.7	1554	1.7
Gampaha	52.2	64.0	7.8	38982	9.9	34463	8.8
Kalutara	54.9	65.0	7.1	17533	10.7	15450	9.4
N.I.H.S	52.2	66.2	4.2	4181	8.0	3726	7.2
Kandy	53.4	62.5	7.5	23221	9.6	20209	8.4
Matale	58.2	65.5	5.5	12418	13.5	9675	10.5
NuwaraEliya	65.1	69.3	7.0	10238	7.8	10589	8.1
Galle	56.5	67.2	6.6	22493	12.3	20788	11.3
Matara	58.1	67.6	6.9	17261	12.5	15200	11.0
Hambantota	57.3	66.2	8.0	19166	17.3	11161	10.1
Jaffna	51.5	60.9	6.1	3122	3.4	4591	5.1
Kilinochchi	63.6	67.0	3.4	2475	12.7	1237	6.3
Mannar	49.4	67.5	8.8	459	2.6	1992	11.4
Vavuniya	46.8	60.4	11.8	762	2.7	1561	5.6
Mullaitivu	47.2	49.0	6.9	983	5.8	1855	10.9
Batticaloa	44.2	52.9	8.7	3383	3.6	14619	15.6
Ampara	70.4	75.3	4.3	6707	13.1	11750	23.0
Kalmunai	44.9	57.0	7.9	2257	3.0	11653	15.7
Trincomalee	50.6	59.9	8.9	2059	2.9	16465	23.1
Kurunegala	55.9	67.0	6.5	40634	13.5	31016	10.3
Puttalam	54.3	63.8	8.8	13347	9.0	24859	16.7
Anuradhapura	60.1	66.9	5.2	23525	13.0	34030	18.8
Polonnaruwa	64.1	69.5	4.9	10041	11.3	19325	21.7
Badulla	64.1	69.3	7.5	20393	13.5	13703	9.0
Monaragala	57.8	67.8	5.4	15160	16.6	10218	11.2
Ratnapura	57.1	67.4	7.6	21199	10.9	24642	12.7
Kegalle	54.2	64.7	7.6	12898	8.7	17656	11.8
Sri Lanka	**55.4**	**64.9**	**7.1**	**385819**	**10.6**	**411618**	**11.3**

Annexure 11 : Oral health services 2013

RDHS/ Health Area	No. of SDTT	No. of SDC	Total number of schools	Target group (1,4,7 & Other)	SDTT: Pop ratio	% Schools screened	% of Schools completed	% Caries				% Calculus			Screening coverage %	Coverage* %	Expected screening coverage**	Ranking
								Grade 1	Grade 4	Grade 4 (permanent teeth)	Grade 7 (permnent teeth)	Grade 1	Grade 4	Grade 7				
Colombo	53	48	424	105070	1982	99%	95%	57%	58%	9%	17%	2%	16%	22%	95%	84%	101%	-6%
Gampaha	28	35	536	99945	3569	92%	87%	57%	60%	10%	20%	3%	17%	23%	85%	74%	56%	29%
Kalutara	8	6	76	16944	2118	100%	100%	66%	73%	11%	25%	1%	12%	18%	93%	76%	94%	-2%
Kandy	21	19	343	50805	2419	100%	93%	57%	62%	11%	22%	1%	15%	19%	90%	82%	83%	8%
Matale	30	32	651	81547	2718	75%	72%	64%	65%	10%	22%	3%	18%	28%	74%	68%	74%	1%
NuwaraEliya	11	12	316	32209	2928	77%	71%	59%	67%	10%	19%	6%	19%	27%	78%	71%	68%	9%
Galle	7	7	560	63819	9117	32%	27%	68%	66%	22%	23%	8%	30%	37%	26%	21%	22%	4%
Matara	36	35	383	58273	1619	55%	47%	62%	66%	11%	27%	3%	16%	21%	52%	44%	124%	-71%
Hambantota	21	22	367	49036	2335	95%	95%	60%	52%	15%	31%	7%	23%	28%	93%	90%	86%	8%
Jaffna	13	10	318	39974	3075	82%	75%	44%	42%	8%	15%	2%	12%	18%	74%	64%	65%	9%
Kilinochchi										NO SDTT								
Mannar										NO SDTT								
Vavuniya	3	3	181	30675	10225	No data		33%	41%	8%	15%	2%	4%	7%	29%	25%	20%	9%
Mullaitivu	NO SDTT																	
Batticaloa	2	2	348	41409	20705	12%	5%	63%	70%	8%	19%	1%	22%	33%	14%	10%	10%	4%
Ampara	4	4	175	19404	4851	35%	26%	58%	56%	4%	13%	1%	11%	15%	53%	43%	41%	12%
Kalmunai	3	3	245	25411	8470	17%	4%	64%	71%	15%	22%	0%	5%	11%	15%	11%	24%	-9%
Trincomalee	2	2	269	34233	17117	11%	4%	57%	52%	14%	24%	3%	14%	35%	12%	7%	12%	0%
Kurunegala	38	36	745	92420	2432	80%	79%	52%	53%	7%	13%	2%	13%	20%	79%	75%	82%	-3%
Puttalam	9	11	360	51485	5721	80%	76%	49%	56%	7%	13%	1%	13%	19%	73%	66%	35%	38%
Anuradhapura	13	16	539	60033	4618	50%	44%	47%	53%	6%	13%	2%	14%	21%	50%	42%	43%	7%
Polonnaruwa	9	14	475	32708	3634	22%	16%	54%	57%	5%	12%	2%	14%	26%	58%	41%	55%	3%
Badulla	17	19	585	67632	3978	66%	58%	65%	68%	9%	21%	1%	10%	16%	52%	41%	50%	2%
Monaragala	10	15	277	30880	3088	97%	95%	53%	57%	6%	14%	1%	12%	20%	88%	80%	65%	23%
Ratnapura	19	21	591	87369	4598	55%	52%	62%	63%	11%	22%	2%	9%	12%	43%	36%	43%	-1%
Kegalle	17	23	532	52492	3088	61%	53%	63%	66%	8%	19%	2%	17%	23%	78%	69%	65%	13%
Sri Lanka	**380**	**406**	**9744**	**1262570**	**3323**	**62%**	**57%**	**57%**	**59%**	**10%**	**19%**	**2%**	**15%**	**22%**	**64%**	**56%**	**60%**	**4%**

* Coverage %: healthy + Rx completion children out of the target group

** Expected screening coverage: calculation is based on the assumption of SDT child ratio of 2000

*** Ranking: actual coverage-expected coverage

Population, birth rates, eligible families, pregnant mothers, reported deliveries and first antenatal clinic visits

Province	Population	Birth Rate	Estimated eligible families	Eligible families registered by PHMs		Estimated Births	Estimated pregnancies (Births×1.1)	Pregnant mothers registered by PHM (out of estimated pregnancies)		Number of first antenatal clinic visits	Number of reported deliveries	Number of reported live births
				No.	%			No.	%			
Western	5984055	15.5	957449	982832	102.7	93044	101391	89706	97.8	85562	73823	73468
Central	2742105	20.0	438737	460157	104.9	54863	60349	52607	87.2	52120	43587	43727
Southern	2621586	17.7	419454	431645	102.9	46488	51137	47322	92.5	43901	39153	39554
North	1126149	18.4	180184	172637	95.8	20693	22762	20382	89.5	18334	17093	17054
East	1680343	21.3	268855	290343	108.0	35798	39378	34829	88.4	32580	30061	30128
North Western	2578157	18.0	412505	448802	108.8	46405	52001	46988	90.4	43657	40262	40472
North Central	1450138	18.8	232022	274468	118.3	27200	29920	28665	95.8	27115	23456	23496
Uva	1421578	19.0	227452	242692	106.7	27049	29753	27304	91.8	26082	23288	23548
Sabaragamuwa	2031126	17.6	324980	343517	105.7	35732	39306	35580	90.5	34177	30273	30433
Sri Lanka	**21635237**	**17.9**	**3461638**	**3647093**	**105.4**	**387271**	**425998**	**383383**	**92.1**	**363528**	**320996**	**321880**

Indicators of field antenatal care and percentage of pregnant women protected by rubella vaccine 2013

RDHS/Health Area	% Pregnant mothers registered before 8 weeks	% Pregnant mothers registered 8-12 weeks	% Teenage pregnant (less than 20 Yrs) mothers registered	% of Primies registered	% Pregnant mothers P5 and above registered	% Registered pregnant mothers protected for Rubella	% Antenatal mothers having the first home visit	Average antenatal home visits by PHM	Mothers protected with T.T. at delivery	Mothers tested for Grouping Rh at delivery	Mothers tested for VDRL at delivery
Western	71.0	18.7	4.4	37.1	2.4	96.9	83.6	3.8	99.6	99.8	99.7
Central	70.6	21.4	4.7	31.1	2.8	97.4	92.3	4.7	99.8	99.6	99.8
Southern	82.9	13.5	4.9	32.7	2.6	98.3	95.3	4.6	100.6	100.6	100.5
North	72.6	19.3	4.9	32.3	4.4	92.7	98.5	7.1	99.6	99.7	99.4
East	75.7	18.1	8.1	32.8	5.0	92.1	95.4	4.6	99.8	99.8	98.0
North Western	81.9	13.5	5.6	32.6	2.7	98.9	95.3	4.3	99.9	99.9	99.5
North Central	78.4	15.9	6.0	31.0	2.4	99.3	94.2	4.7	99.8	99.9	99.8
Uva	78.8	17.0	5.9	30.5	2.4	97.5	92.5	4.8	100.2	99.9	100.0
Sabaragamuwa	71.9	21.8	5.4	33.4	2.3	97.9	87.3	4.3	100.1	100.1	99.7
Sri Lanka	**75.4**	**17.7**	**5.3**	**33.3**	**2.8**	**97.0**	**91.3**	**4.5**	**99.9**	**99.9**	**99.7**

Indicators of clinic care, ante-natal screening, status of BMI, and anaemia 2013

Province	% of registered mothers attending clinics at least once	Average number of clinic visits by a mother	VDRL clinics available	% of clinic attendees (ANC) screened for VDRL	% of mothers with reactive VDRL	% of clinic attendees (ANC) anaemic out of FV	% of clinic attendees (ANC) tested for blood grouping & Rh	% of mothers BMI measured	% of mothers with BMI less than 18.5	% of mothers with BMI more than 25
Western	95.4	5.5	300	36.8	0.02	5.1	13.0	79.2	19.7	21.9
Central	99.1	6.4	562	71.9	0.04	8.5	30.7	82.7	21.6	15.8
Southern	92.8	7.2	204	48.3	0.06	5.4	23.9	86.6	26.2	13.3
Northern	90.0	7.9	12	28.1	0.01	21.2	21.2	82.4	23.4	17.6
Eastern	93.5	6.8	290	53.0	0.01	14.6	34.8	83.2	20.4	19.4
North western	92.9	7.0	142	87.4	0.08	13.9	39.0	85.3	23.1	17.8
North central	94.6	7.4	246	88.0	0.03	13.9	37.0	82.5	25.3	16.8
Uva	95.5	7.1	17	72.5	0.18	7.3	35.2	87.1	25.8	11.9
Sabaragamuwa	96.1	6.5	67	63.2	0.04	11.8	30.0	83.3	26.8	14.5
Sri Lanka	**94.8**	**6.6**	**1840**	**59.2**	**0.05**	**9.8**	**27.3**	**83.1**	**23.0**	**17.2**

Natal care 2013

Province	% of institutional deliveries out of total reported deliveries	% of home deliveries out of total reported deliveries	% LSCS out of total reported deliveries	% of untrained deliveries out of total reported deliveries	% of deliveries reported out of total estimated pregnancies	% of deliveries reported out of total registered pregnancies
Western	99.9	0.03	36.4	0.02	80.5	82.3
Central	99.8	0.20	30.1	0.14	72.2	82.9
Southern	100.0	0.04	31.6	0.03	76.6	82.7
Northern	99.8	0.25	23.6	0.18	75.1	83.9
Eastern	99.8	0.20	24.7	0.16	76.3	86.3
North western	99.9	0.08	33.3	0.07	78.9	85.7
North central	99.9	0.07	27.4	0.04	78.4	81.8
Uva	99.9	0.12	25.6	0.10	78.3	85.3
Sabaragamuwa	99.9	0.10	33.0	0.07	77.0	85.1
Sri Lanka	**99.9**	**0.10**	**31.0**	**0.08**	**77.1**	**83.7**

Indicators of post natal care: post natal visits, Vitamin A supplementation, post natal complications 2013

Province	% of mothers receiving the 1st post natal visit within the 1st10 days out of reported deliveries	% of mothers receiving the1stpost natal visit within the 1st 10 days out of estimated births	Average number of post natal visits within first 10 days	% of postnatal visits to the mother around 42 days	% of mothers receiving Vitamin A mega dose for reported deliveries	% of estimated mothers who received Vitamin A	% of reported deliveries with post natal morbidities
Western	88.4	78.2	1.7	71.9	94.3	75.9	11.7
Central	93.7	74.5	1.7	79.1	82.4	59.5	9.9
Southern	96.3	81.1	1.8	80.8	91.6	70.1	13.6
Northern	93.3	77.1	1.8	77.7	100.9	75.8	7.3
Eastern	94.0	79.0	1.8	75.0	96.2	73.5	8.8
North western	93.9	81.4	1.8	82.5	58.6	45.4	13.9
North central	92.2	79.5	1.6	75.7	89.3	70.0	12.3
Uva	89.0	76.6	1.8	77.9	91.4	71.5	8.9
Sabaragamuwa	91.7	77.7	1.7	72.5	86.1	66.3	14.0
Sri Lanka	**92.2**	**78.2**	**1.7**	**76.7**	**87.1**	**67.1**	**11.5**

Indicators of child care service provision: infant registration, field visits 2013

Province	% of infants registered by PHM out of estimated births	% of registered infants received at least one field visit after 42 days	Average number of home visits per infant	Average number of weighing per infant	% of estimated infants supplied with vitamin A mega dose at 6 months	% of estimated children supplied with vitamin A mega dose at	
						18 m	3 y
Western	95.0	60.0	6.3	9.0	75.1	80.8	80.9
Central	82.7	66.5	7.9	10.0	65.8	64.6	63.5
Southern	87.6	68.5	9.1	10.4	75.5	75.4	78.2
Northern	86.0	58.8	10.9	10.8	84.1	86.3	88.2
Eastern	85.9	70.3	6.3	10.2	78.6	81.1	84.8
North western	88.9	60.2	6.9	10.9	39.8	40.3	40.0
North central	92.8	59.9	7.1	10.0	70.4	76.7	77.6
Uva	91.4	78.4	6.9	10.2	73.9	72.9	71.7
Sabaragamuwa	88.4	57.0	7.9	9.8	66.5	66.3	66.7
Sri Lanka	**89.0**	**63.9**	**7.4**	**10.0**	**68.9**	**70.7**	**71.4**

Indicators of post natal care: post natal visits, Vitamin A supplementation, post natal complications 2013

Province	% LBW	% moderately underweight infants	% severely underweight infants	% moderately underweight young children (2nd year)	% severely underweight young children (2nd year)	% moderately underweight pre schoolars (3rd to 5th year)	% severely underweight pre schoolars (3rd to 5th year)
Western	12.2	5.0	1.0	11.3	2.6	13.4	3.1
Central	15.6	7.8	2.0	16.8	4.5	19.4	4.7
Southern	11.5	6.1	1.0	14.2	2.3	23.6	3.6
Northern	11.0	4.7	0.8	12.5	2.3	19.1	3.4
Eastern	12.3	5.5	1.5	13.0	3.6	19.1	4.2
North western	11.7	6.7	1.1	13.0	2.8	17.0	3.4
North central	13.9	6.8	1.4	15.9	3.1	22.8	3.9
Uva	16.0	7.2	1.7	16.3	3.5	23.8	4.6
Sabaragamuwa	16.6	7.2	1.4	15.3	2.4	22.4	3.3
Sri Lanka	**13.3**	**6.3**	**1.3**	**13.9**	**3.0**	**19.5**	**3.8**

Infant and child mortality, SMI coverage and WWC performance 2013

Province	NNMR based on PHM reporting	IMR based on PHMs reporting	Under 5 mortality rate based on PHM reporting	No. of functioning Well Woman Clinics	% of 35 year women screened for cervical carcinoma
Western	5.8	7.7	8.5	256	32.3
Central	7.5	10.4	11.2	125	33.1
Southern	5.0	6.8	7.6	87	34.5
Northern	8.6	12.3	14.7	147	15.1
Eastern	6.6	9.3	11.1	71	33.9
North western	8.1	10.3	11.3	131	37.0
North central	6.3	8.7	9.7	44	40.0
Uva	6.1	8.1	8.8	65	39.2
Sabaragamuwa	6.0	8.2	9.8	57	37.5
Sri Lanka	**6.5**	**8.8**	**9.9**	**983**	**33.9**

Indicators of child care service provision: infant registration, field visits 2013

Province	Current FP user rate for modern methods	Current FP user rate for all methods	% Unmet need for family planning	Current users of IUD		Current users of Injectable	
				No	%	No	%
Western	52.3	63.4	7.4	101618	10.3	82824	8.4
Central	57.6	64.9	7.0	44914	9.8	39901	8.7
Southern	57.2	67.1	7.1	58920	13.7	47149	10.9
Northern	51.4	61.0	7.1	7801	4.5	11236	6.5
Eastern	50.6	59.6	7.8	14406	5.0	54487	18.8
North western	55.4	65.9	7.3	53981	12.0	55875	12.4
North central	61.4	67.8	5.1	34529	12.6	53927	19.6
Uva	61.7	68.7	6.7	35553	14.6	23921	9.9
Sabaragamuwa	55.8	66.2	7.6	34097	9.9	42298	12.3
Sri Lanka	**55.4**	**64.9**	**7.1**	**385819**	**10.6**	**411618**	**11.3**