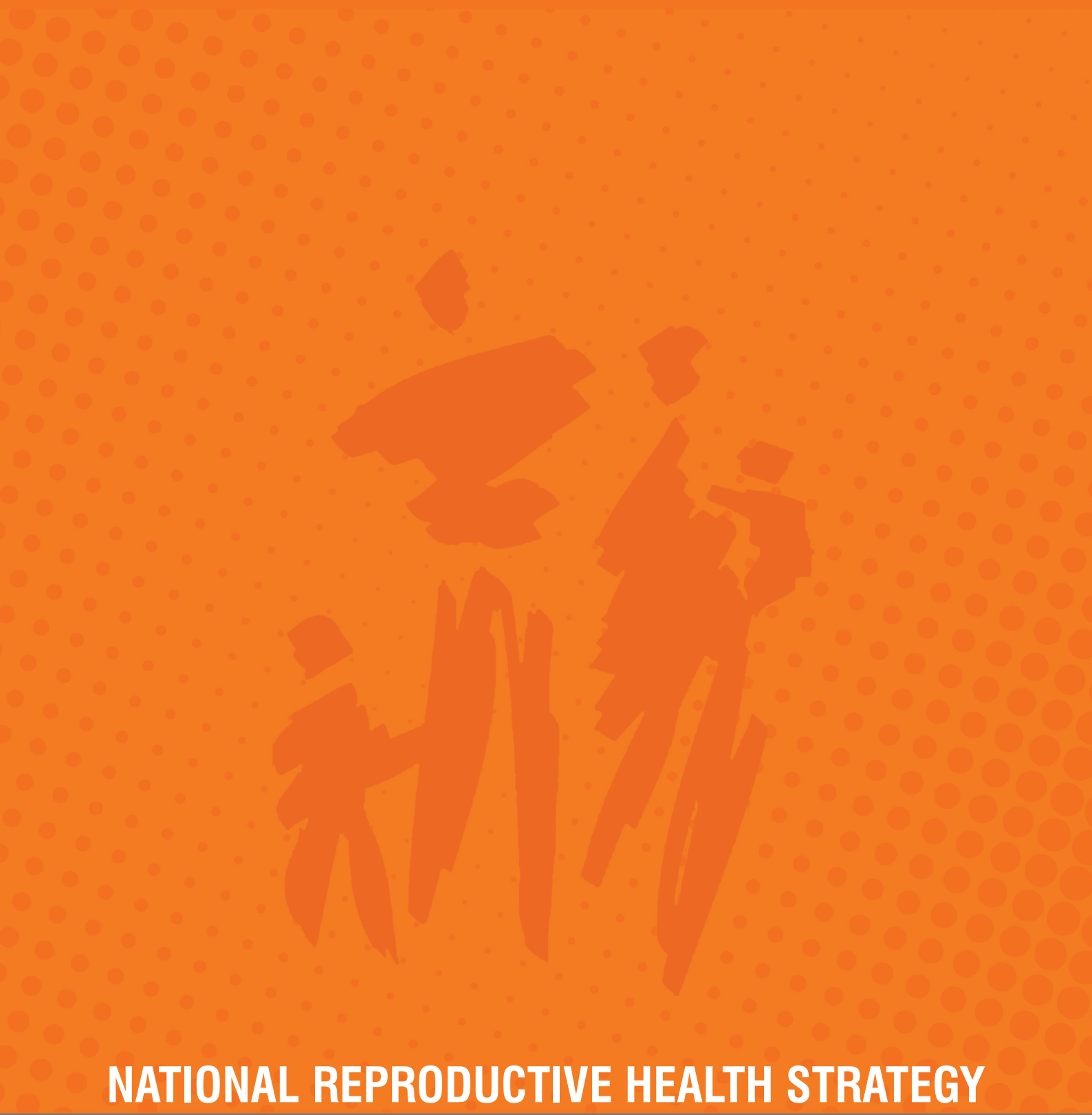


NATIONAL REPRODUCTIVE HEALTH STRATEGY

2014 - 2018

Health Protection Agency
Ministry of Health | Male', Maldives

Supported by:
UNFPA

FOREWORD

Reproductive health is fundamental to individuals, families and the social and economic development of communities and the nation.

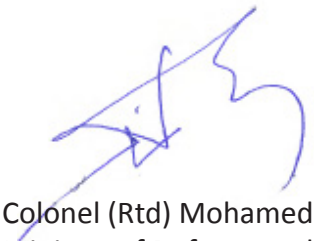
The goal of this strategy is to develop the health sector to improve the health of the people of Maldives, especially women and children. This document provides a template to develop specific plans and to make funding decisions. It also emphasizes that ensuring the health of women and children involves a cross-sectoral approach whereby Ministry of Health must work with sectors outside of Reproductive health.

I believe that all interventions for Reproductive health should be made available with the highest standard of quality and safety, and services should be delivered according to evidence-based best practices. Addressing needs and community views, particularly those of women, on the quality of service provision is key to ensuring improved quality and increased access and utilization at all levels. Involvement of communities can improve acceptance to health services.

The close links between the different asp~cts of reproductive health, interventions in one area are likely to have a positive impact on the other arears. Existing Reproductive health services will be strengthened and used as entry points for new interventions, looking for maximum synergy. Collaboration at region, atoll and community levels is also necessary

We are responsible for facilitating effective and efficient implementation of the Strategy to achieve the targets. Coordination among programmes and regions/atolls authority within the Ministry of Health, as well as coordination with relevant sectors is crucial. It is also necessary to collaborate with professional organizations, universities, relevant national and local NGOs, society groups and other stakeholders in addressing various Reproductive health issues. It is my vision that comprehensive Reproductive health services will be made available to all especially to women and newborns, integrating maternal and newborn care, family planning, nutrition, immunization, child survival, prevention and treatment care of sexually transmitted infections (HIV, HepB) and other aspects of primary health care.

I would like to acknowledge the wealth of technical assistance and other resources provided by United Nations Population Fund (UNFPA) and World Health Organization (WHO). Extreme gratitude to Maldivian Nurses Association and all those who have contributed their time, knowledge, and expertise.



Colonel (Rtd) Mohamed Nazim
Minister of Defense and National Security
Acting Minister of Health

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LIST OF ABBREVIATIONS

AIDS	Autoimmune Deficiency Syndrome
ANC	Antenatal Care
ASFR	Age-specific Fertility Rates
BBS	Biological Behavioral Survey
CPR	Contraceptive Prevalence Rate
C-section	Caesarean Section
FP	Family Planning
FSW	Female Sex Worker
GBV	Gender-Based Violence
HC	Health Centre
HDI	Human Development Index
HIV	Human Immuno-eficiency Virus
HIS	Health Information System
HMP	Health Master Plan (2006-2015)
HPA	Health Protection Agency (HPA)
HPV	Human Papilloma Virus
ICPD	International Conference on Population and Development
IDUs	Injecting Drug Users
IGMH	Indira Gandhi Memorial Hospital
IPV	Intimate Partner Violence
IUD	Intra-Uterine Device
IVF	In-Vitro Fertilization
LBW	Low Birth Weight
LGA	Local Government Authority
MDGs	Millennium Development Goals
MDHS	Demographic Health Survey
MISP	Minimum Initial Service Package
MNH	Maternal and Newborn Health
MoHG	Ministry of Health and Gender
MVR	Maldivian Rufiyaa (local currency)
NGOs	Non-Government Organizations
NMR	Neonatal Mortality Rate
MARPs	Most at Risk Populations (for HIV infection)
MSM	Men having Sex with Men
NGOs	Non-Government Organizations
PCOS	Polycystic ovarian syndrome
PMR	Perinatal mortality rate
PMTCT	Prevention of Mother-to-Child Transmission (of HIV infection)
PPH	Post Partum Haemorrhage
RH	Reproductive Health
RHS	Reproductive Health Survey
SAARC	South Asian Association for Regional Cooperation
SARA	Service Availability and Readiness Assessment
STI	Sexually Transmitted Infection
T-3	Trimester-3 (of pregnancy)
TFR	Total Fertility Rate
THE	Total Health Expenditures
TT	Tetanus Toxoid
UN	United Nation
VCT	Voluntary Counseling and Testing (for HIV)
VIA	Visual Inspection with Acetic acid
MMR	Maternal Mortality Ratio

I. INTRODUCTION

The Maldives is an island nation consisting of a chain of about 1190 coral islands, geographically divided into 26 double-chain atolls in six regions, which is administratively organized into 20 atolls. Only 192 of these islands are inhabited with a projected mid-year total population of 336224 in 2013[1] .The Gross Domestic Product (GDP) growth has been 6-8% per year in the last two decades and GDP per capita was USD 3855 in 2011.The country has achieved five out of the eight Millennium Development Goals (MDGs). It ranks 104 out of 187 countries on its Human Development Index (HDI) in 2012 (see Annex 1).

The Government continues to recognize that reproductive health (RH) is a crucial component ofgeneral health, as stated in the National Reproductive Health Strategy 2005-2007 and 2008-2010. It is seen as a major facilitating service towards achieving the right of the individual and couples to protect theirRH and to take responsibility for their reproductive functions. These show the Government commitments on implementing the Programme of Action, ICPD 1994 and achieving the Millennium Development Goals and targets by 2015. This Strategy also links to the Health Master Plan 2006-2015.

The Ministry of Health and Gender (MoHG) has shifted the focus of its maternal and child health programme to the broader concept of reproductive health programme since 2008, as stated in the National Reproductive Health Strategy 2008-2010. This Strategy emphasizes it further and promotes a continuum of care along the life course. This approach has two dimensions of care that include continuity in terms of time, e.g. from pre-pregnancy, pregnancy, childbirth, postpartum and neonatal periods; as well as reproductive health needs during adolescence, adulthood and that of the elderly. Another dimension is related to the levels of care that links care at household level up to primary care and referral levels.Such approach can reduce costs by allowing greater efficiency and provide opportunities for promoting related health services [2].

The Ministry of Health and Gender recognizes the importance to achieve equity in both access to quality health care and health status. With worldwide revitalization of Primary Health Care since 2008, the country aims to also strengthen service delivery through strengthening the health system, leadership for better accountability and promote healthy public policy in all sectors. This Strategy embraces the Primary Health Care approach with its five key elements: i) reducing exclusion and social disparities in health (universal coverage reforms); ii) organizing health services around people's needs and expectations (service delivery reforms); iii) integrating health into all sectors (public policy reforms); iv) pursuing collaborative models of policy dialogue (leadership reforms); and v) increasing stakeholder participation[3] . These are reflected in values and principles adopted by the Strategy.

This National Reproductive Health Strategy 2014-2018, aims to serve the need for directing the programmes in an integrated and comprehensive manner to address key RH issues and challenges. The Strategy consists of seven chapters. This first Chapter provides a brief introduction, while Chapter II elaborates on the situational analysis of the RH components. Chapter III covers key determinants of RH and Chapter IV delineates a strategic framework for addressing key RH issues and challenges. Chapter V elaborates on key interventions and activities, while Chapter VI provides implementation plan and Chapter VII presents monitoring and evaluation framework for measuring progress and impact.

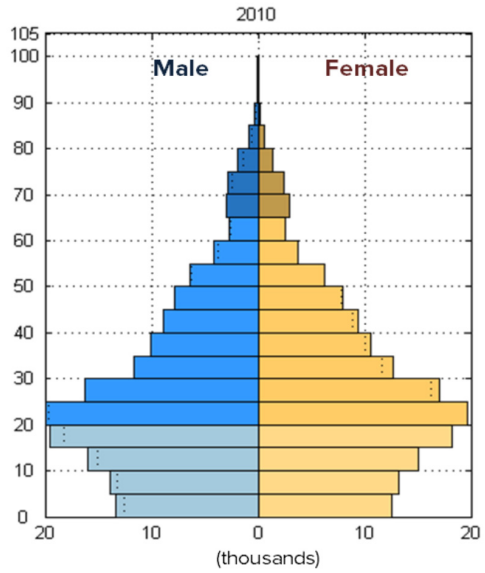
[1]Ministry of Health, Republic of Maldives.The Maldives Health Statistics 2012. Male, Health Information Section, Policy Planning Division, MoH, 2012.
[2]WHO and PMNCH, accessed at: http://www.who.int/pmnch/knowledge/publications/summaries/knowledge_summaries_2_enable_continuum_of_care/en/
[3]WHO links on Primary Health Care. 2013. Accessed at: http://www.who.int/topics/primary_health_care/en/

II. A SITUATIONAL ANALYSIS ON REPRODUCTIVE HEALTH

The Republic of Maldives is divided into administrative six regions consisting of 26 naturalatolls, that are classified – for administrative purposes – into 20 administrativeatolls.These are: i) North Region with three atolls; ii) North Central Region with four atolls; iii) Central Region with two atolls; iv) Male Region with two atolls; v) South Central Region with five atolls; and vi) South Region with four atolls (see a map in Annex 2).

The Health Master Plan 2006-2015: Quality health care, bridging the gaps has the following vision: "The Maldivian population is a healthy population who are healthliterate and practice healthy lifestyles, and have easy and effectiveaccess to quality health services in the region where they reside which is covered by a health care financing mechanism".Its mission is stated as: "Protect and promote the health of the population with enablingpolicies and healthy environments; provide social health insurance;develop an efficient, sustainable health system and provide needbased, affordable and quality health services in partnership with the private sector and community". These provide direction for all health programmes, including RH.

The health status of the people of the Republic of Maldiveshad improved significantly in the last few decades. Life expectancy at birth was 46.5 years in 1977, while in 2012 it was 77.6 years for males and 74 years for females.However, an emphasis and focus on the development of curative care has resulted in deterioration on the delivery of Primary Health Care approach resulting in reduced community participation inhealth promotion and preventive services and under-utilization of the skills of trained community-based public health workers. In addition, the provision of specialized health services at regional and atoll levels with smaller populations requires huge investments that are not cost-effective. This continues to deter private investments in health care in the atolls[4].



Maldives with its small population size has a large proportion of young people (Figure 1), while the number of elderly citizens is increasing. This requires programmes targeting adolescent sexual and reproductive health for the young, as well as health care for the elderly. There is inadequate knowledge on reorganization of services and sensitization ofhealth care professionals in pace with changes to the demographic profile of the country leading to inadequate services for adolescent/young people and elderly in general, as well as specific services for other society members, such as people with different ability.

Source: ICPD Beyond 2014. Maldives: Country Implementation Profile. 2010.

Figure 1.Total population by age group and sex, 2010

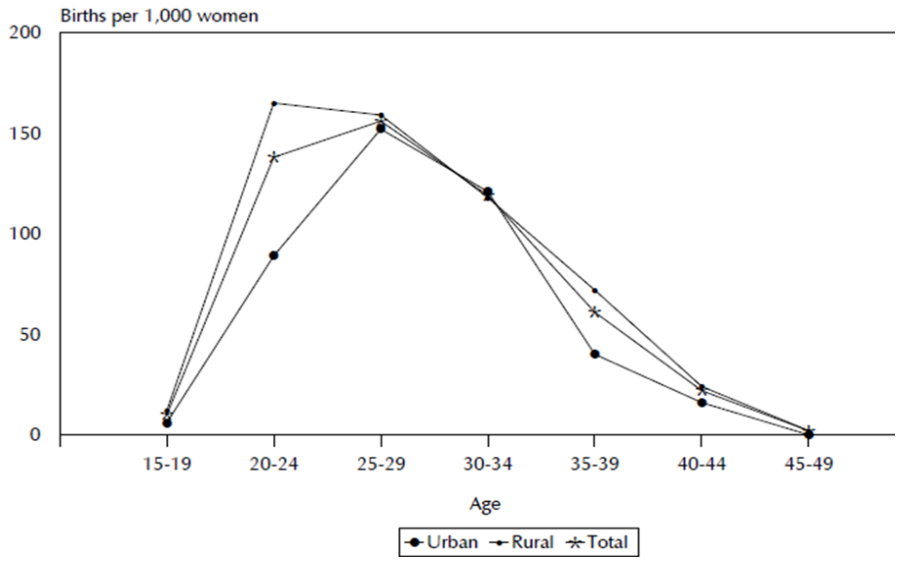
The following are the situational analysis of each RH component along the life course with its issues and challenges. These exist within unique health systems of Maldives and are also greatly influenced by key social determinants of health.

[4]*MoH, Republic of Maldives. The Health Master Plan 2006-2015.Male, MoH, 2006.*

There are five core components of RH: i) family planning; ii) maternal and newborn health; iii) preventing unsafe abortion; iv) prevention and management of sexually transmitted infections (STIS)/HIV; and v) promoting sexual health. Among those core RH components, adolescents and young people are given a special attention, as they are most vulnerable groups among other age groups. There are other components of RH that include infertility, RH needs of specific groups (e.g. young people, men, elderly, people with different ability, etc) and cancers related to RH system. There are also other situations/conditions that are closely related to RH, such as gender-based violence and RH services in emergency situation. Each component has its own issues and challenges that need to be addressed within Maldives' health systems setting, while considering the existing social determinants of health.

2.1. Family planning

The latest data on fertility and family planning is available from the Maldives Demographic and Health Survey (MDHS) 2009. The total fertility rate (TFR) was 2.5 in 2009, with the TFR among urban women beinglower than that of rural women (2.1 births compared with 2.8 births per woman).The fertility estimates from the Population and Housing Census 2006 (TFR: 2.15) are not directly comparable to those from the MDHS.For all measurements, the MDHS 2009 estimates are higher than estimates from the Census 2006.



Source: MDHS 2009

Figure 2.Age-specific fertility rates by urban-rural residence

There are also discrepancies in Age-Specific Fertility Rate (ASFR) between urban and rural residences, as reflected in Figure 2. The highest discrepancies at the ages of 20-24 years and 35-39 years, with rural women having a higher fertility than those who reside in urban settings. Similar discrepancies also exist among women from the lowest and the highest wealth quintile.

The Contraceptive Prevalence Rate (CPR) was 35% for any method or 27% for modern method only, while the unmet need for family planning (FP) was 29%. Theuse of any method by currently married women has decreased from 42% in the 1999 Reproductive Health Survey (RHS) to 35% in the 2009 DHS.

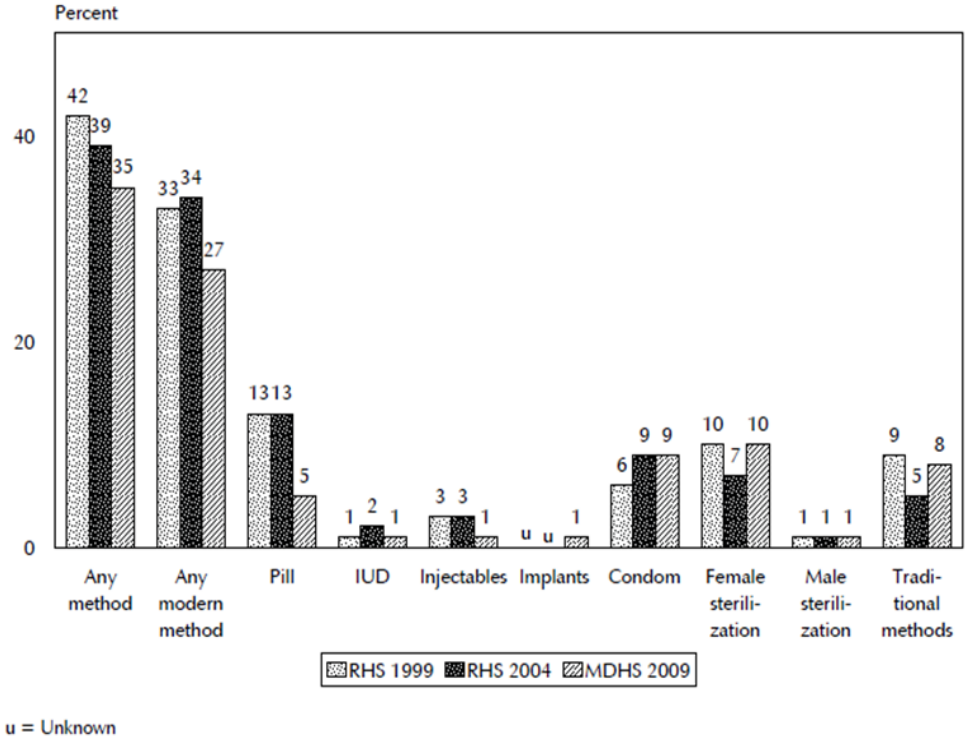


Figure 3.Trends in contraceptive use in 1999, 2004 and 2009

Figure 3 shows the trends in contra-ceptive use. The use of oral pills decreased from 13%in 1999 and 2004 to only 5%in 2009. The use of condoms increased from 6%in 1999 to 9%in 2004 and 2009. The proportion of married women who weresterilized de-clined from 10% in 1999 to 7%in 2004 but reverted back to 10%in 2009. Thus, female sterilization had become the most commonly usedmodern method in 2009. In 2009, among the reasons for discontinuations of all methods were, wanting to become pregnant (28.3%) became pregnant while using contraceptives (13.8%) and side effects (10.4%).

In summary, Maldives is unique in its fertility rate: while it has a low CPR (27%) and a high unmet need (29%), the TFR is low (2.5). Possible reasons for this might be because of a very high divorce rate, termination of pregnancy, infertility and use of traditional contraceptive methods. Quality of care for FP can be one of the reasons for discontinuation of contraceptive methods. One of the main issues deterring family planning service delivery is lack of adequate infrastructure; administrative work, ANC Clinics, PNC Clinics and other services given by the public health units are being offered in the same space at the same resulting in lack of privacy. Family Planning Clinic is also being run during the regular office hours; efforts are being made towards changing to the service hours to rectify the problem. Research to find out the other contributing issues can be useful for improving FP services and other aspects of reproductive health, as well as quality of life.

[5]*MoHG, Republic of Maldives.The Maldives Health Profile, MoHG, 2014.*

2.2 Maternal and New-Born Health

Maternal health

Maternal Mortality Ratio (MMR) has been reduced significantly over the years to reach 13 per100000 live births in 2012 from its baseline figure of 500 per 100000 live births in 1990[5]. Thus, the MDG 5 target of reducing MMR by three-quarters by 2015 hasbeen achieved. However, in a country with a small population, the MMR figures can fluctuate considerably even by addition of a single maternal death.

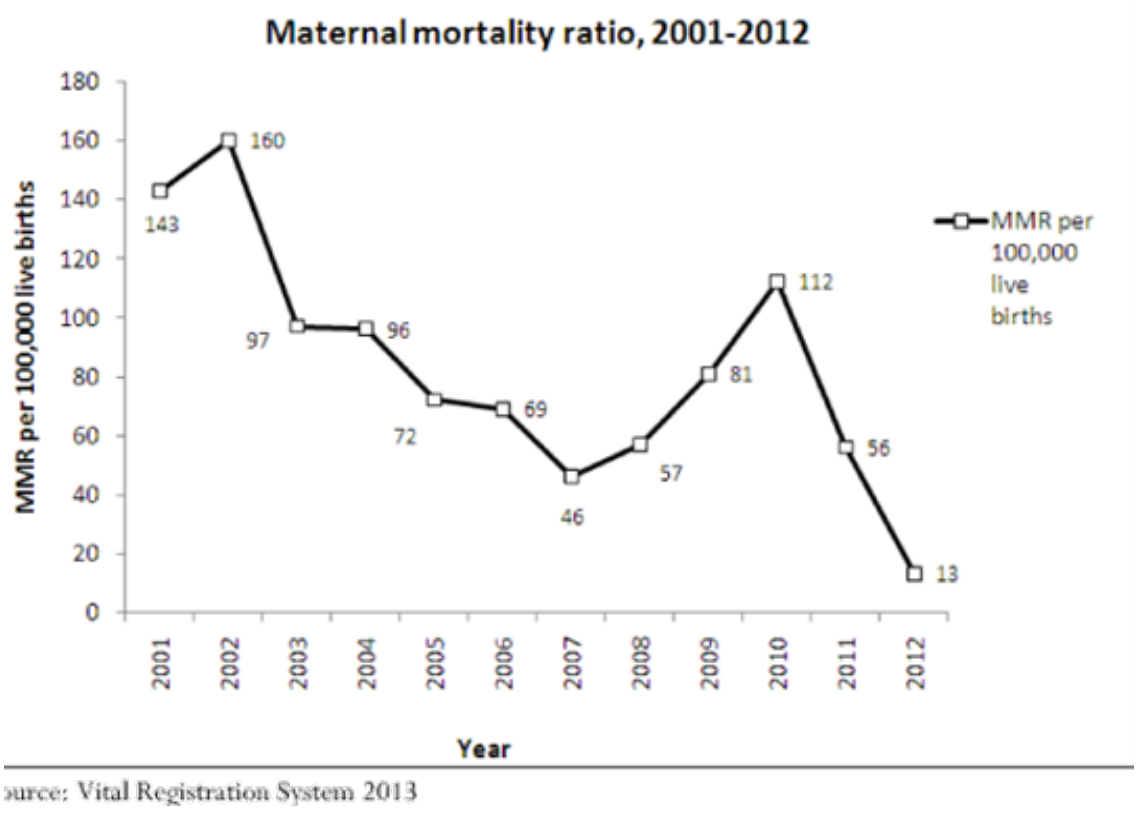


Figure 4. MMR (per 100 000 live births), 2001-2012

Figure 4 shows the decline of MMR with some fluctuations during the last decade. With a small population size, Maldives recorded, eight in 2010, four in 2011[6] and one in 2012. It is recommended, there-fore, to use absolute number for monitoring maternal deaths in a country with a small population

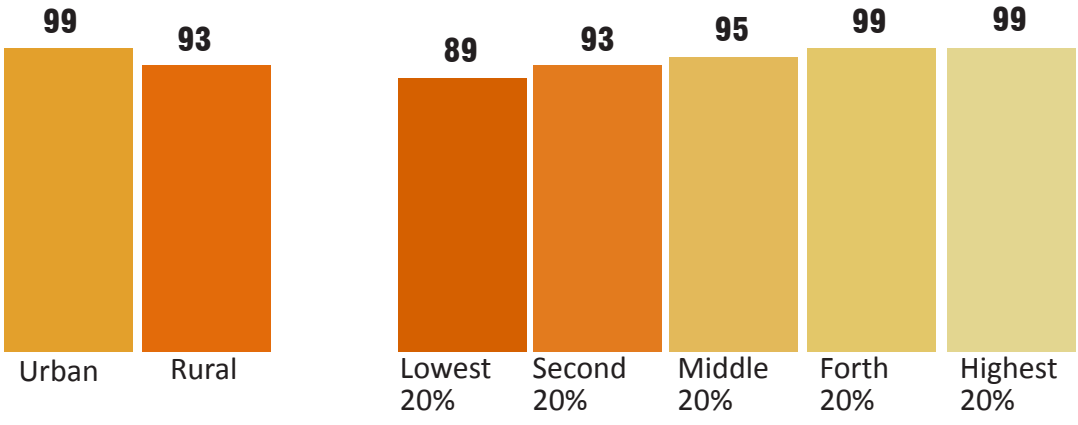
The causes of maternal deaths in 2009-2011 were, among others, eclampsia (4 cases), complications of abortion (3 cases), postpartum haemorrhage (2 cases), puerperal sepsis (2 cases), amniotic fluid embolism (2 cases) and rupture of uterus (1 case)[7] . These can tell stories on what was really happening that lead to death. As the number of maternal deaths in a year is only a few, a review of each maternal and perinatal death by the Maternal and Perinatal Morbidity and Mortality Review Committee is critical for understanding the contributing factors of these maternal deaths. These would lead to specific actions to prevent future maternal deaths because of similar problems.

[6]*Maternal and Perinatal Morbidity and Mortality Review Committee.Maternal deaths in the Maldives: 2009-2011.Male, 2012.*
[7]*Ibid.*

Not all women who get pregnant have a good nutritional status. About 12% of women have short stature below 145 cm. The percentage increases with age, is higher in rural areas, and decreases with increasing level of education and wealth status. It ranges from 18% among women with no formal education to 6% among those with more than secondary education andfrom 8% in the Central Region to 18% in the South Region.About 4.6% has a BMI less than 18.5, which denotes under-nutrition. About 65% of women took iron supplements during pregnancy for 90 days or more. Seven percent took iron tablets for fewer than 60 days. Anaemia prevalence among women was 15.1% in 2007. Maldives having a high Thalassaemia and Sickle Cell Anaemia carrier rate is a contributing factor. At present it is mandated by for couples to be screened for Thalassaemia prior to getting married, and if couples who are carriers are marrying extensive genetic counselling is offered.

The coverage of antenatal care (ANC) was 97% in 2009, with the majority of women (90%) having their first ANC visit in the first trimester of pregnancy; and 7% during the fourth and fifth months of pregnancy. The discrepancies on the coverage of ANC among rural-urban residence, wealth quintile and education level is not significant. Almost 90% of pregnant women take iron supplements during pregnancy. Almost all women (more than 97%) who received ANC were weighed, had their blood pressure measured, urine and blood samples taken and their blood tested. Blood testing is of particular importance in the screening for maternal syphilis,HIV, anaemia, and Hepatitis B, which is being carried out for all pregnant women seeking antenatal care in Maldives in 2011, there were three positive syphilis cases among pregnant women who came for ANC visit. Whereas pregnant women who are Hepatitis B positive is commoner; in 2012 74 patients tested positive among whom 57% were women and in 2013 up to October, 78 patients tested positive with 51% being women (Medical Records, Indira Gandhi Memorial Hospital).

Proportion of birth attended by a trained health professional by residence and household wealth level



Source: UNICEF

Figure 5

The total number of live births was 7182 in 2011, with 3988 births occurred in Malé and 3156 in atolls[8] . The majority of births (95%) occurred in ahealth facility, with 85% in a public facility and 10% in aprivate health facility. Discrepancies among regions, socio-economic status (Figure 5) and urban-rural dwelling are narrow, e.g. Malé and the South Central Region have the highest proportion of institutional deliveries (98%), while the North Central Region has the lowest (90%). The proportion of births assisted by a skilled attendant was 95%, with 71% assisted by a gynaecologist; 9% by a doctor and14% by a nurse or midwife. Across the regions, it ranged from 89% in North Central and Central regions to 99% in Malé[9] .

[8]MoH, Republic of Maldives.The Maldives Health Statistics 2012.Male, MoH, 2013.
[9]Ministry of Health and Family (MOHF) [Maldives] and ICF Macro. 2010. Maldives Demographic and HealthSurvey 2009. [9]Calverton, Maryland: MOHF and ICF Macro.

In the tertiary level Indira Gandhi Memorial Hospital (IGMH), regional hospitals and atoll hospitals, high proportions of deliveries are assisted by gynaecologists (69%, 82% and 85%, respectively). A nurse or midwife plays animportant role at IGMH (25%) and at health Centre (22%). At health centre, doctors provide assistance during delivery half of the time. Almost all deliveries (97%) in the private sector are assisted by a gynaecologist.

The Caesarean-section rate is very high with 32% of births delivered by C-section (MDHS 2009). The rate is higher among first births (39%) and women in urban areas (38%); while among women with no formal education the rate was 22% and among educated women 27-39% or more. The C-section rates were 25% and 41%, respectively,among women in the lowest and highest wealth quintile.

The coverage of postpartum/postnatal visit was 94%, with 67% received a postnatal checkup within two days of delivery and 3% of women had a checkup 3-40 days after delivery. There is no significant discrepancy in PNC among regions and among various socio-economic status or residence. The majority of women (92%) received a postnatal checkup from a gynaecologist, doctor or nurse/midwife.

In summary, the coverage of all basic maternal health services in health facility is higher than 90%, which corresponds to the low level of MMR. However, Maldives is unique in that about 54% of deliveries occur at the tertiary hospital and private hospital in Malé, while there are six regional hospitals and 14 atoll hospitals with many of them staffed by one or more obstetricians and paediatricians. Further, most normal deliveries are assisted by an obstetrician, while there are sufficient numbers of nurse-midwives/midwives working in the health facilities. Majority of the specialists in the outer atolls are expatriates from neighbouring countries, whereas majority are Maldives at the tertiary care hospital.

C-section rate is too high, which may put some women to unnecessary risks during childbirth and postpartum. Quality of care is an issue, as preventable causes of maternal deaths, such as rupture of uterus and puerperal sepsis are still found. With many expatriate specialists from different countries working at all hospital levels, standard of care and written clinical protocols are required to ensure the practice of evidence-based standards in managing clients. Currently, IMPAC guidelines are in use and National Clinical Protocols are in the process of being developed with the aid of consultants.

Newborn Health

According to MDHS 2009 data the Neonatal Mortality Rate (NMR) in urbanareas is 33% higher than that in rural areas (20 per 1000 live births compared with 15 per 1000live births), as majority of the sick newborns are referred to the Tertiary care hospital with Level III NICU facilities, after stabilization.However from the MoHG data of 8 and 7 per 1000 live births, respectively in 2009 and2011[10] (Figure 6).

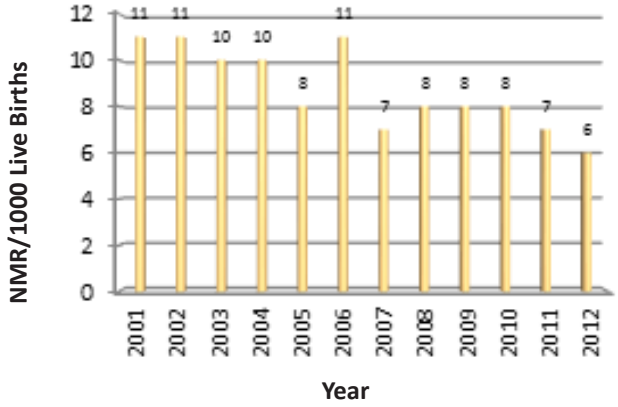


Figure 6. Neonatal mortality rate (per 1000 live births), 2001-2012

While there is a significant difference with MDHS 2009 data, Figure 6 shows that there has been a significant reduction of NMR since 2007. As most of deliveries in Maldives (95%) occur in health facilities, a facility-based survey may provide updated information on NMR. Facility based data is available on the causes of death, which requires analysing.

[10]*MoH, Republic of Maldives.The Maldives Health Statistics 2012.Male, MoH, 2013.*

Perinatal Death Reviews are ongoing. As most neonatal deaths usually relate to maternal health, process of labour and immediate newborn health care, it is important to get data on causes of neonatal deaths from a facility-based survey. In many developing countries, common causes of neonatal deaths are prematurity, asphyxia, infection and birth defects. At Indira Gandhi Memorial Hospital's NICU a birth defects register has been maintained since 2008. Furthermore, wheels are in motion for establishment of a birth defects surveillance system.

Currently, a perinatal database is being maintained at IGMH, where all the information pertaining to all the live births and perinatal deaths are being entered. This project is planned to be scaled up to include Regional Hospital in the near future.

The prevalence of premature births is available from from VRS, and detailed information is available from Level III NICU at IGMH, where majority of the premature babies are referred for further care. the prevalence of low-birth weight babies (less than 2500 g) is 10.2%. A proportion of these are premature babies, which are more vulnerable than small-for-date babies. Prevalence of Large for gestational age babies is also an issue worth researching. Data on birth defects is difficult to obtain. In the future, such data is necessary for planning and decision making.

Essential newborn care as per recommendations of WHOs "Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for Essential practice" is the standard of care given. In 2005, as per recommendation of a visiting Neonatologist Sick Newborn care a protocol of All India Institute of Medical Sciences (WHO Collaborating center) was implemented at IGMH NICU for uniformity and standardization of care. At present, National Sick Newborn Care protocols have been developed and are soon to be disseminated. Postnatal care is combined with postpartum care for mothers and its coverage has reached 94%.

In summary, NMR is low, which corresponds to the low MMR. However, the cause of neonatal deaths needs further analysis. Prematurity needs more attention, as it relates to survival and quality of life of premature babies in the future. Birth defect is also a growing issue all over the world and a concern for Maldives; thus, the existing data needs to be analysed for further interventions and preventive measures.

2.3 Preventing Unsafe Abortion

Abortion is permitted in the Maldives for two conditions 1) for thalasseamia major and sickle cell major within 120 days of pregnancy and 2) for multiple congenital anomalies and anencephaly within 120 days of pregnancy. Thalassaemia is relatively common among Maldivians with a prevalence of 0.38% in 2005[11] , carried by 18% of the population and affects one child in every 250.

Complicated abortion is one of the causes of maternal deaths. In 2010, among the eight maternal death cases, three cases were related to abortion: two cases of septic abortion in women of 18 and 28 years old and one case of rupture of uterus post-abortion in a 27-year old woman. Such cases deserve a thorough review. Each of the three cases may have different background that, if understood, can guide to necessary actions for preventing unsafe abortion. Information on abortion is very limited.

In summary, abortion is still a challenge, as it contributes to maternal mortality and morbidity. Recognizing this Ministry of Health and Gender approached the Ministry of Islamic affairs to update the ruling for abortion publicized in 1999. This appeal was reviewed by the Fiqh Academy of Maldives and a Fathwa has been revealed recently allowing abortion for rape and incest, therefore, there are 5 instances where abortion is permitted. This has been implemented in the country.

[11]*MoH, Republic of Maldives.The Health Master Plan 2006-2015.Male, MoH, 2006.*

2.4 Prevention and management of STIs/HIV

Surveillance on sexually transmitted infections (STIs) is limited. Health Protection Agency, in its annual communicable disease report 2013 revealed that a total of 524 cases of STIs were reported through the national STI/HIV surveillance system. About 97% affected females, with 502 vaginal discharge cases and 5 with ulcers. There were only 17 male cases – sixteen cases with urethral discharge and one case with ulcers. There has been an increased on detection of STIs, including chlamydia and gonorrhea that can cause infertility if left untreated.

Surveillance of STIs in the Maldives consists of syndromic STI case reporting. There had been 785 STI cases treated at health care facilities in 2013). There is no breakdown availableon specific STIs. Pregnant women are routinely screened for syphilis, HIV and Hepatitis B – there were three cases of Syphilis in 2011, but no cases in 2013. However, there is no targeted STI activities for key affected populations. Although no HIV, syphilis or hepatitis was found among female sex workers or youth in the BBS 2008, the table below provides the overall STI status[12].

Cohort/Group	FSW	Sexually active youth (Male')	Sexually active youth (Lammu)	MSM Male'	MSM Addu	IDU Male'	IDU Addu	Resort Workers
% self reporting of STIs	27%	19%	23%	17%	12%	16%	12%	7%

Source: National Strategic Plan for the Prevention and Control of HIV/AIDS, Republic of Maldives2012-2016

Health care seeking behaviour among high risk groups varied widely, ranging from 100% of seafarers to none of MSM (men having sex with men) in Addu going to health practitioners. Surveillance of STI consists of syndromic STI case reporting, sentinel etiological STI case reporting and cross sectional community-based STI surveys repeated every 3-5 years. The annual syndromic reporting has been strengthened in 2004, but it needs to be strengthened further.

Only 41.5% of women interviewed for MDHS 2009 had "comprehensive knowledge" about HIV. The School Health Survey 2009 found that nationwide, 67.2% of boys and 74.3% of girls in grades 8-10 had heard of "HIV infections/AIDS".Among Maldivians community, there is a high divorce and re-marriage rate, which increases the number of sexual partners any individual have over a lifetime. Multiple sexual partners, increased unsafe sexual relations and injecting drug usemay lead to rapidly change the low to a high HIV prevalence in the country.

Through 2012, 18 HIV-positive cases had been reported among Maldivians (16 male, 2 female) and 311 cases among expatriates. All have been identified through case reporting and majority of the infections were reportedly acquired through heterosexual transmission. Currently there are 7 living with HIV in the Maldives. Maldives reported to have cases of HIV among key populations reported in 2011 and 2012; they are from MSM and IDU communities. Twelve of the 18 HIV-positive Maldivians died of AIDS. Until recently, in Maldives, HIV infections were imported, however, the most recent infections were local. The government provides lifelong care and treatment (ARV) to all those who require, free of charge.

There are national estimates of most-at-risk populations (MARPs) for STIs/HIV in Maldives that include IDUs, female sex worker (FSW) and men having sex with men (MSM) as shown in Table 2. IDUs are the most likely trigger for an HIV epidemic, as there is a relatively large number of Maldivians using drugs with a high prevalence of needle sharing. About 31% of IDUs in Male' and nearly a quarter in Addu reported sharing an unsterilized needle at the last time of injection. These MARPs require targeted reproductive health and STIs/HIV-related services tailored to their needs and situation.

[12]*MoH.National Strategic Plan for the Prevention and Control of HIV/AIDS, Republic of Maldives2012-2016.*

Risk behaviour	National estimate	80% prevention coverage achieved through quality outreach covering
Injecting drug users	793	Male, Gnaviyani
Female sex workers	1139	Male, Gnaviyani, Addu, Thaa, Haa, Dhaal and Haa Atoll
Men having sex with men	1199	Male, Gnaviyani, Addu and Thaa Atoll

Source: National Strategic Plan for the Prevention and Control of HIV/AIDS, Republic of Maldives2012-2016

Table 2.Most-at-risk populations estimates and potential prevention coverage

About 86% of IDU in Male' had been in jail and 64% of them used drugs while in prison and 32% reported injecting drugs while in jail. FSW and IDUs both reported very low consistent condom use, while a high percentage of MSM reported they had also had sex with women within the past 12 months[13] . IDU and MSM have a wide-range sexual network. With a focused effort, in a few key geographic areas, as shown in Table 2, up to 80% of MARPs can be reached with prevention efforts to ensure the maintenance of low HIV prevalence throughout the country.

Prevention of mother to child transmission (PMTCT) of HIV infection is given a special attention. The target is in 2016 to achieve 90% of pregnant women visiting ANC clinics have comprehensive knowledge on HIV infection and prevention and access to PMTCT programme. An important target is achieved by screening 100% of women attending ANC clinics for HIV, an "opt out" option needs to be introduced. This means that the HIV test is mandatory, as a part of the national standard for ANC service and if a pregnant woman refuses to do so, she needs to make a written signed statement. Pre- and post-test counselling is provided. In 2012, 5065 pregnant women were tested for HIV through ANC services. (Annual communicable disease report, 2013) PMTCT has four prongs, from primary prevention of HIV among women, FP services for women with HIV to prevent unwanted pregnancy, prevention of HIV transmission from an infected mother to her child and treatment, care and support for HIV infected women and infants along with initiative for elimination of congenital syphilis to be delivered through the existing health care infrastructure.

In summary, prevention and management of STIs/HIV is critical to ensuring that couples are aware of the dangers of such diseases for themselves and all sexual partners, as well as for their children. STIs/HIV can jeopardize the lives of men and women may cause infertility, abortion, and stillbirth, prematurity, furthermore it can cause as social deprivation, stigma and loss of developmental opportunities among young people. Interventions targeting the MARPs and their partners are important, besides efforts to increase awareness of general population, with a special attention to young people.

2.5 Promoting Sexual Health

Adolescents and youths are the most vulnerable groups for risky sexual behaviours as they go through a challenging period of puberty and become sexually active, while their perception and understanding about sexuality may not be adequate. In Maldives, an estimated 52% of its population is younger than 25 years. For these reasons, adolescents/youths deserve a special attention in promoting sexual health.

According to MDHS 2009, 25% of young women and 22% of young men had not talked aboutreproductive health and sexuality with anyone.Among those who talked, 57% of female respondents talked with their female friends and 66% of male respondents talked with their male friends. The majority of the women discussed it more often talked with persons of the same sex, while men are more open to talking about it with persons of the opposite sex, such as female friends or girlfriends.The role of teachers is significant: more than one-third of young, never-married women reported talking with a female teacher and 13% had talked to a male teacher. Among young,never-married men, 31% had talked with a male teacher and 19% had talked with a female teacher.

[13] *Biological and Behavioural Survey (2008)*

Most young women in Maldives had their first sexual intercourse after age 18. The proportion of women who had sex before age 18 is high among women who live in urban areas and in Malé (8%) and low among women in North Central (3%). The rate of young women having sexual intercourse by age 18 decreases rapidly by their degree of education, from 14% among women with primary education to 5% among women with secondary education. The median age at first intercourse has increased from 17.0 years among women age 45-49 to 21.8 years among women age 25-29. Very few teenagers have begun child bearing at age 18, while 7% have started at age 19[14] .

Premarital sexual activity was found among 11.6% youths of 18-24 year olds.About 36% of men report having had sex with more than one partner ina life time. These men have on average 2.3partners ranging from 1.7 among men age 15-24 to 2.9 among men age 40-49.The mean number of life time sexual partners is highest among men who are divorced,separated or widowed (3.9). Urban men, men in the South and men with no formal education have higher proportions of multiple partners. As stated earlier, The divorce rate of Maldives is very high which is 11 per 1000 inhabitants/year, while many other countries have 3-5 per 1000 inhabitants/ year.

Knowledge about fertile period is deficient in young women as well as young men: 51% among women and 53% among men. Only 16% of women and 11% of mengave the correct response, that a woman has the greatest chance of becoming pregnant halfway between her periods.However, knowledge about contraceptive methods is high and equal among women and men: 94% and 93%, respectively.

In summary, there are great challenges in promoting sexual health, as a high proportion of adolescents and young people are still practising risky behaviours. These can lead to increased risks of transmission of STIs/ HIV and the occurrence of unintended pregnancies.

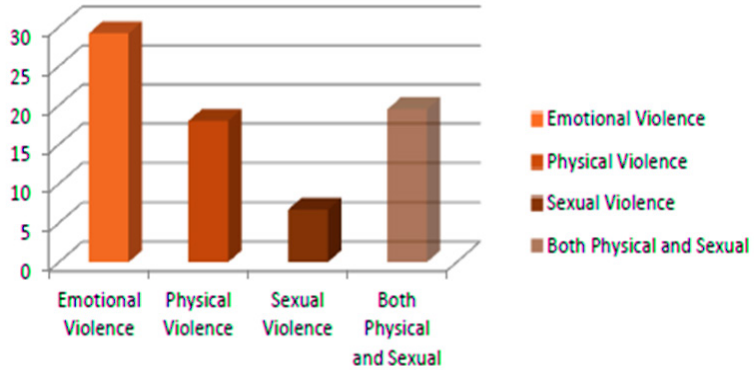
2.6 Other Issues Related to Reproductive Health

There are other components of RH that include infertility, RH needs of specific groups (e.g. young people, men, elderly, people with different ability, etc) and cancers related to RH system. There are also other situations/conditions that are closely related to RH, such as gender-based violence and RH services in emergency situation.

Gender-Based Violence

The Women's Health and Life Experience Study 2004 in Maldives highlighted the magnitude of gender-based violence (GBV). Around 19.5% women aged 15-49 who had ever been in a relationship, reported experiencing physical and/or sexual violence by an intimate partner. About 29% of ever-partnered women aged 15-49 reported experiencing emotional abuse by an intimate partner, which were highest in Central and Southern regions and lower in Male' and the North regions.

[14]*Ministry of Health and Family (MOHF) [Maldives] and ICF Macro. 2010. Maldives Demographic and HealthSurvey 2009. Calverton, Maryland: MOHF and ICF Macro.*



Source: MoH. Draft Health Sector Response to GBV. Male, MoH, 2013

Figure 7. Prevalence of gender-based violence by type of violence

Figure 7 highlights the prevalence of GBV. Women were more likely to experience severe forms of physical partner violence such as punching, kicking, and choking or burning rather than just moderate partner violence. About 6% of ever pregnant women aged 15-49 reported being physically or sexually abused during pregnancy and 41% of them being kicked or punched in the abdomen.

Those who experienced intimate partner violence are more likely to report miscarriage, stillbirth and abortion. The experience of physical and/or sexual partner violence tends to be accompanied by highly controlling behavior by intimate partners. There was a significant overlap between physical and sexual partner violence with most women who reported sexual violence also reporting physical partner violence. Women who are younger (aged 25-29), have lower levels of education and have been separated or divorced appear to be at increased risk of partner violence.

The level of non-partner violence at the national level was 13.2%. Similar to intimate partner violence, sexual violence was less common than physical violence in this group. However, non-partner violence was generally found to be higher in Male' than in the atolls, which is the opposite finding in intimate partner violence.
The Government of Maldives passed the Prevention of Domestic Violence Act in 2012. According to the new law, any acts or form of domestic violence is unacceptable and intolerable. Following this, a plan of action for implementing the law is established.

Cervical cancer

Cervical cancer is the second most frequent cancer after breast cancer among women that is related to human papilloma virus (HPV) infection. HPV infection is the most common viral infection of the reproductive tract among those who are sexually active. Although the infection is a self-limiting disease, a small percentage of the infections by some virus types may lead to cervical cancer. Most sexually active women and men are infected at some point in their lives and some may be repeatedly infected.

The peak time for acquiring infection is shortly after becoming sexually active. Skin-to-skin genital contact is a well-recognized mode of transmission. There are many types of HPV and many of them do not cause problems. HPV infections usually clear up without any intervention within a few months after acquisition and about 90% clear within two years. A small proportion of infections with certain types of HPV can persist and progress to cancer[15] .

Although most pre-cancerous lesions resolve spontaneously, there is a risk for all women that HPV infection may become chronic and pre-cancerous lesions progress to invasive cervical cancer. Symptoms of cervical cancer tend to appear only after the cancer has reached an advanced stage. It takes 15-20

[15]*WHO, 2013. Accessed at: http://www.who.int/mediacentre/factsheets/fs380/en/*

years for cervical cancer to develop in women with normal immune systemsand only 5-10 years in women with weakened immune systems, such as those with untreated HIV infection.

There is limited data related to cervical cancer in Maldives. Globally, there are currently two vaccines to be given to girls before their sexual debut (9-11 years), which protect against both HPV 16 and 18 –the types that cause 70% of cervical cancers. As pre-cancerous lesion and early stage of cervical cancer may occur with no symptoms in women who feel perfectly healthy, screening of cervical cancer is still an important prevention measures and cannot be replaced by the vaccination.

When screening detects pre-cancerous lesions, these can easily be treated and cancer be avoided. Screening can also detect cancer at an early stage and treatment has a high potential for cure. Pap smear is a common screening method in hospitals. Other methods are visual inspection using acetic acid (VIA) – which can be done at primary care level – and HPV testing. In Maldives, with a vast facility-based health services, data related to cervical cancer can be obtained from health facilities. A survey on the subject is necessary for programme planning and development. Cervical cancer screening program using VIA launched in 2014 in Male'. It's one of the priority for the government.

Reproductive Health Services in Emergency Situation

Due to its location, topography and vulnerability to climatic events, Maldives has a high risk of disaster. Tsunami 2004 created severe devastation in Maldives. Complex emergencies intensify many reproductive health risks. They decrease access to health facilities and services, including family planning, basic maternal and newborn health and emergency obstetric care. They often exacerbate the risk of STI transmission and gender-based violence due to disrupted family and community life, disturbance of social norms, risks of coercion and abuse in exchange for food, income, shelter or protection and a breakdown of law and order.

Providing the full range of reproductive health services remains a significant challenge due to the lack of infrastructure, incomplete supply of health commodities and limited capacity of the health personnel during emergency situation. It is recognized that in the future, more comprehensive services – at least as outlined in the minimum initial service package (MISP) – are to be provided during the emergency situation, when it happens.

Infertility

Infertility affects up to 15% of reproductive-aged couples worldwide.The psychological burden of couples without a child can be significant. Even when a country faces population pressure, infertile couples have the rights to get support for having a child. Information related to infertility in Maldives is not easy to obtain.

There are various causes of infertility, e.g. tubal occlusion from reproductive tract infections, which are often sexually transmitted, postpartum complications, unsafe abortion practices and ectopic pregnancy. Polycystic ovarian syndrome (PCOS) can also lead to infertility. PCOS is perceived to be a common problem in Maldives that deserves further review on the magnitude of the problem and its predisposing factors[16].

Despite their importance, infertility prevention and care often remain neglect¬ed public health issues. Low fertility is becoming more common worldwide, particularly in ageing populations and many urban settings where women are having their first babies at older ages. It is necessary to integrate infertility prevention, care and treatment into maternal, newborn and other reproductive health-care systems. It can be started as a programme that targets prevention of infection and education about fertility.

[16]WHO, 2010.Mother or nothing: the agony of infertility.Bulletin World Health Organisation 2010;88:881–882.Accessed at: http://www.who.int/bulletin/volumes/88/12/10.011210.pdf

For many infertile women, particularly those with problems such as blocked or severely scarred Fallopian tubes where surgical tubal repair is either not successful or not advisable, in vitro fertilization (IVF) can help. Unfortunately for most women in developing countries, infertility services are not widely available and IVF is unaffordable. Infertility services can be initiated at primary care level through promotive and preventive measures and backed up by referral, as appropriate. Infertility prevention also involves important lifestyle choices: it starts with quality reproductive health care which includes pre-conception fertility care.

Reproductive health needs of specific groups

RH needs of young people deserve a special attention as access to services surrounding the promotion of sexual and reproductive health and rights remains a great challenge. A holistic approach toward this service is needed to include sexual and gender-based violence, sexual diversity discrimination, relationship issues, fears and concerns about sex and sexuality. There are policies and strategies related to adolescent and youth that were developed during 1990s, although execution of those policies and strategies were not effective due to various reasons. The current governments manifesto and slogan is youth centered, to ensure health, employment opportunities, economic growth and entertainment facilities. The recently developed youth health strategy has been already endorsed. National standards for adolescent health is being developed and interventions are in progress for implementation of the standards.

Men's RH behaviours and needs change over the course of their lives. Meeting the sexual and reproductive health needs of men should result in lower rates of STIs/HIV and unintended pregnancy, better parenting, and healthier and more satisfying personal and family relationships. They also need to function as a father, overcome fertility problems and help ensure that their partners' pregnancies are healthy. Men need self-esteem, self-awareness and skills to avoid violent and coercive relationships, to engage sexually in ways that are respectful of themselves and their partners and to be part of strong, fulfilling relationships that can help them meet their other objectives.Attention to men's needs should also be leveraged to improve sexual and reproductive health services for women. The information, counseling and skills-building that men need are just as vital for women but, until recently, they have been over shadowed by women's substantial need for medical reproductive services. These are the issues that need to be considered in addressing RH needs of Maldivian' men[17] .

Elderly, people with different ability also have their RH needs. They have the same rights as other Maldivians. Data related to these groups of societies is not easy to obtain. Research in these areas would provide direction on how to address their RH needs and how RH services can be set up.

[17]*Sonfield A. Looking at Men's Sexual and Reproductive Health Needs.The Guttmacher Report on Public Policy May 2002, Volume 5, Number 2.*

III. KEY DETERMINANTS OF REPRODUCTIVE HEALTH

There are key determinants for RH programmes, including health systems issues. These need to be considered when designing RH programmes to achieve universal health coverage and impact targets.

3.1 Leadership and governance

The Government of Maldives shows its leadership and governance in health through the Health Master Plan (HMP) 2006-2015 revised in 2012 with a vision and a mission as quoted in Chapter II. The Government recognizes health as a human right and is committed to ensure access to primary health care to all citizens in an equitable manner at an affordable price. It provides a defined package of services for each level of the health system, utilizing the primary health care approach. Health system is aimed to be responsive to the socio-cultural situation of the country and the specific needs of women, children, the elderly and people with special needs; while all preparatory steps are taken to respond to emergencies and disasters. Government is also committed to achieve the MDGs and targets of ICPD++.

The policy goals of the HMP include: i)to ensure people have the appropriate knowledge and behaviours to protect and promote their health; ii)to ensure safe and supportive environments are in place to promote and protect health and well being ofthe people; iii) to prevent and reduce burden of disease and disabilities; iv) to reduce the disparities in the quality of life anddisease burden; v) to ensure all citizens have equitable and equal access to health care; vi) to ensure public confidence in the national healtsystem; vii) to build partnerships in health service; viii) to ensure adequate and appropriate human resourcesfor health service provision; ix) to ensure health system is financed by a sustainable and fair mechanism. RH programmes are basically included in all of the nine policy goals.

Following the ratification of the Decentralization Act in May 2010, 188 island councils, 19 atoll councils and two city councils were formed as a part of the executive branch of the unitary Government. The councils are to prepare development and management plans with the participation of the community, NGOs and other relevant stakeholders and includeprojects to utilize these funds and other resources. The oversight body for the electedcouncils is the Local Government Authority (LGA), another newly formed body at national level, which standardizes and harmonizes the operations of local councils[18] .

There have been substantial changes in 2012 made by the new Government aiming at moderating the initial strong decentralization move. This is an important challenge for the health sector in Maldives.The managing boards were dissolved and amalgamated in one central board which is a transitory structure towards a central management of health services at national level[19].The focal segment of the system will now be at the Atoll level . In the MoHG, the Health Protection Agency (HPA, formerly Centre for Community Health and Disease Control) functions as the technical players for health programmes, including RH programmes. The Health Protection Act passed in December 2012 empowers the MoH to directand oversee measures for protecting and maintaining public health and increasing the awareness of citizens.

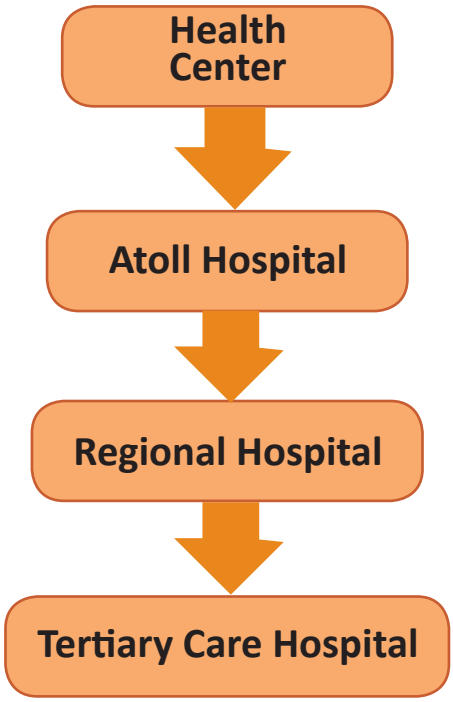
3.2 Service delivery

The health services in Maldives are provided through a 4-tier health system that include: i) health centres and health posts as primary health-care level facilities; ii) atoll hospitals that function as first level referral facilities

[18]*WHO.WHO Country Cooperation Strategy Republic of Maldives 2013-2017.WHO Country Office for Maldives, 2013.*

[19]*MOH.Health Sector Roadmap 2012/2013.Male', 2012.*

and iv) tertiary care hospitals – there are two in Male': Indira Gandhi Memorial Hospital (IGMH, public hospital) and ADK Hospital (private hospital). Annex 2 provides names of regional and atoll hospitals.



There are more than 160 health centres with more than 24 health posts, 14 atoll hospitals and six regional hospitals, besides many private medical centres[20] . Health services in Maldives are mostly provided in hospitals, while it is expected that each level of care can provide a set of service package. A high proportion of people in islands and atolls seek and utilize health services in Male'. For example, more than 50% of deliveries in the country occur in Male, especially in the tertiary care hospitals. Also, a high proportion of normal childbirths are assisted by a specialist.

There are hospitals with a very low bed occupancy rate in 2011, such as Vaavu Atoll Hospital (5%), Muli Regional Hospital (6%), Haa Alif Atoll Hospital (9%), Alif Alif Atoll Hospital (10%),Dhaalu and Gaaf Alif Atoll hospitals (11%). The rest of regional and atoll hospitals have the rates ranging from 22% to 74%. The average number of outpatient visits per day is also low in Vaavu Atoll Hospital (11) and Alif Alif Atoll Hospital (18). The rest of regional and atoll hospitals have 28-142 visits/day.

Reallocation of roles and responsibilities for health service delivery introduced in recent years may have had some implications in terms of access, quality, coverage and safety ofhealth services. This is especially because there is no dissemination strategies and weak monitoring and control mechanisms. However, the recent consolidation of services under one board may provide a good opportunity to help all institutions andpersons working in the health system to define, understand and assume their functions, responsibilities and terms of accountability.

Introduction of universal social health insurance in January 2012 hascaused an important increase in the utilization of health services. This poses a serious strain on the system which in some cases, particularly in the private sector. It leads to financially driven high workloads with very short consultation times and consequent poor quality of service provided; however, under utilization has also been identified in recent health system assessments[21] .

3.3 Human Resources

There has been a rapid expansion of medical services in the last ten years. In 2005 there were 379 medical doctors with a doctor-to-population ratio of 1:775, while in 2010 there were 525 doctors with a doctor-to-population ratio of 1:609. In 2005,the number of nurses was 974 with a nurse-to-population ratio of 1:302, where as in 2010, with the total number of nurses being 1868, the nurse-to-population ratiowas 1:171. The nurse-to-doctor ratio was about 4:1. Despite these improvements, there are important issues in terms of accessibility, quality and performance .Low productivity in some of health facilities has been reported; recently health sector has undergone major reformations within which the services have been reorganized and staffs has been shuffled. A monitoring mechanism of health services also exist however monitoring was not adequate during the changeover.

[20]*MoH.Health Facility Registry 2012.*
[21]*MOH.Health Sector Roadmap 2012/2013.Male', 2012.*
[22]*MoH.Maldives health workforce development: Brief situational analysis.Unpublished. 2013.*

There is a severe shortage of national health professionals, health sector managers and other support workers which is often addressed with recruitment of expatriate professionals. In 2010, 51% of the total work force was expatriate with some categories, e.g. doctors, going up to 81.7%, or even to 100%, such as physiotherapists[23]. Table 3 highlights the number of expatriate work force providing medical services in Male and atolls, especially for doctors and nurses.

International recruitment of health workers is expensive and has implications for health service delivery:a high turnover among expatriate staff.. The Maldives Medical Council is trying to strengthen the licensing process for medical professionals recruited for the country.

	Public Sector				Total Public Sector		Total Private Sector		Grand Total
	Male'		Atolls						
	Expats	Local	Expats	Locals	Expats	Local	Expats	Locals	
General Practitioners	58	39	218	6	276	45	4	5	300
Doctor (specialist)	44	45	82	0	126	45	22	2	195
Nurses	342	264	639	569	981	833	44	10	1868

Source: WHO. WHO Country Cooperation Strategy Republic of Maldives 2013-2017.WHO Country Office for Maldives, 2013.

Maldivian students are sponsored to undertake medical/other professional pre-service/post-graduate training abroad. However,the system makes it easy for them to pay back the amount that the Government spent on them and move to the private sector. There is some evidence about increasing trends of local professionals moving from the public to the private sector andalso an incipient migratory move abroad among key health professionals.

RH services in hospitals are mainly provided by specialists. This does not permit adequate opportunities given to nurses/nurse-midwives to practice their skills. Recent assessment of the health systems in Maldives identified other important issues affecting the health workforce, as follows.

- Difficulties in attracting and retaining health workers to/in the atolls and islands, leading to a high turnover and overall shortages of human resources that results in an inequitable distribution of health workforce between Malé and the atolls.
- Fragmented information and knowledge management systems leading to limitations in evidence-based decision making.
- Poor career and professional development opportunities, ineffective incentives system, poor work environment, weak supervision, poor social and institutional recognition leading to poor motivation and low productivity.
- Weak leadership and management of human resources at national and subnational (atoll) levels.
- Limited local production capacity leading to overdependence on expatriate health professionals.
- Variability in the quality of pre-service and postgraduate training often not responding to current needs[24] .

[23]*MOH.Health Sector Roadmap 2012/2013.Male', 2012.*

[24]*MoH.Maldives health workforce development: brief situational analysis.Unpublished. 2013.*

3.4 Health Financing

The MoHG provides comprehensive health services, which are highly subsidized for all citizens. These are funded by general tax revenues and donations. Almost 90% of inpatient and 70% of out patient services were provided by the public sector health facilities in 2011. The MoHG with the help of its donor partners also covers the cost of all preventive services and immunization[25] .

The total health expenditure (THE) in 2011 was USD 179414 610 (9% of GDP) or USD 561/capita, while the Government budget on health was USD 78 950 940 or USD 247/capita. There are three main sources of finance for the health sector: the public, private and external sources. The major source of health funds is the people of the Maldives, which accounts for almost 50%. The second main source of finance is the Government of the Maldives (44%). External sources, such as donations and grants for multilateral and bilateral aid, contributed to less than 3.3%. The employers contributed approximately the same percentage to cover their employees for health insurance[26].

Direct out-of-pocket expenditures are high (49%), of which almost 53%was spent at the public providers and 47% at the private providers.Overall, more than 45% of THE is managed and spent directly by the household, 45% by the public financing agents and 3% by donors and NGOs. The health services corporation manages most of the public financing resources (29% of THE) in 2011 and it also includes public health issues in its mandate; however, most of these resources have been diverted to curative care services at atoll level. Private insurance manage a growing good amount of health funds in Maldives and represent almost 4% of THE. Donors transfer most of their funds to the MoH and, secondly,to their own donor-run health services facilities, other aid groups and NGOs.

Public sector providers are the major recipients of health funds(more than37% of THE). These include MoH facilities, e.g. IGMH (10.6% of THE), regionaland atoll hospitals, health centres and health posts. Public hospitals receive more than30% of THE, health centers accounts to almost 7.5% and health post 1% of THE. Private providers (physicians, clinics, dentists and private pharmacies) account for 28% of THE. World providers account for 23.7%, mainly overseas treatments, paid mostly by the people[27] .

The health funds are primarily spent on curative care (66.8%),both inpatient and outpatient curative care, with almost 11% spent on administration and 5.5% on preventive care and 17% on medicines. Nationwide, Maldives spent USD 130/capita on inpatient curative services and the same amount on inpatient treatment abroad. Only USD 11/capita has been spent on public health programmes. The pharmaceutical survey shows that USD 95/capita has been spent on medicines in 2011. This high spending has been a great concern and further attention has been made on Pharmaceuticals and Drugs Policy in terms ofconsumption and control of the import-export operation.

The universal social health insurance scheme has attained a high coverage of the country's population. In 2012, Aasandha has beenintroduced, with a free universal access to the scheme of the entire population, with annual individual financial limits of MVR 100 000 (USD 6 485). Currently, beneficiaries tend to over-utilize services due mainly to poor information about the rational use of insurance benefits. This leads to the perception of Aasanda being a "100 000 MVR pre-paid scheme", which results in inefficient use of resources, especially with the absence of gate-keepers in the system.

On the other hand, it leaves the patient to decide which services are required, which also pose some safety risks on patients who may end getting inadequate or unnecesary services for theirspecific health problem. On the insurer side, there is a rather poorly targeted package of services with prevalent diseases or more disadvantaged groups not being prioritised. Also, the insurer does not selectively purchasing the best service providers but all of them.

[25]WHO.WHO Country Cooperation Strategy Republic of Maldives 2013-2017.WHO Country Office for Maldives, 2013.
[26]MoH and WHO.Maldives National Health Account 2011.Male', 2013.
[27] Ibid.

3.5 Health information

The process of devolution followed by centralization of some elements of the system has left the health information system (HIS) seriously fragmented. While data collectionworks well in many of the sub-systems (e.g. programmes, some health facilities, etc), information sharing, dissemination and processing for use by policy makers is often not happening. Capacity at central level both qualitative (e.g. data analysis) and quantitative (e.g. number of staffassigned to HIS) is limited. At peripheral levels motivation to collect and process data is low which leads to, among other problems, poor timelines and completeness of HIS reports. As mentioned in some recent technical reports current deterioration of the HIS is at the moment alarming requiring immediate action to revitalize it .[28]

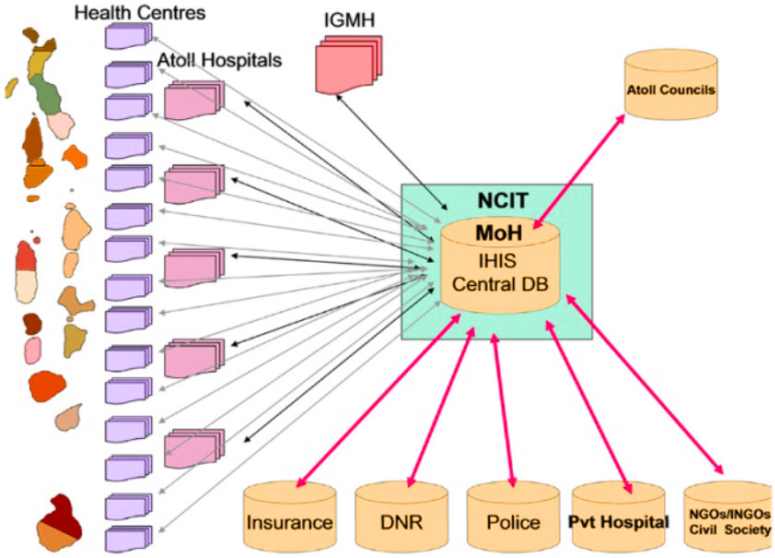


Figure 8. Planned integrated health system in Maldives

The MoHG currently undertakes work to develop in collaboration with the National Centre for Information and Technology (NCIT) under way national integrated health information system with electronic health record of each individual. This would allow access to patient-based data for authorized users. There is an intention to link all sources of health information, e.g. hospital data, public health data, vital statistics and health insurance into an integrated HIS. Also, a national HIS policy document is being formulated.
Source: OneUN in the Maldives, Newsletter, Issue 11, April-June 2013.

Information on quality of RH services is important as a basis for improving quality of care. However, such data is difficult to obtain. As the coverage of most of RH services is high and these services are mostly provided in health facilities/hospitals, it is useful to have such data from a simple facility-based survey on key aspects of RH that can be done quickly by local academic institutions or NGOs.

3.6 Medical products and technology

Medicines, medical material and technology are increasingly blamed for cost escalation of health care. Most of the pharmaceutical procurement and supply are managed by private sector except for a fraction of drugs procured and supplied by the State Trade Organization (public organization with 17% private share). Before the introduction of universal health insurance (Aasanda)in early 2012, medicines were co-paid by patients (approximately USD 2.6 per prescription). Currently, they are fully reimbursed[29].

[28] *MOH.Health Sector Roadmap 2012/2013.Male', 2012.*
[29] *Ibid.*

An essential medicines list exists but adherence by prescribers isvery low with their choice open to around 2900 registered drugs. There is an absence of a proper system tomonitor consumption of medicines; therefore, it is difficult to forecast needs and ensure an adequate supply. This leads to health facilities, including referral hospitals, reporting stock-outs and wastage due to expiry of life-saving drugs. Drug quality control is suboptimal with limited qualitative and quantitative testing capacity and poor inspection and control due mainly to insufficient staff.

Regulatory framework for medicines and technologies is weakwith important delays in legislative processes leaving the sector functionally unregulated in some key areas. There are problems identified also in the use of drugs by prescribers with polypharmacy and irrational use having been detected in recent assessments.

3.7 Demographic Situation

As per the 2006 Census, 37% of the population were between 10 and 24 years old. Hence health issues and specific needs of this population segment, such as adolescent sexual and reproductive health and nutrition, psychological status, education, employment and socioeconomic problems leading to tobacco and drug use, are a priority. At the same time, the proportion ofthe elderly population increased from 3.8% in 2000 to 5.3% of the total populationin 2006, indicating the need for developing targeted programmes for healthy ageing[30].

There is also an increase in internal migration of reproductive-age male population from the atolls to Malé. This increase in male population in Malé together with the decline of population growth and correspondinglower levels of fertility, provision of family planning and reproductive health services to the population in the atolls and to the overcrowding population of Malé.

Socio-cultural issues, including values, norms and beliefs that are embraced by Maldivians in general may influence acceptance of health services. Urban and rural communities may differ in their views about reproductive health. This difference may also occur among regions and atolls.

3.8 Partnership

Maldives has long-standing collaboration with international agencies, including United Nations agencies involved in health, e.g. UNICEF, UNFPA and WHO.The other key partners in health are South Asian Association for Regional Cooperation (SAARC), the World Bank, Islamic Development Bank and Asian Development Bank. There is a record of partnership with Global Fund(GFATM). Health and academic institutions of other countries provide support in exchange of experiences, technical expertise, training opportunities andcollaborative programmes. The priority areas for international collaboration are based on health issues indicated in the United Nations Development Assistance Framework(UNDAF).

Collaboration among sectors is a critical in addressing many aspects of RH, e.g. adolescent sexual and RH, family planning, MNH, prevention of STIs/HIV, gender-based violence, etc. Among the sectors that are involved are ministries of education, social welfare, youth and sports, home affairs, etc.

The Government also recognizes the community organizations and NGOs as useful partners.They are mostly concentrated in Malé. The Society for Health Education delivers awareness programmes and provides thalassaemia screening services, adolescent health and family planning services. The Diabetes and Cancer Society of Maldives conducts screening,awareness and group education programmes. The Manfaa Institute on Ageing provides empowerment and awareness programmes for the elderly and their caregivers. The Care Society conducts community-based programmes for persons with disabilities and conducts awareness and advocacy for the rights of persons with disabilities .[31]

[30] *WHO.WHO Country Cooperation Strategy Republic of Maldives 2013-2017.WHO Country Office for Maldives, 2013.*
[31] *Ibid.*

IV. STRATEGIC FRAMEWORK FOR REPRODUCTIVE HEALTH

The Strategic Framework for Reproductive Health aims to provide guidance for advancing reproductive health programmes nation-wide in addressing key RH issues and challenges. It follows the directions provided by the Health Master Plan 2006-2015, while addressing RH issues as elaborated in Chapter II and considering key determinants of RH as elaborated in Chapter III. The Strategic Framework also maintains continuity with the former National Reproductive Health Strategy 2008-2010 and linkage to other relevant national strategies.

Overall, Maldives has achieved a high coverage of all basic maternal and newborn health services to more than 90%, although CPR remained low at 27% (MDHS 2009). However, the quality of all aspects of RH services requires further review. Also, there are issues on unequal utilisation of health facilities with more than half deliveries occur in the tertiary level hospitals in Male', while atoll and regional hospitals are staffed with adequate number of nurse-midwives and backed up by expatriate obstetricians. These contribute to the high costs of provision of health services. Further, a large proportion of normal deliveries are attended by an obstetrician leaving nurse midwives with less practice and reduced confidence in assisting childbirth.

The large proportion of adolescents and young people ages 10-24 years (37% – Census 2006) and their special needs on sexual and reproductive health deserve a special attention. Also, the growing proportion of elderly (5.3% – Census 2006) indicating the need for developing targeted programmes for healthy reproductive life while aging. There are other members of society who have special needs in sexual and RH, such as those with different ability. They have equal rights to be treated equally as other citizens.

4.1 Goal and objectives

The goal of the National Reproductive Health Strategy 2014-2018 is to achieve universal access to reproductive health towards achieving the right of the individual and couples to protect theirreproductive health and to take responsibility for their reproductive functions – and to maintain maternal mortality ratio at lower than 50 per 100 000 live births (or less than 4 maternal deaths/year, nation-wide) and perinatal mortality rate at lower than 10 per 1000 total births by 2018.

The objectives to be achieved by 2018 are as follows.

1) To increase (all methods and modern methods) by 5% from the current estimate of 35% and 27% respectively.
2) To maintain proportion and quality of institutional deliveries at least 95% with at least 60% of deliveries occur at the closest health facility from home.
3) To maintain coverage of basic maternal and newborn health services (antenatal and postpartum/postnatal care) at least 95%. and maintain service quality standards at all levels.
4) To ensure the implementation of standard quality of basic maternal and newborn health care and emergency obstetric/sick newborn care in at least 80% of health centres, atoll and regional hospitals.
5) To continue screen all pregnant women for HIV and syphilis in ANC visits for follow up actions.
6) To collaborate with education sector in implementing family-life/life-skills education or sexuality education in at least 75% of schools and in provision of adolescent-friendly health services.
7) To strengthen RH services for RH morbidities, such as prevention and management of STIs/HIV, infertility, polycystic ovarian syndrome, cervical cancer, people with special needs, in cluding men, people with different ability.

There are health-system aspects related to RH that needs to be addressed in achieving the objectives.

1) Health services shall be provided through a 4-tier health system with effective referral system from the community to health centre, atoll and regional hospitals to the tertiary hospital. For each level, the package of RH services is to be defined,utilizing primary health care approach.
2) Health facility performance: a regular review on health facility performance can support decision making for effective and efficient management of health facilities.
3) Human resources for RH: to promote effective and efficient RH services, roles of each category of health providers are to be reviewed, which should be consistent with the 4-tier health system.
4) Health information system: information related to key RH issues must be available in health facilities; however, the data is not reported or collected, or available but not analysed. These are missed opportunities for practising evidence-based programme planning and decision making.
5) Quality of each component of RH services requires improvement and standardized nation-wide.
6) Reviews and research are needed to understand the above issues to lead strategic decision making.
7) Tools to use for assessing health facility in order to get reliable and regular information (such as SARA) about them on most of the above aspects. [32]

The Health Master Plan 2006-2015 has set targets to be achieved by 2015. Some of the targets are not yet achieved; however, information on this is limited or not available. Table 4 provides RH-related and health system targets that are relevant to RH programmes in the Health Master Plan 2006-2015.

Table 4. Indicators related to RH to be achieved by 2015 as included in the Health Master Plan 2006-2015

Indicator	Baseline 2005	Target 2010	Target 2015
Adolescent			
Percentage of adolescents with correct knowledge about contraceptives	16%	25%	50%
Percentage of adolescents with correct knowledge on preventing STIs and HIV	54%	65%	75%
Percentage of adolescents using tobacco	24.7%	<15%	<10%
Family planning			
CPR	39%	39%	39%
Maternal and newborn health			
Maternal mortality ratio/100,000 live births	73	<70	<50
Perinatal mortality rate/1000 live births	19	15	10
Percentage of women of reproductive age (16-45) given TT vaccination	49%	75%	>95%
Percentage of mothers who had alive birth receiving TT vaccination	65%	80%	90%
Percentage of pregnant women receiving 4 ANC visits by atrained health professional	91%	>95%	100%
Proportion of births attended by SBA	92%	95%	100%
Prevalence of anemia among pregnant women	51%	35%	25%
% of pregnant women consuming IFA at least2 months during pregnancy	80%	90%	>95%
% of pregnant women attended by a gynecologist atleast once during T-3	NA	75%	>95%
Proportion of babies born with birth weight less than 2500 grams	11%	<10%	<5%
Cancer in women			
Percentage of women above 35 years screened for breast cancer	NA	Increase 50%	Increase75%
Percentage of reproductive age women screened for cervical cancer	NA	Increase 50%	Increase75%
Prevention of STIs/HIV			
Percentage of people with correct knowledge on HIV/AIDS signs/symptoms	99%	100%	100%
Percentage of people with correct knowledge on ways of transmission of HIV	91%	95%	95%

[32]WHO.Health statistics and health information system.Geneva, WHO. Can be accessed at: http://www.who.int/healthinfo/systems/sara_introduction/en/

[33]As per definition, the denominator for perinatal mortality rate should be per 1000 total births

Indicator	Baseline 2005	Target 2010	Target 2015
Percentage of people with correct knowledge on STIs signs/symptoms	48%	75%	>90%
Percentage of people with correct knowledge on ways of transmission of STIs	67%	80%	>95%
People with specific RH service needs			
Increase the proportion of population over 40 years undergoing regular screening and check-ups from baseline	NA	By 5%	By 15%
Increase the proportion of ageing and disabled people involved in social activities	NA	By 5%	By 15%
Health-system related			
Percent of health facilities with adequate personnel/facilities for defined service	NA	75%	90%
Access to a referral health facility in less than 1 hour by ordinary boat	NA	75%	95%
Percent of atoll level health servicesutilizing health information/data for strategic planning and management	NA	50%	100%
Availability of a skilled birth attendant (SBA) in inhabited islands	NA	All islands	Sustained
Availability of PHC worker dedicated to PHC work in inhabited islands	NA	All islands	Sustained
Availability of health facility providing comprehensive primary health care(basic preventive, diagnostic, curative and rehabilitative services) in inhabited islands	NA	All islands	Sustained
Percentage of islands with a mechanism for medical evacuation and transport	NA	50%	100%
Percentage of emergency medical evacuations undertaken in less than one hour	NA	80%	100%
Percentage of population covered under health insurance	NA	70%	100%
Proportion of population with access to medicines	79%	85%	95%
Population awareness on services available at local health facility increased	NA	By 25%	By 50%
Proportion of atoll level health facilities with quality management systems	0	25%	50%
Proportion of health facilities where clinical services are audited	NA	25%	50%
Proportion of health facilities where managerial services are audited	NA	50%	100%
Percentage of health facilities with total quality management programmes	None	At central	At regional
Proportion of collaborating programmes with NGOs and community groups	~10%	By 10%	By 25%
Proportion of multisectoral committees in health sector with NGO representation	~50%	75%	100%
Health services provided by nongovernmental sector increased	NA	By 15%	By 25%
% islands with organized community groups working for health increased	NA	By 10%	By 25%
Staff requirement defined for all health institutions and number of staff in place matching the minimum requirement	Defined, not matched to skills	Defined,match-ed to skill	Matched Minimum skill
Proportion of staff with clear job descriptions and responsibility assigned	Descriptions not specific	100%	Sustained
Performance assessment mechanism implemented and linked to promotions	Not fully im-ple-mented and not linked to reward	Fully implemented	Linked to reward
Staff proficiency testing for re-registration nursing staff established	None	In place	Sustained
Increase in expenditure on preventive measures	28%	Up to 33%	Sustained
Improve access to essential drugs	79%	85%	95%
Social health insurance mechanism established	None	Established	Universal coverage

4.2 Values and principles

The following values and principles are the basis for implementing RH programmes in 2014-2018.

1) Respect the rights of the individual to informationand education and emphasizes access to accurate information in order that they take full, free andinformed decisions.
2) RH services are people-centred,confidential and not to discriminate against any individual on accountof gender, or social background.
3) RH services are provided in a manner that ensures affordability,equity in access and quality corresponding to the needs of each individual.
4) RH services ensure privacy of the individual,and sensitive and responsive to the socio-cultural circumstances of the individual.
5) Evidence-based interventions, proven to be effective and beneficial to health, which lead to provision of good quality of RH services within a continuum of care along the life course.
6) Consistent with other relatednational policies, legal provisions and relevant international agreements and conventions.

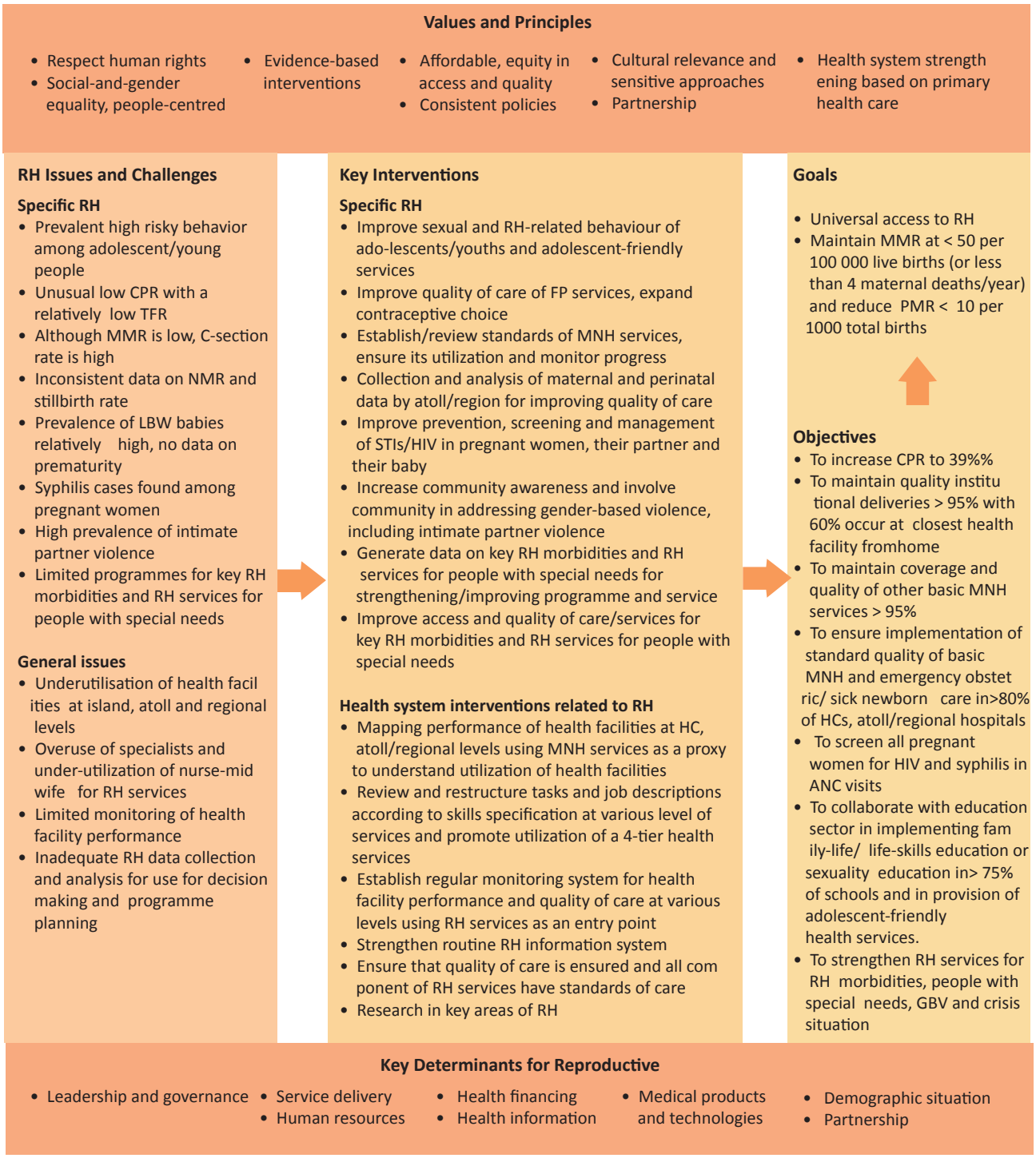
7) Health system strengthening based on primary health care to ensure sustainability for achieving equity and universal access to integrated andcomprehensive RH interventions.

8) Partnerships with relevant programmes and sectors, development partners and stakeholders in RH to optimize coordination and collaboration that promotes transparency and accountability in achieving the RH goals and to ensure community participation.

4.3 The Framework

The Strategic Framework for Reproductive Health 2014-2018 is summarized in Figure 9.

Figure 9. The Strategic Framework for Reproductive Health 2014-2018



As stated earlier, the Framework aims to provide guidance in addressing RH key issues and challenges in 2014-2018, as elaborated in Chapter II. It uses values and principles as stated in Section 4.2 and considers the key determinants of RH, as elaborated in Chapter III. The goals and objectives are to be kept consistent with the Health Master Plan 2006-2015and maintain continuity with the former National Reproductive Health Strategy 2008-2010, as well as linkage to other national strategies.

The Key Interventions in the Framework consists of sets of activities to ensure the achievement of the objectives and goals by 2018. This includes specific interventions for RH components and health system interventions related to RH. These key interventions are elaborated further in Chapter V.

Specific interventions forRH components

1) Improve sexual and RH-related behaviour of adolescent/young people and improve quality of adolescent-friendly reproductive health services.
2) Improve quality of care of FP services, expand contraceptive choice.
3) Develop/review standards of MNH services, ensure its utilization and monitor progress.
4) Collection and analysis of maternal and perinatal data by atoll/region for improving quality of care.
5) Improve prevention, screening and management of STIs/HIV in pregnant women, their partner and their baby.
6) Increase community awareness and involve community in addressing gender-based violence, including intimate partner violence.
7) Generate data on key RH morbidities, as well as data on RH services for people with special needs, and people living with haemoglobinopathies for strengthening/improving RH programmes and services.
8) Improve access and quality of care/services for key RH morbidities and RH services for people with special needs.

Health system interventions related to RH

1) Mapping performance of health facilities at health centre, atoll and regional levels and tertiary using MNH services as a proxy to better understand utilization of health facilities at various level.
2) Review and restructure tasks and job descriptions according to skills specification of staff providing RH services at various level and promote utilization health services.
3) strengthen regular monitoring system and support for health facility performance and quality of care at various levels of health facilities using RH services as an entry point.
4) Strengthen routine RH information system.
5) Ensure that quality of care is monitored, including that all component of RH services have evidence-based guidelines/standards.
6) Research in key areas of RH to better understand key RH topics that are supportive for evidence-based decision making and planning, as well as improve quality of care.

V. KEY INTERVENTIONS AND ACTIVITIES

The key interventions and activities to ensure the achievement of the objectives and goals of the Reproductive Health Strategy by 2018 have been highlighted in Chapter IV. The following are further detailed of interventions and activities.

5.1 Increase quality of care for family planning

Despite the low CPR at 27% (and the use of traditional method around 8%) and a high unmet need at 29% (MDHS 2009), Maldives has a low TFR at 2.5. This might be related to quality of FP services, a very high divorce rate, infertility because of STIs or morbidities such as PCOS, use of traditional contraceptive methods or termination of unwanted pregnancy. Research on these issues can be useful for improving FP services and other aspects of reproductive health, as well as quality of life.

The HMP 2006-2015 targeted CPR at 50% in 2010 and 65% by 2015, while the National RH Strategy 2008-2010 targeted CPR at least 45% by 2010. The latest CPR data available from 1999 , 2004, 2009 show declining CPR from 42,39 and 35 respectively.

The following key activities are critical in achieving the targets.

i. Increase awareness on the importance of using contraceptives to prevent unwanted pregnancy that may lead to unsafe abortion. This can be done through: i) advocacy to religious leaders, community leaders, professional and women organizations; ii) implement behaviour-change communication for FP; iii) use multi-sectoral channels to educate couples, brides-bridegrooms to be and adolescents; and iv) engage various mass media, private sectors and partners in promoting FP services.

ii. Ensure quality of FP services and address special needs of various segments of communities. The key activities are: i) ensure that all health facilities provide quality FP services that are client-centred; ii) improve quality of FP services and counseling according to national standards, including in managing side effects, through facilitative supervision and knowledge/skills update; iii) ensure availability of contraceptives and im prove contraceptive choice, including emergency contraception for appropriate use, in all service delivery points; iv) address special needs for FP for special groups, e.g. women with HIV positive (in coordination with National HIV and AIDS programme), sexually active unmarried couples, those with different abilities, female Substance users etc.

iii. Ensure good management of FP commodities, supplies and equipments. The key activities are: i) assessment of FP commodities, supplies and equipments, especially at HC and atoll hospital levels; ii) ensure adequate stock, quality, distribution and monitoring of these.

iv. Conduct an assessment to understand the causes of low CPR, high unmet need for FP in a low TFR.

v. Strengthen linkages between FP services and other RH services, such as postpartum FP and post-abortion FP, prevention of STIs/HIV, prevention of abortion, managing infertility, etc.

5.2 Promote institutional deliveries to take place at the closest facilities from home

Maldives is unique in that about 54% of deliveries occur in Malé, while there are six regional hospitals and 13 atoll hospitals with many of them staffed by one or more obstetricians and paediatricians. Further, most normal deliveries are assisted by an obstetrician, while there are sufficient numbers of nurse-midwives/midwives working in the health facilities. This might be related to a very high C-section rate at 32% of births, which

may put some women to unnecessary risks during childbirth and postpartum. Quality of care is an issue, as preventable causes of maternal deaths, such as rupture of uterus and puerperal sepsis are still found. With many expatriate specialists from different countries working at all hospital levels, standard of care and written clinical protocols are to be ensured. The following are the key activities.

i. Ensure that HC, atoll and regional hospitals in each region function well as a sub-national unit that can provide comprehensive MNH services, with a special attention to childbirth as most maternal and newborn deaths occur around it. Normal deliveries should be able to be carried out by a nurse-midwife and backed-up by a medical officer. When pregnant women have risk factors, childbirth should be arranged in advance to take place at atoll hospital and assisted by an obstetrician and backed-up by respective regional hospital. Transport arrangement should be prepared in advance. Although this is the existing mechanism for referrals it need strengthening starting from atolls with a large number of populations (10 000-20 000 inhabitants), e.g. Seenu (Addu Atoll), Haa Dhaalu (South Thiladhunmathi), Kaafu (Male' Atoll), Raa (North Maalhosmadhulu), Haa Alif (North Thilad hunmathi), Laamu (Hadhdhunmathi), Shaviyani (North Miladhunmadhulu), Gaafu Dhaalu (South Huvadhu Atoll), Noonu (South Miladhunmadhulu).

ii. Provide quality and timely childbirth and newborn care as a continuum of care from antenatal period by closely monitor pregnant women after last ANC, around expected due date and anytime when there is danger sign. Provide post-partum FP service.

iii. Ensure availability of medicines, supplies and equipments for ANC, childbirth, postpartum and newborn care; especially prevent stock outs of life-saving medicines for mothers and newborns.

iv. Ensure quality of care by monitoring performance of health providers, through facilitative supervision, ensuring adherence to evidence-based standards and guidelines for maternal and newborn health and peer reviews. C-section can only carried out based on medical indications.

v. continue and strengthen maternal and perinatal death reviews (e.g. verbal autopsy and facility-based maternal death reviews) to understand local background and contributing factors that lead to maternal death and, in turn, they can guide to actions to address these factors for preventing future maternal deaths. Verbal autopsy to be combined with reporting of maternal deaths by local authorities as notifiable events to be reported within 24 hours, so that a verbal autopsy can be done immediately by a health provider using a standardized form/questionnaire. Near-misses cases review initiated in 2012 need to be continued and expanded to include regional and atoll hospitals as planned. the number of maternal deaths ranges from 4 to 8 deaths during 2009-2011..

vi. Expand maternal-perinatal network and database entry to regional and atoll hospitals with the involvement of HCs to address maternal and perinatal health; using information technology – as a basis for actions.

vii. Strengthen utilization of telemedicine services for improving maternal and newborn health care

5.3 Improve quality of antenatal and postnatal care

Basic MNH care: antenatal, delivery and postpartum and newborn care are to be provided in a continuum of care. Antenatal care is important for maintaining maternal and foetal health, preparing childbirth and diagnosis and treatment of health problems. Postpartum care for mothers and postnatal care for newborns are

important in ensuring that both of them keep healthy during postpartum and neonatal period. The key activities are as follow.

i. Continue and strengthen quality antenatal care (ANC) as early as possible in the first trimester, at least four times during pregnancy, and includes provision of iron-folic acid, TT injection, Hb/blood pressure, nutrition and foetal growth monitoring, HIV and VDRL and Hepatitis B tests. strengthen programmes to educate mothers on self-care, birth and emergency preparedness while emphasising on gestational diabetes, PIH, Maternal infections etc. Special programmes are to commence for the prevention and management of birth defects and genetic disorders as early as possible during pregnancy. Manage complications of abortion by providing post-abortion care, including post-abortion FP service. Proper recording/reporting of ANC is required for monitoring progress.

ii. Ensure that quality essential newborn care is given immediately after birth, including keeping the baby warm, skin-to-skin contact with the mother (immediately after cutting the cord) for initiating breastfeeding within an hour and rooming in of the baby if delivery occurred in a health facility following evidence-based guideline and standards, at all levels of health facilities.

iii. Provide postnatal visit at least three times during neonatal period. The first visit is within two days and the second visit is two weeks after birth and the last visit is a month after birth. These visits are to be combined with postpartum care for the mother. Home visit can be carried out by a primary health care officer/nurse-midwife when mothers and their new borns cannot come to health facilities.

iv. Ensure proper care of newborns by educating mothers(through ANC), families and communities, including keeping the baby warm and exclusive breastfeeding up to 6 months after birth.

v. Premature and low-birth-weight (LBW) babies need to be referred to appropriate health facilities. This main cause of death among newborns needs a special attention even before they are born, e.g. through ensuring good maternal health and nutrition status (for LBW babies) and provision of antenatal corticosteroid for for mothers who seems to deliver before 37-week gestation.

vi. Conduct facility-based research on stillbirths and early neonatal deaths in hospitals with a high number of deliveries to understand causes, contributing factors and magnitude of the problem. At the tertiary care hospital where majority of the delivaries take place an internal audit is conducted and perinatal review meeting conducted jointly by dept of Obstetrics and Gynaecology and Department of child health

5.4 Ensure implementation of MNH care standard in facilities at all levels

Availability of evidence-based MNH guidelines and standards for various level of health services are to be ensured. These are to be distributed and utilized by all health facilities and properly monitored. The following are the key activities.

i. Review guidelines/protocols/standards for pre-pregnancy health care, basic MNH services and emergency obstetric/sick newborn care for all levels of care, and update them accordingly.

ii. Ensure that all health facilities have the MNH guidelines/protocols/standards according to the level of services and utilize them for delivering day-to-day basic MNH services and emergency obstetric/sick newborn care.

iii. Monitor the implementation of evidence-based guidelines using a simple checklist that can capture quality of key MNH services. This can be implemented in health facilities in atolls with a large number of populations (10 000-20 000 inhabitants), e.g. Seenu (Addu Atoll), Haa Dhaalu (South Thiladhunmathi), Kaafu (Male' Atoll), Raa (North Maalhosmadhulu), Haa Alif (North Thiladhunmathi), Laamu (Hadhdhunmathi), Shaviyani (North Miladhun madhulu), Gaafu Dhaalu (South Huvadhu Atoll), Noonu (South Miladhunmadhulu). These would cover around a third of the total populations.

iv. Provide support to health facilities, as necessary, to ensure that they can implement the evidence-based guidelines for MNH care.

5.5 Screen all pregnant women for HIV and syphilis in ANC visits for follow up actions

Considering that the implementation of screening of pregnant women for HIV only covers less than 30% while risky sexual behaviours are not very rare , it is necessary to increase the coverage of HIV test to all pregnant women so that transmission of HIV infection to a newborn can be prevented if the mother is HIV positive. Also, considering that syphilis cases are still found among pregnant women during ANC visits with three cases in 2011, all pregnant women are continued to be screened to prevent congenital syphilis among newborns. The screening should cover all pregnant women. The following are the key activities.

i. Ensure that all atoll and regional hospitals have the ability to screen pregnant women for HIV and syphilis and for health centres refer to these hospitals if they cannot do it.
ii. Review the availability of reagents for HIV, Hepatitis B and syphilis tests, distribute adequate numbers for all relevant facilities and avoid stock outs.
iii. Ensure proper counselling on HIV, Hepatitis B and syphilis before and after the tests to ensure proper understanding about STIs, how they are transmitted, treatment for both couple when the test is positive, impact on newborns and its prevention measures, etc.
iv. Treatment and support for those with positive test, all necessary actions for their sexual partners and PMTCT steps and/or treatment of syphilis to prevent congenital syphilis and ensure Hepatitis B immunoglobulin administration.

5.6 Collaborate to implement life-skills education in schools

Adolescents and youths (37% of the total populations) are the most vulnerable groups for risky sexual behaviours as they go through a challenging period of puberty and become sexually active. Their perception and understanding about sexuality may not be adequate. Premarital sexual activity was found among 11.6% of youths 18-24 year olds.About 36% of men report having had sex with more than one partner with an average of 2.3partners in a lifetime. For these reasons, adolescents/youths deserve a special attention in promoting sexual health. Sexual and reproductive needs of adolescents /youth living with Thalassemias and other Heamoglobinopathies also warrant urgent attention.

Collaboration with the Ministry of Education is necessary to reach adolescents at least in 75% of schools implement life-skills/sexuality education and in linking it with adolescent-friendly health services (AFHS). Family life education can also be taught among primary school children to build a good ground for interactions and respects between boys and girls. The following are the key activities.

i. Review available curriculum – in collaboration with Ministry of Education and Ministry of Youth and

ii. Develop joint plans for implementing the curriculum in schools and develop linkages be tween this activity and AFHS delivery points and favourite places where adolescents go, such as sport centres and music lounges.

iii. Strengthen AFHS delivery points, with a particular attention to health centres and involvement of health centres and youth communities.

iv. Monitor the programmes for continuous improvement of life-skills education that linked to AFHS points.

5.7 Strengthen services for RH morbidities, special groups, GBV and crisis situation

RH morbidities include prevention and management of STIs/HIV, infertility, , reproductive organ cancers, polycystic ovarian syndrome and people with special needs including men, people with different ability .For the prevention and management of STIs/HIV, interventions are complementing those of National STIs/HIV programmes – mainly on syndromic approach for identification and treatment of STI cases coming for other RH services, and PMTCT for HIV. Other morbidities are mostly managed using a medical care approach. It is necessary to expand it to public health approach with emphasis on promotive and preventive measures. Addressing special needs of particular groups of communities requires understanding on their situation and needs that lead to establishment of services that are acceptable to each group.

There are also other situations that are closely related to RH, such as gender-based violence and RH services in emergency/crisis situation. These are areas that need a strong multi-programmes and multi-sectoral collaboration. However, health sector can initiate actions through relevant RH services that can be followed with broader efforts involving other programmes and sectors. The general activities for each topic are as follow.

i. Review the situation and magnitude of each RH morbidity to understand its causes, back ground and characteristics. Design public health programmes with emphasis on promotive and preventive measures that can be delivered at community, health post and health centre levels. These are backed up with medical services in atoll/regional hospitals. This can be initiated in few atolls before expanding to other atolls. Monitoring progress is important for improving services and planning.

ii. Conduct research to understand special RH service needs of particular groups, such as youths, men, elderly, people with different ability. It is necessary to know the size of each group, where they live and their characteristics. Prioritization can be made as appropriate before reaching the ability to cover all groups. The services can also be carried out in collaboration with other programmes, such as HIV/AIDS programmes, or with other sectors, such as the Ministry of Youth and Sport. It is important to involve some representa tives from each group in designing programmes relevant to their specific needs. Such ser vices can be initiated in cities and gradually brought to islands or rural areas, as appropriate. Monitoring progress is necessary.

iii. Establish services for health sector response to GBV and ensure, that guidelines for health providers in managing GBV victims are familiarized and utilized, including linking health services with other support services from relevant sectors. Documentation of each case is very useful in generating data for advocacy and programme planning. Involvement of community and religious leaders, as well as other members of societies is important for preventing GBV.

iv. Strengthen emergency/disaster preparedness in collaboration with other sectors, UN agencies and NGOs. As a small-islands country, surrounded by the vast Indian Ocean, Maldives is prone to natural disaster, such as tsunami in 2004, which intensify many

reproductive health risks. Comprehensive RH services – at least as outlined in the minimum initial service package (MISP) – are to be prepared all the time, so that immediately after the occurrence of disaster, MISP can be provided in affected areas.

5.8 Address key health-system issues related to Reproductive Health

There are important health system issues to be addressed, as stated in Chapter IV that would benefit all programmes, including RH programmes. The following are key actions to address them.

i. Mapping performance of health facilities at health centre, atoll and regional levels using MNH services as a proxy to better understand utilization of health facilities at various level. Service availability and readiness assessment tool can be modified for the purpose. The performance map can be used as an entry point to further analyze the situation of health facilities with very low and low performance, such as Vaavu Atoll Hospital, Muli Regional Hospital, Haa Alif Atoll Hospital, Alif Alif Atoll Hospital, Dhaalu and Gaaf Alif Atoll hospitals, as well as some primary care level facilities (health centres and health posts). Facilities with a high performance can be used as a model or benchmark to be achieved by other health facilities. Criteria for low, average and high performance are to be developed for each level of services. This activity may involve other health programmes; therefore, the criteria can be a composite one. The mapping of facility performance can be done every two years, to allow facilities with a low performance to improve their status.

ii. Review and restructure tasks and job descriptions according to skills specification of RH service providers at various levels and promote utilization of a 4-tier health services. Every tier of health services has its own level of services to be delivered. For RH using a continuum of care approach, a summary in Annex 3 provides reference on key interventions/ services to be delivered at each level. It is important to ensure that each of the 4-tier health services is well functioning, linked and harmonized one tier to another and utilized by the community as expected from a primary health care concept. This needs to be combined with clarification on tasks and job descriptions of health staff according to category of skills specification, e.g. a nurse-midwife has the skills to provide ANC, assistance for normal deliveries, postpartum and newborn care, etc. The Master Plan 2006-2015 targeted among others that >95% pregnant women attended by an obstetrician at least once during Trimester-3, which emphasizes that normal maternity care no need to be attended by a specialist most of the time. As most of the specialists at atoll and regional hospitals are expatriates, such rationalisation of tasks can significantly reduce health care costs, while increasing confidence and responsibility of national health staff. This may also reduce the high rate of C-section, thus reduce the unnecessary risks of having surgery without medical indications. Communities need to be well educated in accepting such a reform. This initiative has implications on human resources recruitment on how to gradually decrease recruitment of expatriates and absorb all interested national health staff. This may need establishment of a reward system for those willing to work in remote islands/atolls for at least two years. At the end, this overall initiative is to be linked with the mapping of facility performance.

iii. Strengthen regular monitoring system for health facility performance and quality of care at various levels using RH services as an entry point. It is essential to enable proper function ing of the existing monitoring system in each region to monitor the performance and quality of RH services in each atoll within the region, and in each atoll to monitor that of

[34] *WHO.Health statistics and health information system.Geneva, WHO. Can be accessed at: http://www.who.int/healthinfo/systems/sara_introduction/en/*

health centres and health posts within the atoll. The checklist for monitoring performance and quality of RH care is to be revised, which can be a joint effort with other interested programmes. The type of supports that can be provided to health facilities are to be decided by the team assigned for this initiative.

iv. Strengthen routine RH information system to get necessary data on coverage of RH services, related maternal and neonatal morbidity, obstetric complications, MNH services, FP services, number of STIs/HIV cases served through RH services, youths coming to AFHS points, victims of GBV coming to health facilities, etc. It can be a source of rich information to be analysed and followed up, as appropriate, while useful for monitoring progress.

v. Ensure that quality of care is maintained and monitored, including that all components of RH services have evidence-based guidelines/standards. These guidelines/standards are to be implemented in provision of care/services. This initiative is linked to the above activities related to improvement of facility performance. There are ways to improve quality of care, such as facilitative supervision, peer review, bench-marking, training and apprenticeship. Training and necessary orientation should be given to low performing facilities. A study tour to a model facility can be organized from time to time

vi. Research in key areas of RH to better understand key RH topics that are useful for evidence-based decision making and planning, as well as improve quality of care. There are many RH-related issues stated in the earlier chapters that need in-depth research. These can be simple research carried out by graduate students, which allow them to practice on conducting research that are useful for the country.

VI. IMPLEMENTATION PLAN

The National Reproductive Health Strategy 2014-2018 is to be implemented and coordinated through the existing health sector organizational and management structures in the Republic of Maldives. The following are the operational plan and partners' collaboration for implementing the plan.

6.1 Operational plan

The operational plan for implementing the Strategy is summarized below (Table 5), which covers interventions and activities elaborated in Chapter V.

Table 5. Operational plan of the National Reproductive Health Strategy 2014-2018

Objectives	Activity	Output	Timeframe				
			2014	2015	2016	2017	2018
I. Maintain MMR at < 50 per 100 000 live births (or less than 4 maternal deaths/year)and reduce PMR < 10 per 1000 total births by 2018							
1.Increase CPR at least 39%	•Increase awareness on the importance of using contraceptives to prevent unwanted pregnancy	•Increase in CPR to >39%	35%	36%	37%	38%	39%
	•Ensure quality of FP services and address special needs of various segments of communities	•FP performance and quality at facilities monitored	30%	40%	55%	70%	80%
	•Ensure at service points good management of FP commodities, supplies and equipments	•FP commodities, supplies and equipments monitored	30%	40%	55%	70%	80%
	•Conduct an assessment to understand the causes of low CPR, high unmet need for FP in a low TFR	•Assessment on the causes of the said situation conducted	-	+	-	-	-
	•Strengthen linkages between FP services and other RH services in health facilities	•Integrated FP service to become 'one-stop RH services'	30% of facilities	35% of facilities	40% of facilities	45% of facilities	50% of facilities
2.Achieve > 95% institutional deliveries with 60% using the closest facilities from home	•Ensure that HC, atoll and regional hospitals in each region function well as a sub-national unit that can provide comprehensive MNH services, with a special attention to childbirth	•Atoll and regional hospitals can manage normal and complicated MNH cases from their areas	20%	30%	40%	50%	60%
	•Provide quality and timely childbirth and newborn care as a continuum of care	•Coverage of quality institutional deliveries > 95%	50%	65%	80%	95%	>95%
	•Ensure availability of medicines, supplies and equipments for ANC, childbirth, postpartum and newborn care	•No stock outs of medicines, supplies and equipments for MNH care	20%	15%	10%	5%	0%
	•Ensure quality of care by monitoring performance of health providers	•MNH providers adhere to standard of services	30%	40%	55%	75%	95%
	•Establish maternal-perinatal network among regional and atoll hospitals with the involvement of HCs (Strengthen utilization of telemedicine services for improving maternal and newborn health care)	•Network of maternal-perinatal services established and active	30%	50%	70%	90%	100%
		•New innovations for MNH are identified and implemented at various levels of services	1	2	3	4	5

Objectives	Activity	Output	Timeframe				
			2014	2015	2016	2017	2018
I. Maintain MMR at < 50 per 100 000 live births (or less than 4 maternal deaths/year)and reduce PMR < 10 per 1000 total births by 2018							
3. Maintain coverage and quality of antenatal and postnatal care at least 95%	• Provide quality antenatal care (ANC) as early as possible in the first trimester, at least four times during pregnancy	• Coverage of quality ANC>95%	75%	80%	85%	90%	>95%
	• Ensure that quality essential newborn care (ENC) is given immediately after birth	• Coverage of quality ENC at birth >95%	75%	80%	85%	90%	>95%
	• Provide postnatal visit at least three times during neonatal period	• Coverage postnatal visit at least three times during neona-tal period>95%	75%	80%	85%	90%	>95%
	• Ensure proper care of newborns by educating mothers (through ANC), families and communities	• All premature and LBW babies survived	80%	85%	90%	95%	100%
	• Premature and LBWbabies need to be referred to appropriate health	• Research on stillbirths and early neonatal deaths conducted	+	-	+	-	+
	• Conduct facility-based research on stillbirths and early neonatal deaths in hospitals with a high number of deliveries						
4.Ensure imple-menta-tion of MNH carestandard in at least 80% of facilities at all levels	• Establish/Review guidelines/protocols/ standards for basic MNH services and emergency obstetric/sick newborn care for all levels of care, and update them accordingly	• Guidelines/proto-cols/standards for basic MNH services and emergency obstetric/sick newborn care for all levels of care reviewed	+	-	-	-	-
	• Ensure that all health facilities have the MNH guidelines/protocols/standards ac-cording to the level of services and utilize them	• All levels of care have evidence-based guidelines/ proto-cols/standards for MNH services	+	+	+	+	+
	• Monitor the implementation of evi-dence-based guidelines using a simple checklist that can capture quality of key MNH services	• Implementation of evidence-based guidelines is moni-tored	30%	40%	50%	65%	80%
	• Provide support to health facilities, as necessary, to ensure that they can imple-ment the evidence-based guidelines for MNH care	• Support to health facilities provided, as appropriate	+	+	+	+	+
5. Screen all pregnant wom-en for HIV and syphilis in ANC visits for follow up actions	• Ensure that all atoll and regional hos-pitals have the ability to screen pregnant women for HIV and syphilis and for health centres refer to these hospitals if they cannot do it	• All atoll/regional hospitals have the ability to screen pregnant women for HIV and syphilis	+ -	+	+	+	+
	• Review the availability of reagents for HIV and syphilis tests, distribute adequate numbers for all relevant facilities and avoid stock outs	• No stock-outs of reagents for HIV and syphilis, Hepatitis B tests in atoll/region-al hospitals	+ -	+	+	+	+
	• Ensure proper counselling on HIV, Hepa-titis B, syphilis and other STI'S before and after the tests	• Proper counselling on HIV and syph-ilis and other STIs before and after the tests	+ -	+	+	+	+
	• Treatment and support for those with HIVand/or syphilis/Hepatitis B positive tests MNH care	• Those with HIVand/or syphilis/ Hepatitis B positive tests treated and supported ade-quately	+ -	+	+	+	+

Objectives	Activity	Output	Timeframe				
			2014	2015	2016	2017	2018
6. Collaborate to implement life-skills education in at least 75% of schools	• Review available curriculum – in collaboration with Ministry of Education and Ministry of Youth and Sport – on sexuality education and family life education; update it as appropriate	• Curriculum on sexuality education and family life education updated as appropriate	+	-	-	+	-
	• Develop joint plans for implementing the curriculum in schools and develop linkages with AFHS delivery points	• Joint plans for imple-menting the curricu-lum in schools and linkages with AFHS delivery points developed	-	+	-	+	-
	• Strengthen AFHS points, with a particular attention to health centres and involvement of health posts and youth communities	• AFHS points down to health centres strengthened with involvement of health posts and youth communities	20%	35%	50%	65%	75%
	• Monitor the programmes for continuous improvement of life-skills education that linked to AFHS points	• Life-skills education that linked to AFHS points monitored	20%	35%	50%	65%	75%
II. Achieve universal access to reproductive health							
7. Strengthen services for RH morbidities, groups with special needs, GBV and crisis situation	• Review the situation and magnitude of each RH morbidity to understand its causes, background and characteristics as a basis for establishing public health programmes	• Situation and magnitude of each RH morbidity reviewed (cumulative)	1	3	5	6	7
	• Conduct research to understand special RH service needs of particular groups, such as youths, men, elderly, people with different ability Collaborate with relevant sectors and NGOs to increase awareness on GBV, with a special attention to IPV	• Research on special RH service needs of particular groups conducted (cumulative)	1	2	3	4	5
		• Collaboration with relevant sectors and NGOs to increase awareness on GBV and IPV established	+	+	+	+	+
	• Strengthen emergency/disaster preparedness in collaboration with other sectors, UN agencies and NGOs	• Disaster preparedness strengthened and maintained	+	+	maintain	maintain	maintain
8. Address key health-system issues related to Reproductive Health	• Mapping performance of health facilities at health centre, atoll and regional levels using MNH services as a proxy to better understand utilization of health facilities at various level	• Performance of health facilities at health centre, atoll and regional levels mapped(cumulative)	20%	60%	80%	100%	100%
	• Review and restructure tasks and job descriptions according to skills specification of RH service providers at various levels and promote utilization of a 4-tier health services	• Tasks and job descriptions of RH service providersat various levels reviewed and restructured	+	+	+	+	+
	• s strengthen regular monitoring system for health facility performance and quality of care at various levels using RH services as an entry point	• Regular monitoring system for health facility performance and quality of care at various levels established and implemented	+	+	+	+	+
	• Strengthen routine RH information system to get necessary data on various aspects of RH	• Routine RH information system strengthened	+	+	+	+	+
	• Ensure that quality of care is ensured and monitored, including that all components of RH services have evidence-based guidelines/standards	•All components of RH services have evidence-based guidelines/standards and its implement- ation ensured	+	+	+	+	+
		•Research in key RH topics conducted					

6.2 Coordination and collaboration in implementing the Strategy

HPA of the MoHG is responsible for facilitating effective and efficient implementation of the Strategy to achieve the targets. Coordination among programmes and regions/atolls authority within the MoH, as well as coordination with relevant sectors is crucial. Collaboration with UN agencies, development partners, donor agencies and international NGOs provides a wealth of technical assistance and other resources.

It is also necessary to collaborate with professional organizations, universities, relevant national and local NGOs, society groups and other stakeholders in addressing various RH issues. They can contribute to the implementation of the interventions and activities. Collaboration at region, atoll and community levels is also necessary. Involvement of communities can improve acceptance to health services.

VII. MONITORING AND EVALUATION

Monitoring of RH programmes is essential for measuring progress and understanding challenges in implementing the programmes. Such information is necessary for accelerating progress, planning for future activities and ensuring accountability. While monitoring often deals with input, process and output; evaluation usually reviews longer-term results, such as outcome and impact of interventions.

7.1 Monitoring and evaluation framework

Table 6 provides monitoring and evaluation framework for the implementation of the National Reproductive Health Strategy 2014-2018. The framework only covers key interventions and indicators that can represent the overall RH programmes with the intention to simplify the monitoring and evaluation process. Some indicators from the Health Master Plan 2006-2015 are included.

Table 6.1. Monitoring and evaluation framework for RH programmes

Goal 1: Maintain MMR at < 50 per 100 000 live births (or less than 4 maternal deaths/year)and reduce PMR < 10 per 1000 total births by 2018

Interventions	Key indicator	Base-line	Target by 2018	Frequency of measurement	Means of verification
1. Increase quality of care for FP	• CPR	35%	39%	Regular	Survey
	• % of adolescents with correct knowledge about contraceptives	30%	70%	Regular	Survey
2. Institutional deliveries occur at the closest facilities from home	• Coverage of institutional delivery closest from home	54% in Male'	80% in respective facilities	Annual	Report
	• C-section rate	32%	<10%	Annual	Report
	• Proportion of babies born with birth weight less than 2500 g	10%	<5%	Annual	Report
	• Number of maternal deaths/ yr	4-8	4	Annual	Report
	• PMR	NA	<10/1000 births	Regular	Survey
3. Improve coverage of quality ANC and postnatal care	• Coverage of quality ANC	NA	>95%	Annual	Report
	• Prevalence of anemia among pregnant women	<25%	15%	Annual	Report
	• Coverage of quality postnatal care	NA	>95%	Annual	Report
4. Ensure implementation of MNH carestandards in facilities at all levels	• % facilities complied to MNH care standards	NA	>80%	Annual	Report
5. Screen all pregnant women for HIV and syphilis in ANC visits for follow up actions	• % pregnant women screened for HIV/, Hepatis B, syphilis and STIs	NA	100%	Annual	Report
	• % pregnant women with HIV Hepatis B, syphilis and STIs adequately treated and followed-up for newborn and partner	NA	100%	Annual	Report
6. Collaborate to implement life-skills education in schools that linked to AFHS delivery points	• Percentage of schools implement life-skills education and linked to AFHS delivery points	NA	>75%	Annual	Report

Goal 2: Achieve universal access to reproductive health					
Interventions	**Key indicator**	**Base-line**	**Target by 2018**	**Frequency of measurement**	**Means of verification**
7. Strengthen services for RH morbidities, groups with special needs, GBV and crisis situation	• Number of Hospitals covered for strengthening services on priority RH morbidities, groups with special needs, GBV and RH services in emergency situation	NA	7 (6 regional hospitals and IGMH)	Annual	Report and supervision
		NA		Annual	Report
8. Address key health-system issues related to Reproductive Health	• % of reproductive age women screened for cervical cancer	NA	50% Available	Biannual	Survey and supervision
	• Availability of mapping of performance of health facilities (health centre, atoll and regional hospitals)	NA		Annual	Report
	• % inhabited islands with a skilled birth attendant (SBA)	NA	100%	Annual	Report
	• no of services SRH services provided by nongovernmental sector increased		By 30%		

7.2. Responsible party for monitoring and evaluation of RH programmes

The responsible parties for monitoring and evaluation of RH programmes lie with relevant national,regional and atoll health authorities under the Ministry of Health and Gender. At national level, the Health Protection Agency of the MoHG is responsible for the overall monitoring and evaluation of RH programmes. In carrying out the responsibility, HPA need to establish close collaborations with other programmes, as well as divisions responsible for planning and health information system, MoHG. Also, collaboration with private sectors and other relevant partners/stakeholders is required in order to get timely and accurate data.

The collaboration is to be expanded for improving the quality of data, its analysis and utilization at all levels, as well as for eliminating duplication of reporting.It is then useful to have a common agreement among health programme managers, partners and private sector in conducting an integrated supervision. Such initiative is strategic for all health programmes as a part of improving health programme management in the broader context of health system strengthening.

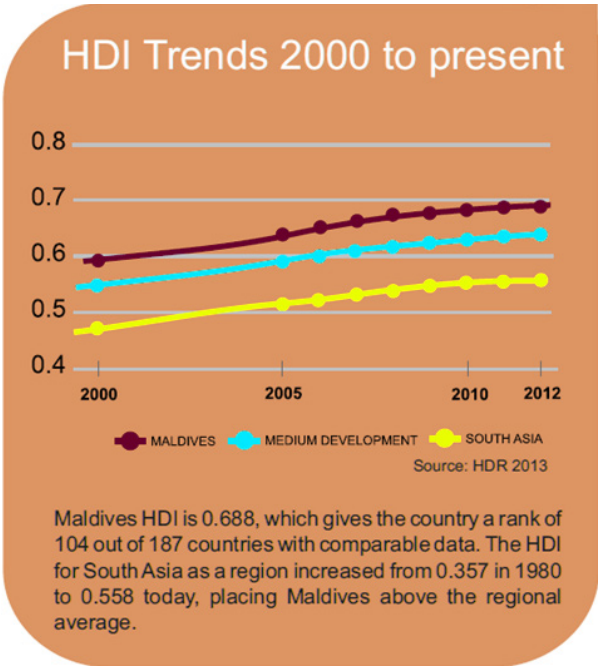
Annex 1.Demography and vital statistics, Republic of Maldives

Population, female (% of total)	163595	49%	2012
Population, male (% of total)	167057	51%	2012
Population growth (annual %)	1.69		Census 2006
Population ages 0-14 (% of total)	87896	26.58%	2012
Population ages 15-64 (% of total)	226741	68.57%	2012
Population ages 65 and above (% of total)	16 015	4.84%	2012
Fertility rate, total (births per women)	2.5 (DHS 2009)	1.8	2010
Life expectancy at birth, female (years)	74.8		2012
Life expectancy at birth,male (years)	73		2012
Death rate (per 1000 population)	3		2012
Mortality rate, infant (per 1000 live birth)	9		2012
Mortality rate, under five (per 1000 live births)	11		2012
Maternal mortality ratio (modeled estimate, per 100 000 live births)*	13		2012

Source: MoH, 2013.) MoH, Republic of Maldives.The Maldives Health Statistics 2012.Male, MoH, 2013.*

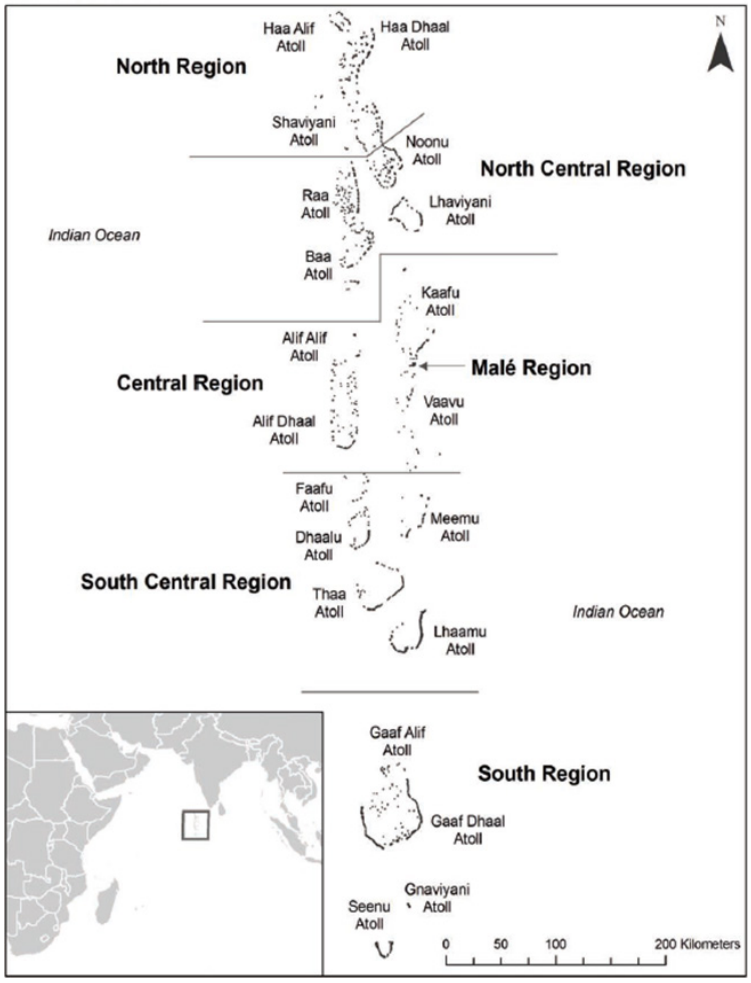
Population by localities in Maldives,2006

No	Name	Capital	Population (Census 2006)
1	Alif Alif (North Ari Atoll)	Rasdhoo	5,776
2	Alif Dhaalu (South Ari Atoll)	Mahibadhoo	8,379
3	Baa (South Maalhosmadulu)	Eydhafushi	9,578
4	Dhaalu (South Nilandhe Atoll)	Kudahuvadhoo	4,967
5	Faafu (North Nilandhe Atoll)	Nilandhoo	3,765
6	Gaafu Alif (North Huvadhu Atoll)	Viligili	8,262
7	Gaafu Dhaalu (South Huvadhu Atoll)	Thinadhoo	11,013
8	Gnaviyani (Fuammulah)	Fuvahmulah	7,636
9	Haa Alif (North Thiladhunmathi)	Dhidhdhoo	13,495
10	Haa Dhaalu (South Thiladhunmathi)	Kulhudhuffushi	16,237
11	Kaafu (Male' Atoll)	Thulusdhoo	15,441
12	Laamu (Hadhdhunmathi)	Fonadhoo	11,990
13	Lhaviyani (Faadhippolhu)	Naifaru	9,190
14	Male' [Malé]	Male'	103,693
15	Meemu (Mulakatholhu)	Muli	4,710
16	Noonu (South Miladhunmadhulu)	Manadhoo	10,015
17	Raa (North Maalhosmadhulu)	Un'goofaaru	14,756
18	Seenu (Addu Atoll)	Hithadhoo	18,026
19	Shaviyani (North Miladhunmadhulu)	Funadhoo	11,940
20	Thaa (Kolhumadulu)	Veymandoo	8,493
21	Vaavu (Felidhu Atoll)	Felidhoo	1,606
	Maldives	**Male'**	**298,968**



Source: OneUN in the Maldives, Newsletter, Issue 11, April-June 2013

Source:Ministry of Planning and National Development, Republic of Maldives (web).
The presented atoll areas refer to land area of inhabited islands, resorts and industrial islands.
Accessed at: http://www.citypopulation.de/Maldives.html



National Hospital

Indira Gandhi Memorial Hospital (IGMH)

Regional Hospital

1. Kulhudhufushi
2. Ungoofaaru
3. Muli
4. Gan
5. Thinadhoo
6. Hithadhoo

Atoll HWWospital

1. Haa Alif
2. Shaviyani
3. Noonu
4. Baa
5. Lhaviyani
6. Alif Alif
7. Alif Dhaalu
8. Vaavu
9. Faafu
10. Dhaalu
11. Thaa
12. Gaaf Alif
13. Gnaviyani

ONE-PAGE SUMMARY OF ESSENTIAL INTERVENTIONS

ESSENTIAL, EVIDENCE-BASED INTERVENTIONS TO REDUCE REPRODUCTIVE, MATERNAL, NEWBORN AND CHILD MORTALITY, AND PROMOTE REPRODUCTIVE HEALTH

CONTINUUM OF CARE	ADOLESCENCE & PRE-PREGNANCY	PREGNANCY (ANTENATAL)	CHILDBIRTH	POSTNATAL (MOTHER)	POSTNATAL (NEWBORN)	INFANCY & CHILDHOOD
ALL LEVELS: COMMUNITY PRIMARY REFERRAL	• Family planning (advice, hormonal and barrier methods) • Prevent and manage sexually transmitted infections, HIV • Folic acid fortification/ supplementation to prevent neural tube defects	• Iron and folic acid supplementation • Tetanus vaccination • Prevention and management of malaria with insecticide treated nets and antimalarial medicines • Prevention and management of sexually transmitted infections and HIV, including with antiretroviral medicines • Calcium supplementation to prevent hypertension (high blood pressure) • Interventions for cessation of smoking	• Prophylactic uterotonics to prevent postpartum haemorrhage (excessive bleeding after birth) • Manage postpartum haemorrhage using uterine massage and uterotonics • Social support during childbirth	• Family planning advice and contraceptives • Nutrition counselling	• Immediate thermal care (to keep the baby warm) • Initiation of early breastfeeding (within the first hour) • Hygienic cord and skin care	• Exclusive breastfeeding for 6 months • Continued breastfeeding and complementary feeding from 6 months • Prevention and case management of childhood malaria • Vitamin A supplementation from 6 months of age • Routine immunization plus *H.influenzae*, meningococcal, pneumococcal and rotavirus vaccines • Management of severe acute malnutrition • Case management of childhood pneumonia • Case management of diarrhoea
PRIMARY AND REFERRAL	• Family planning (hormonal, barrier and selected surgical methods)	• Screening for and treatment of syphilis • Low dose aspirin to prevent pre-eclampsia • Antihypertensive drugs (to treat high blood pressure) • Magnesium sulphate for eclampsia • Antibiotics for preterm prelabour rupture of membranes • Corticosteroids to prevent respiratory distress syndrome in preterm babies • Safe abortion • Post abortion care	• Active management of third stage of labour (to deliver the placenta) to prevent postpartum haemorrhage (as above *plus controlled cord traction*) • Management of postpartum haemorrhage (as above *plus manual removal of placenta*) • Screen and manage HIV (if not already tested)	• Screen for and initiate or continue antiretroviral therapy for HIV • Treat maternal anaemia	• Neonatal resuscitation with bag and mask (by professional health workers for babies who do not breathe at birth) • Kangaroo mother care for preterm (premature) and for less than 2000g babies • Extra support for feeding small and preterm babies • Management of newborns with jaundice ("yellow" newborns) • Initiate prophylactic antiretroviral therapy for babies exposed to HIV	• Comprehensive care of children infected with, or exposed to, HIV

Source: WHO and the Partnership for Maternal, Newborn and Child Health. A Global Review of the Key Interventions Related to Reproductive, Maternal, Newborn and Child Health (RMNCH). Geneva, Switzerland. 2011.

Health Protection Agency
Ministry of Health
Male', Maldives