

**FACTORS INFLUENCING FAMILY PLANNING IN
MYANMAR AND HEALTH OUTCOMES**

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Myanmar**

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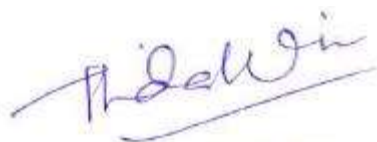
A thesis submitted in partial fulfilment of the requirement for the degree of
Master of Public Health
by

Thida Win
Myanmar

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

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Abstract

Background: Myanmar's contraceptive prevalence rate is much lower (46%) than the regional rate (60%). While most of the current family planning (FP) programs target married people, unmarried people's needs are not properly considered. The gaps, barriers and challenges regarding FP for all reproductive-age population in Myanmar are not yet well understood.

Objectives: To explore factors influencing FP and their health outcomes to inform policy makers and service providers on improvement of FP services in Myanmar.

Study Method: A literature review was done using the USAID evaluation plan conceptual model.

Findings: Myanmar has policies and regulations in place regarding FP. The public sector is the major provider of FP services while the role of international/local organizations as well as the private sector is also significant. However there still are gaps in FP services for married and more for sexually-active unmarried people. The main factors influencing these gaps are human and financial resources in both public and private sectors, the absence of programs targeting unmarried people and the deep-rooted cultural norms in the country.

Conclusion and recommendations: Current barriers and challenges regarding FP use in Myanmar stem from resource deficiencies in the supply side while cultural factors also play a key role. Existing programs and approaches should be reviewed to include everyone in need of FP services. Moreover, the workload of current service providers should be reviewed and human and financial resources should be increased. Further research on FP-related cultural norms is recommended for designing approaches in future programs.

Key Words: family planning, influencing factors, health outcomes, CPR, Myanmar.

Word Count: 12,974

List of Acronyms (Abbreviations)

| | |
|-------|--|
| AIDS | Acquired Immune Deficiency Syndrome |
| AMW | Auxiliary Midwife |
| BDHS | Bangladesh Demographic and Health Survey |
| BS | Birth Spacing |
| CBR | Crude Birth Rate |
| CCS | Community Cost Sharing |
| CDR | Crude Death Rate |
| CPR | Contraceptive Prevalence Rate |
| DHS | Demographic and Health Survey |
| DMPA | Depot Metroxy-Progesterone Acetate |
| DoPH | Department of Public Health |
| DPH | Department of Health Planning |
| FP | Family Planning |
| GDP | Gross domestic products |
| GFATM | Global Fund to Fight AIDS, Tuberculosis and Malaria |
| HDI | Human development index |
| HIV | Human Immunodeficiency Virus |
| HSP | Health Strategic Plan |
| HSSO | Health System Strengthening Officer |
| ICPD | International Conference on Population and Development |
| IHLCS | Integrated households living condition survey |
| IEC | Information, education and communication |
| IMR | Infant Mortality Rate |
| INGO | International non-governmental organization |
| IUD | Intra-Uterine Devices |
| LAPM | Long-Acting and Permanent Method |
| LHV | Lady Health Visitors |
| LMIC | Low and middle income countries |
| MARPs | Most at Risk Populations |
| MDGs | Millennium Development Goals |
| MICS | Multiple Indicator Cluster survey |
| MMA | Myanmar Medical Association |
| MMCWA | Myanmar Maternal and Child Welfare Association |
| MMR | Maternal Mortality Rate |
| MOH | Ministry of Health |
| MRHD | Maternal and Reproductive Health division |
| MSIM | Marie Stopes International, Myanmar |

| | |
|---------|--|
| MW | Midwife |
| NFP | Natural Family Planning |
| NGO | Non-Governmental Organization |
| NHSCC | National Health Sector Coordination Committee |
| OOP | Out-of-pocket |
| PSI | Population Services International |
| RH | Reproductive Health |
| RHAC | Reproductive Health Association of Cambodia |
| RHCS | Reproductive Health Commodities Supplies |
| RHMIS | Reproductive Health Management information system |
| RMNCH | Reproductive Maternal, New born and Child Health |
| SEAR | South East Asia Region |
| SPARHCS | Strategic Pathways to Reproductive Health Commodity Security |
| SRHR | Sexual Reproductive Health and Rights |
| STI | Sexually Transmitted Infection |
| TFR | Total Fertility Rate |
| U5MR | Under 5 Mortality Rate |
| UNAIDS | Joint United Nations Programme on HIV/ AIDS |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| WHO | World Health Organization |
| YIC | Youth Information Centre |

Introduction

Globally an estimated 225 million women in 2014 were not able to use an effective contraceptive method although they wanted to avoid pregnancy.^{1,2} Myanmar's contraceptive prevalence rate (CPR) is 46% and is lower than the CPR of 60% in the South East Asia region in 2013³. The Government of Myanmar has promised to FP2020 in 2013 to increase CPR to 60% in 2020.^{4,5}

When I was posted in hospitals as a medical doctor, I saw abortion patients and gave them post abortion care. At that time I was interested why they could not prevent pregnancy and which factors hindered their uptake of contraceptives.

While I was working as a Township Health System Strengthening Officer (HSSO) I met a lot of married rural poor women who got pregnant unintentionally. I interviewed them and asked why they did not use any contraceptives to prevent unintended pregnancy. Most of them wanted to prevent pregnancy by using modern contraceptive methods but they could not afford to contraceptives and some replied that they did not know when to use and how to use them.

These concerns ignited in me the desire to extend family planning programs to all who need knowledge and services of family planning regardless of marital and socio economic status. I am now working as an assistant director of the Women and Child health division under the Myanmar Ministry of Health. Sexual and reproductive health knowledge and experience are essential in my work. I conduct my thesis with the aim of identifying factors influencing family planning in Myanmar and its health outcomes in order to inform policy makers and service providers on improvement of family planning services.

Organization of the Thesis

Chapter One gives background information on Myanmar. **Chapter Two** introduces the problem briefly, and arrives at the objectives of the thesis; it also explains the methodology used for the literature review and presents the conceptual model. **Chapter Three** discusses the existing family planning services and factors influencing family planning in Myanmar. **Chapter Four** explores evidence of health outcomes of family planning worldwide. **Chapter Five** explores evidence of practices in family planning in other culturally similar countries to Myanmar. **Chapter Six** brings the findings of this thesis together and tries to discuss them clearly. **Chapter Seven** describe conclusions and recommendations.

Glossary of Terms and conditions

Source⁶ WHO, Geneva. WHO Indicator and Measurement Registry [internet].2011 [cited 2015 August15]; Available from http://www.who.int/gho/indicator_registry/en/

Adolescent fertility rate (per 1000 girls aged 15-19 years)

The annual number of births to women aged 15-19 years per 1,000 women in that age group. It is also referred to as the age-specific fertility rate for women aged 15-19.

Annual population growth rate (%)

Average exponential rate of annual growth of the population over a given period.

Contraceptive prevalence rate (%)

The percentage of women aged 15-49 years, married or in-union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.

Crude birth rate (per 1000 population)

The crude birth rate is the annual number of live births per 1,000 population.

Crude death rate (per 1000 population)

Number of deaths per 1000 population.

Demand for family planning satisfied (%)

Percentage of women aged 15–49 years, married or in union, who are currently using any method of contraception, among those in need of contraception. Women in need of contraception include those who are fecund but report wanting to space their next birth or stop childbearing altogether.

Numerator: Number of women aged 15–49 that are fecund and are married or in union and need contraception, who use any kind of contraceptive (modern or traditional).

Denominator: Total number of women aged 15–49 that are fecund and are married / have a partner and need contraception.

Family planning

Family planning allows individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility.

Infant mortality rate (IMR)

Infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one, if subject to age-specific mortality rates of that period. Infant mortality rate is strictly speaking not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as rate per 1000 live births.

Life expectancy at birth (years)

The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area.

Maternal mortality ratio (per 100 000 live births)

The maternal mortality ratio (MMR) is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified year.

Out-of-pocket expenditure as a percentage of total expenditure on health

Level of out-of-pocket expenditure expressed as a percentage of total expenditure on health

Population living in urban areas (%)

The percentage of de facto population living in areas classified as urban according to the criteria used by each area or country as of 1 July of the year indicated.

Population living on <\$1 (PPP int. \$) a day (%)

The poverty rate at \$1.25 a day is the proportion of the population living on less than \$1.25 a day, measured at 2005 international prices, adjusted for purchasing power parity (PPP).

Purchasing power parity (PPP int. \$)

Purchasing power parities (PPP) conversion factor, private consumption, is the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as a U.S. dollar would buy in the United States. This conversion factor is applicable to private consumption.

Total fertility rate (TFR)

The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. It is expressed as children per woman. The total fertility rate is the sum of the age-specific fertility rates for all women multiplied by five. The age-specific fertility rates are those for the seven five-year age groups from 15–19 to 45–49.

THE as % of GDP

Total expenditure on health as a percentage of gross domestic product is level of total expenditure on health (THE) expressed as a percentage of gross domestic product (GDP).

Under-five mortality rate

The probability of a child born in a specific year or period dying before reaching the age of five, if subject to age-specific mortality rates of that period. Under-five mortality rate as defined here is strictly speaking not a rate (i.e. the number of deaths divided by the number of population at risk during a certain period of time) but a probability of death derived from a life table and expressed as rate per 1000 live births.

Unmet need for family planning (%)

The proportion of women of reproductive age (15-49 years) who are married or in union and who have an unmet need for family planning, i.e. who do not want any more children or want to wait at least two years before having a baby, and yet are not using contraception.

Chapter 1: Background Information on Myanmar

1.1 Geography

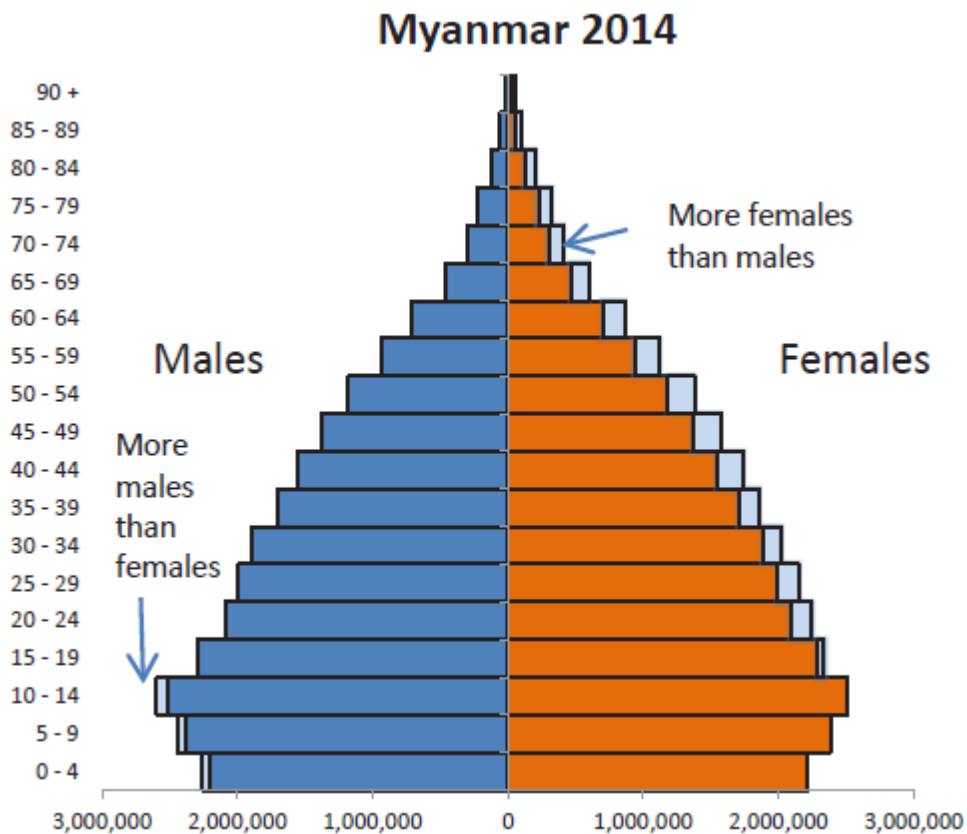
Myanmar is the westernmost country in South-East Asia and is bordered by Bangladesh, India, China, Laos, and Thailand on the landward side. The Bay of Bengal lies in the west and the Andaman Sea in the south of the country. Myanmar covers an area of 676,578 square kilometres. The country is divided administratively into Nay Pyi Taw Union Territory and 14 states and regions, 70 districts, 330 townships, 84 sub-townships, 398 towns, 3,063 wards, 13,618 village tracts, and 64,134 villages. ⁷ A map of Myanmar is seen in Annex (1).

1.2 Demography

Myanmar had a population of 51.42 million in 2014.^{7,8} The population density is 76 persons per square kilometer. About 30 per cent of the population resides in urban areas. The economically productive age group (15–64 years) is 65.6% and the reproductive age group (15–49 years) is 52% (men 25% and women 27%) of total population.⁸

Fertility in Myanmar has been declining and is at the post-transitional stage.^{8,9} The crude birth rate (CBR) decreased from 34.8 births per 1,000 population in 1983 to 17.3 in 2006^{8,9,10} and 18.9 births per 1,000 population in 2014.⁸ The crude death rate (CDR) declined from 9.9 to 5.8 per 1000 population in between 1988 and 2009.¹¹ The demographic profile of Myanmar is seen in Annex (2). The young working age population increased and the number of people age under 10 reduced and a pot-shaped population pyramid can be seen (see figure 1) in Myanmar in 2014.⁸

Figure 1: Population Pyramid of Myanmar, 2014



Source⁸ Myanmar Census report, 2014

1.3 Socio cultural and economic condition

Myanmar is a multicultural society comprising some 135 ethnic groups, with Bamar, Chin, Kachin, Kayah, Kayin, Mon, Rakhine and Shan being the major eight. Ethnic minority groups comprise an estimated 35-40% of the population. There are more than 100 languages and dialects spoken across the nation. About 89.4% of the population are Buddhists. The rest are Christians (4.9%), Muslims (3.9%), Hindus (0.5%), and Animists (1.2%).^{7, 12}

Myanmar is rich in natural resources including land, water, forest, coal, natural gas and petroleum, mineral and marine resources.⁷ However, according to the Myanmar Integrated Household Living Condition Survey (IHLC- 2010) about a quarter of households in Myanmar are living under the poverty line while poverty incidence is nearly two times (29%) higher in rural than in urban areas (15%).¹³ The survey also reveals a large and widespread social and economic disparity among the Myanmar population.¹³ Myanmar's human development index (HDI) rank is 150 out

of 187 countries and territories.¹⁴ The life expectancy at birth was 66.8 years for both sexes in 2014.⁸

1.4 Health care system and financing

Myanmar's health care system has a pluralistic mix of public and private systems in both financing and provision.^{7, 12} The Ministry of Health (MOH) has responsibility for providing comprehensive health care services. The Ministry has six functioning departments, each under a Director-General.⁷ The Department of Public Health (DoPH) is responsible for primary health care and basic health services including sexual and reproductive health services. The Department of Medical Care is responsible for setting specific goals for hospitals and management of hospital services including hospital treatment of reproductive health problems. All reproductive health care services fall under these two departments.⁷

Myanmar had one of the lowest government expenditures on health globally. In 2011-2012 the health sector accounted for only 1.3 per cent of total government expenditure (about US\$ 2 per person per year). Out-of-pocket (OOP) payment was exceptionally high and accounted for almost 80% of total health spending. Households spend on average 2.4% of their overall spending for health care.¹⁵

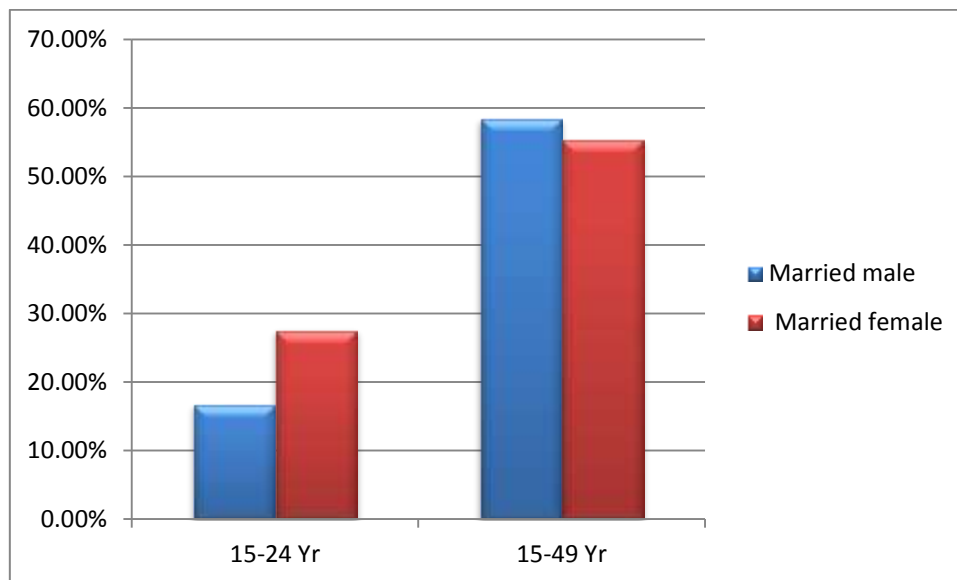
In comparison between five year periods, Government Health Expenditures as a percentage of Gross Domestic Product (GDP) was 0.2% in the 2010-2011 financial year and 0.99% in 2014-2015. Government Health Expenditures as a per cent of General Government Expenditures was 1.03% in the 2010-2011 financial year and 3.38% in 2014-2015, showing a clear increase.^{7,11} Health financing is described in Annex(2).

1.5 Reproductive health status and Reproductive Health Indicators

Successive surveys on Myanmar fertility and reproductive health revealed a steady increase in contraceptive prevalence rates (CPR): 28 per cent in 1997 to 33 per cent in 2001 and 38 per cent in 2007.¹⁶ The CPR in 2013 was 46%.^{3,4} Unmet need for contraception among currently married women decreased from 19.1% in 1997 to 17.7% in 2007¹⁶ but increased to 24.2% in 2010 from different sources.¹³ The Maternal Mortality ratio (MMR) decreased from 580 per 100,000 live births in 1990 to 360 per 100,000 in 2000 and then 200 per 100,000 in 2013. The Under-five Mortality rate (U5MR) decreased from 81 per 1000 live births in 2000 to 46 per 1000 live births in 2013.^{4,7}

The total fertility rate (TFR) was 4.7 children per woman in 1983; it decreased to 3.5 in 1991⁹ and to 2.29 in 2014.⁸ The mean family size declined slightly from 3.3 children in 1991 to 3.2 children in 2006.^{9,16} The average age of marriage was 27.6 years for males and about 26.0 years for females in 2014.⁸ The legal age of marriage without parents' consent is 20 years but if with parents' consent, marriage at or over the age of 14 is legal for woman but there is no specific limitation for men although they must be mature.¹⁷ Figure(2) shows that 57% of the reproductive age group are married (58.5% in men, 55.5 % in women). Among the young people (age 15-24) 16.8% of men and 27.6 % of women marry before the age of 24 and the proportion of unmarried people is more than that in married young people.⁸

Figure 2: Proportion of Population between two groups (Age 15-24 and Age 15-49) by sex, age, marital status



Source⁸: Myanmar Census report, 2014

1.6 Reproductive health services

The Government is committed to expanding the forum of family planning (FP) under the umbrella of the Health Sector Coordinating Committee. FP is a branch of the Reproductive, Maternal, New born and Child Health Technical and Strategy Group.⁷ The National Reproductive Health Policy was developed in 2002 with support from three consecutive Reproductive Health (RH) Strategic Plans.^{5,7} Under DoPH, the Maternal and Reproductive Health division (MRHD) is key implementer of RH services.⁷

Birth spacing (BS) services¹ in Myanmar are provided through the public and private sectors.¹² UNFPA provided support to 20 townships in 1992 through government and the programme was gradually expanded to other townships.⁹ By 2014, UNFPA support for RH covered 163 out of 330 townships^{4,9} and these contribute towards RH commodities and other supportive measures such as training and development and production of Information, Education, and Communication (IEC) materials.^{9,18} The MRHD distributes RH commodities by a quota system which is a “push” system based developed at the national level. The Department of Health Planning (DHP) compiles monthly reports of Reproductive Health Management Information System (RHMIS) forms from UNFPA supported birth spacing in 163 of the 330 townships in the country.^{9, 18} Non project townships depend on private markets or social franchising for contraceptives commodities.⁹

¹ Birth spacing (BS) and family planning (FP) are interchangeably used in the thesis as BS project is being implemented in Myanmar rather than family planning.

Chapter2. Problem statement, Justification, Objectives, and Methodology

2.1 Problem statement

Globally, the number of women of reproductive age (15–49) will have increased by 10% between 2007 and 2015 and will increase by another 8% again between 2015 and 2025. An estimated 225 million women in 2014 were unable to use an effective contraceptive method although they wanted to avoid pregnancy.^{1,2} Demand for contraceptives will increase in the future especially in Low and Middle Income countries(LMIC) due to increasing numbers of reproductive age women and increased preference for smaller families.^{1,2}

In Myanmar, the number of reproductive age women is 13.9 million, and 45% of them are unmarried.⁸ In line with the global trend, demand for reproductive health services is also increasing due to the large proportion of people in the reproductive age group.⁵ Myanmar's CPR was 46% in 2013 which is significantly lower than the regional CPR of 60% in the South east Asia region (SEAR).³ The known unmet need for contraceptives for married couples in Myanmar was 17.7% in 2007¹⁹ and 24.2% in 2010.¹³ Even though this figure is better than that of other LMICs, the global literatures showed that satisfying unmet needs for contraception can prevent 29% of maternal deaths per year.²⁰

In Myanmar, abortion is still illegal unless for medical reasons for the mother. Unsafe abortion is the third most common cause of maternal death.^{5,7} Approximately five per cent of known pregnancies end in abortion with the highest rate occurring among women aged 15-19 years.²¹ This is the data obtained from the health facilities and actual rates of abortion are very likely to be much higher.^{10,21} Although health facilities provide post abortion care services, patients are reluctant to attend hospitals except in life threatening conditions with high risk of complications²². It is thus important to note that there is a self-evident gap concerning the registration and statistics of abortion.

Furthermore, according to Myanmar culture and norms, it is a big shame for individuals and their families if someone gets pregnant without legal marriage. Among young people (age 15-24) 83% of men and 72% of women are unmarried.⁸ Even though sexually active, unmarried women are very afraid of getting pregnant.^{9,23} They are reluctant to buy contraceptive pills as they feel that they would be looked down as bad

girls/women for using contraceptives and condoms. Therefore, it is highly difficult for them to openly receive sexuality education and contraceptive services.^{9,23} In this way, most young women happen to be engaged in sexual activity do so without any precaution and preparation leading to unsafe sexual practices.^{23,24} Therefore, the whole issue of contraceptive use in unmarried people is totally different from that of married adults.

In Myanmar youth culture is changing rapidly because of globalization and cultural diffusion through youth networks.^{23,24,25} Pregnancy rates among unmarried people is not available but it is assumed to relate strongly with the large abortion number.⁹

The MMR in Myanmar was still high at 200 per 100,000 live births in 2013.³ The negative consequences of unwanted pregnancy, abortion and any sexually transmitted infections are some of the main reproductive health problems in Myanmar.^{9,21,22} It is essential to provide family planning knowledge and services to all who need them without any exception.

2.2 Justification

For reduction of significant maternal deaths, especially in LMICs, family planning as one of the main interventions regarding safe motherhood is very important. A study of 172 countries pointed out that contraceptive use can avert an estimate of 272,000 maternal deaths which is a 44% reduction of the current situation.²⁰

The figures on unmet need of contraceptives increased from 17.7% in 2007¹⁹ to 24.2% in 2010¹³ and then maternal mortality is still high and abortion related death is the third leading cause of maternal death.^{7,21} Current programs do not address the needs of unmarried people and the information on them is lacking.^{4,9}

There still is very little understanding on the unique factors influencing the gaps and challenges for access to family planning services among married and especially among unmarried reproductive-age women in Myanmar.

The rationale for conducting this study is to fill this gap and to provide research findings to support the best consideration and approach in future implementations to improve family planning in Myanmar.

2.3 Objectives

2.3.1 General Objective

To identify factors influencing family planning in Myanmar and to explore the health outcomes of family planning in order to inform policy makers and service providers on improvement of FP services in Myanmar.

2.3.2 Specific Objectives:

- (1) To identify the existing family planning situation in Myanmar
- (2) To explore the factors influencing family planning in Myanmar
- (3) To explore the health outcomes of family planning
- (4) To analyze the best family planning practices in other similar countries and their applicability to Myanmar
- (5) To provide recommendations to policy makers and program managers concerning ways to improve family Planning services in Myanmar

2.4 Methodology

The method used for this study is a literature review.

Search strategy:

The main sources for the review search were PubMed, Medline, the Vrije university online library and Google Scholar. Peer reviewed articles, reports, and gray literature were also included. Since studies about FP in Myanmar and neighbouring countries are relatively rare, the literature search covered a period of 15 years from 2000 to 2015. However, one or two studies published before 2000 that were important to the completion of the thesis were also considered, see table 1.

Peer reviewed articles were preferred and the search language was English. However reports from official Ministry websites were found in both Burmese and English.

The inclusion criteria considered literature of FP particularly from low and middle income countries with a focus on factors influencing FP, outcomes and best practices published in English. The literature search was first extended to South East Asia countries and then narrowed down to the selected neighbouring countries due to socio cultural similarities. Literature with only abstracts, narratives and opinions were excluded.

Key words: Family planning, Birth spacing, sexual and reproductive health, rights, unmarried women, men involvement, Adolescents,

determinants, approaches, Myanmar, South East Asia countries, Low and Middle Income countries, unsafe abortion, early marriage, unintended pregnancy, youth friendly health services, interventions, media, peer education, sex education, condom use, benefits of Contraceptive use, Health outcomes, MDG, health behaviours, FP2020, investment in FP Services, success stories in FP, health care financing, safe motherhood.

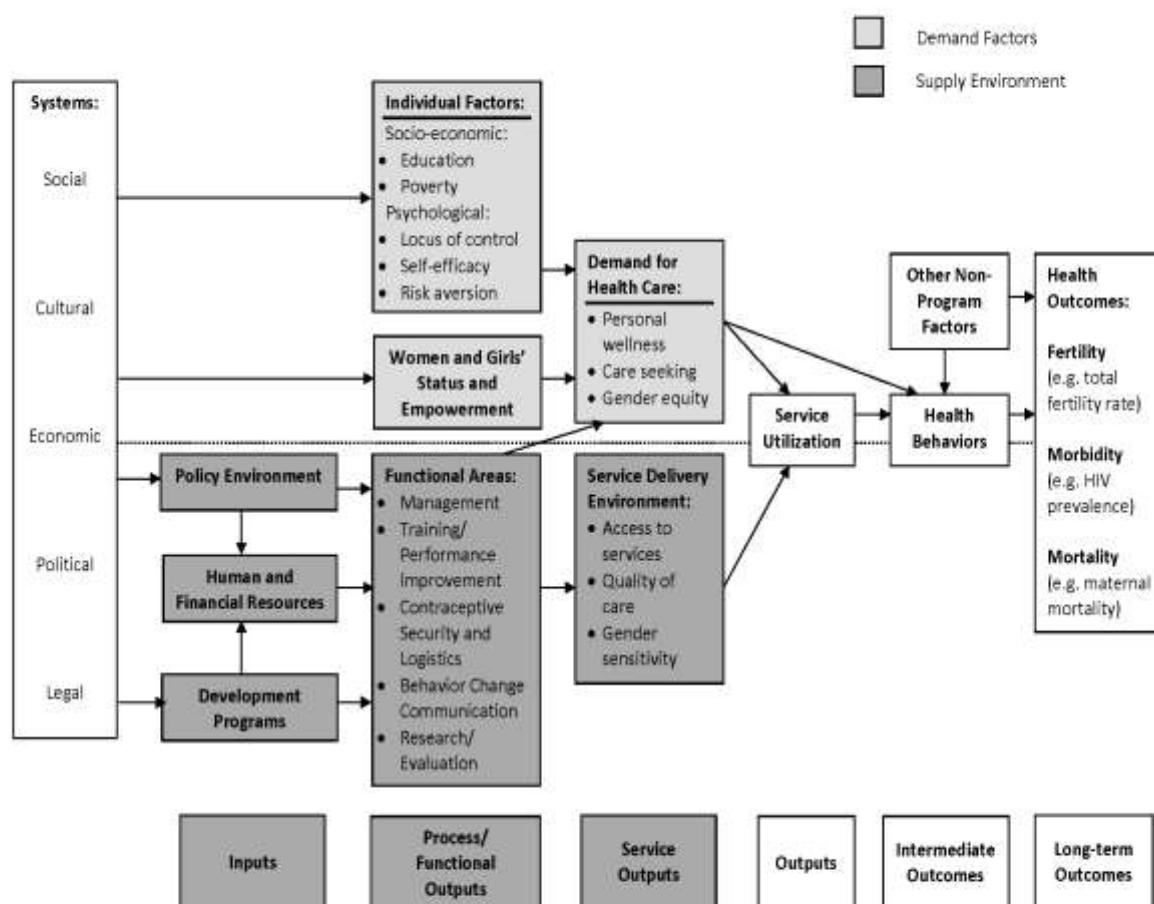
Table 1 : Search Strategy Table by Specific Objectives

| No | Literature | Search Engine | Key words for Specific Objective (SO) 1 | Key words for (SO)2 | Key words for (SO)3 | Key words for (SO)4 |
|----|----------------------------------|--|---|---|--|--|
| 1 | Peer reviewed Published Articles | Pub med Google scholar, Medline, | | Social , cultural, political, sexual behaviors, unintended pregnancy, youth friendly health services, interventions, media, peer education, sex education, Adolescents condom use, contraceptives , family planning | MDG, Health outcomes ,MMR, U5MR,fertility, Benefits of contraceptives, Family planning | Best practices in family planning, interventions in family planning, Community involvement |
| 2 | Grey Literature | Institutional website WHO, UNFPA, UNICEF, World Bank | Country profile, Myanmar, family planning | Influencing factors, choice of methods, service provision, family planning | Trends in MMR, U5 MR, CPR, Unmet need in Family planning, Health outcomes, investment in Family planning Services, FP2020. | South east Asia Region Countries, Bangladesh, Lao PDR, Myanmar, Cambodia, Vietnam |

2.5 Conceptual Model for the Study

This model below illustrates the pathways by which family planning program achieves its objectives and results. It covers inputs, process, outputs and outcomes. It constitutes a logical model for developing an evaluation plan with appropriate indicators. It draws attention to the different aspects of programs to achieve the desired end result.²⁶ See figure (3).

Figure 3: Conceptual model of family planning program



Source ²⁶ USAID Measure evaluation PRH [Accessed 14 May 2015] Accessible at http://www.cpc.unc.edu/measure/prh/rh_indicators/overview/conceptual-framework.html

The social, cultural, economic, political, and legal systems in the society are broad influencing factors on both demand (lightly shaded) and supply sides (shaded in a darker tone) in the model.

Supply environment is influenced by policy environment, human and financial resources and development programs. These factors influence the service delivery environment through functional areas of management, training/ performance, contraceptive security and logistics, behaviour change communication and research/ evaluation.

The service delivery environment focuses on access to services and quality of care with integration of services and gender equity which shape the service utilization.

Demand for health care is influenced by individual socio-economic factors including education, poverty, and psychological factors of knowledge and awareness of family planning. Gender role shapes women's and girls' status and so their empowerments are also influencing factors. These two factors gear up personal wellness, care seeking, and gender equity to demands on health care.

Non-program factors may also influence both health behaviour and outcomes. Fertility is determined not only by contraceptive use, but also age at marriage, extent of induced abortion, postpartum infecundability, and pathological sterility. The entire chain of causal events leading to specific health behaviours directly affects the ultimate objective of family planning program, improved health outcomes in terms of fertility, mortality, and morbidity.²⁶

2.6 Limitation of the Study

There is a limited number of up to date local studies. FRHS 2007 was the last survey conducted in Myanmar. Due to time limitation, my thesis will not cover infertility although the definition of family planning also covers infertility. Although FP confers many social and economic outcomes but I would like to explore health outcomes. My thesis is not covered all countries in SEA Region and therefore best practices are analysed among four selected countries. I would like to highlight family planning programs and their practices although good outcomes in maternal and child health are not only due to family planning program alone but also contributed by other non-program factors.

Chapter 3: Existing situation and factors influencing family planning in Myanmar

This chapter will present the findings to meet the first two objectives of identifying the existing situation and factors influencing FP in Myanmar. Based on the chosen conceptual model, findings are categorized into three portions: the existing situation of FP in Myanmar, supply environment factors, and demand side factors.

3.1 Existing Situation of Family planning in Myanmar

3.1.1 Policy environment

To improve the health status of women and children and for couples to decide on the number of children as their individual rights, the National Population Policy was formulated in 1992 (See Annex 3).^{5,7} It was shifted from a pro-natalist policy towards a health orientated approach for the promotion of birth spacing.^{4,5,27} Although the public sector BS programme was initiated and funded by Family Planning International Assistance in 1991⁹, the government has been becoming politically more positive towards BS, especially since late 2010.²⁷

The policy guidelines related to health sector⁷ included in the Constitution of the Republic of the Union of Myanmar (2008) are as follows:

- mothers, children and expectant women shall enjoy equal rights as prescribed by law in Article (351) and
- every citizen shall, in accord with the health policy laid down by the Union, have the right to health care in Article (367).⁷

The role of co-operatives, joint ventures, the private sector, NGOs, partnership for health system development, and international collaboration are included in the government's health development plans.⁷

3.1.2 Service provisions

Nationally, the MRHD of the DoPH is the most responsible implementer of RH services in collaboration with related divisions.⁷ According to guidelines, state and regional health departments are responsible for all health services including management of tertiary care and referral services.^{6,7} The Township Health System is the backbone of the Myanmar Health System covering an average of 100,000 to 200,000 people per township.^{7,12}

The Township Medical Officer is the key manager of health care delivery as well as administration and implementation of healthcare services in

each township.^{5,7,10} Each township has four to five Rural Health Centres (RHC) and each RHC has four sub-RHCs. One Health Assistant, one Lady Health Visitor, five Public Health Supervisors Grade II and five Midwives (MWs) constitute the staff each RHC.^{5,7,10}

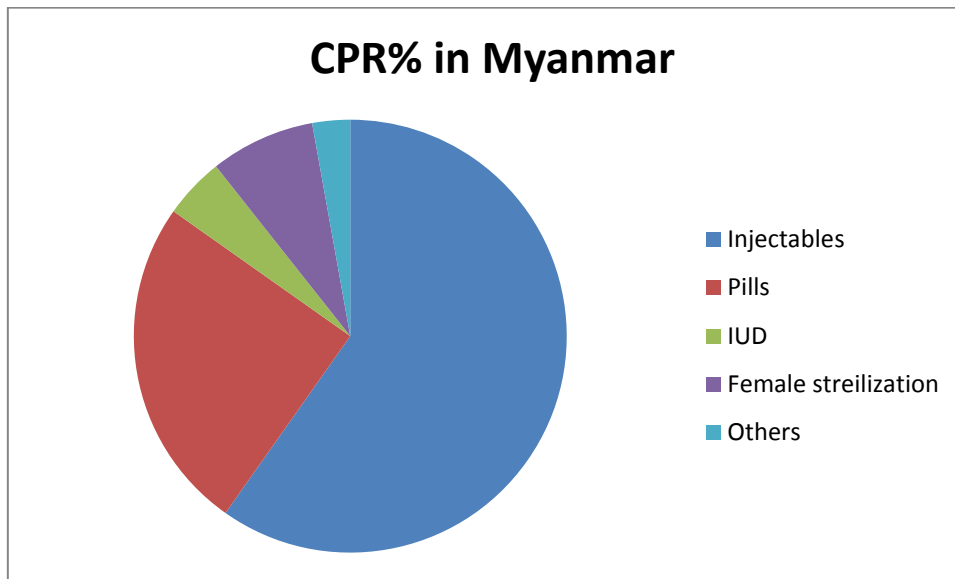
For maternal and child health services, the WHO minimum criteria is 23 health care providers (doctors, nurses, and midwives) per 10,000 people.¹² However, in Myanmar, there are 14 per 10,000 people which is far less than this criteria, meaning a serious shortage of health staff.¹² Health providers treat approximately three women with abortion complications per 100 pregnant women in the community.²² Midwives are overburdened with many responsibilities as multipurpose health workers for birth spacing, immunization, antenatal care, deliveries, postnatal care, under five care, nutrition, school health, elderly health care, reporting, etc.²⁸

The MOH implements RH education and services through youth programs in collaboration with non-governmental organizations (INGOs/NGOs) and community based organizations in 74 project townships in the country.¹² Youth Information Centres (YIC) have become a good model for young people to learn about ARH, socially friendly environments for behaviour change communication (BCC) for adoption of positive habits for safe sex, abstinence of tobacco, alcohol, and betel chewing habits.^{7,9} UNICEF and the Ministry of Education introduced the School based Healthy Living and AIDS Prevention Education program (SHAPE) into the school curriculum in 1997. MOH is trying to scale up adolescent-friendly health services with multi-sectorial collaboration.²⁹

3.1.3 Health behaviours

According to Multiple Indicator Cluster survey (MICS) (2009-2010), CPR in Myanmar was 46% in 2010.³⁰ Figure (4) clearly shows that about 60% of them prefer the hormonal injection method, followed by the daily pill (25%), female sterilization (8%) and IUD (over 4%). Other methods including the male condom, the lactational amenorrhoea method, abstinence, and withdrawal comprise less than 3%.³⁰ Some local studies in Myanmar also reveal that the most popular contraceptive method is the hormonal injection.^{9,14,31,32}

Figure 4: Different contraceptive methods used in Myanmar



Source³⁰ Myanmar Multiple Indicator Cluster survey (MICS) (2009-2010)

Condoms have dual protection but usage of condoms as a type of contraceptive is below 1%.³⁰ Condoms are used to prevent potential infection of sexually transmitted infection (STI) including HIV/AIDS. This point is supported by the Behavioural Sentinel Surveillance 2007 for out-of-school youth³³ which reports that 24% of respondents used condoms during their last sex with casual partners and 43% of respondents used condoms during their last sex with sex workers.

There are low numbers of female sterilization / tubectomy procedures as clients need to submit many supporting documents and couples may not meet criteria for approval. Sterilization board meetings are held infrequently to review applications. It takes a long time to obtain official permission even for married women.^{28,34} Low preference for some long term methods, intra uterine devices(IUDs), limited skills for PPIUD (Post-Partum IUDs) and insufficient commodities to meet the demand for implants were identified in group discussions in a FP conference in Nay Pyi Taw in 2014.²⁸

Ever-married women with two children have the highest usage rate of contraceptives at 53.3%.^{8,30} The coverage is 29.3% among women with no children, while 36% of women with four or more children use contraceptives.³⁰

3.2 Supply environment factors on family planning in Myanmar

Under supply-side factors, the policy environment, human and financial resources, development programs, and service delivery environment will be presented.

3.2.1 Policy environment

The Government of Myanmar views FP as critical to saving lives, protecting mothers and children from death, ill health, disability, and under-development.^{4,5} Myanmar is among the countries that have pledged commitment to FP2020.^{2,4} In 2013, the government committed:

- to increase CPR from 41% to 50% per cent by 2015 and above 60% by 2020, and to reduce unmet need to less than 10% by 2015 (from 12% in 2013),
- to increase demand satisfaction from 67% 80% by 2015, and
- to improve method mix with increased use of long acting permanent methods (LAPMs) and decentralization of service delivery to districts.^{2,4,5}

Educational Policies which increase and expand education opportunities (especially for girls) ensure access to and availability of contraception, increase the survivorship of children, and reinforce parental preferences toward smaller families.^{30,35} Overall, 87.8% of young Myanmar women are literate. The percentage is higher in urban areas at 94.9% than in rural areas, at 84.9%.¹³

3.2.2 Human and financial resources

Public sector: The public sector is the primary source of contraceptive supplies in Myanmar.^{4,7,12} Maternal and child health clinics, Sub-RHCs, RHCs and hospitals provide reproductive health services including birth spacing services.^{7,12} In 2011, the ratio of RHC and population coverage was 1:26,567 and that of midwife and population was 1:4,462.¹² Since there are 64,134 villages in Myanmar, the MOH cannot assign one health staff member to every village.⁷ Furthermore, the majority of highly-skilled medical doctors is concentrated in urban locations, where only 30% of the population resides.⁹ See table (2).

Table 2: Number of Health facilities and staff in Myanmar in 2014

| Object/Activity Indicator | Year 2013-2014 |
|-----------------------------------|----------------|
| Basic | |
| Total Doctors | 31542 |
| Public Doctors | 13099 |
| Co-operative and Private Doctors | 18443 |
| Nurses | 295332 |
| Health assistants | 2062 |
| Lady Health visitors | 3467 |
| Midwives | 21435 |
| Hospitals (Public Sector) | 1356 |
| Hospital Beds | 56748 |
| Maternal and Child Health Centers | 348 |
| Rural Health Centers | 1684 |
| School Health Teams | 80 |

Source⁷ MOH, Health in Myanmar, 2015

The overall staff vacancy rate is 10% especially in hard-to-reach rural areas and there is rapid turnover of trained service providers, especially in remote areas.^{4, 28} Health worker shortages and urban rural gap have been identified as key barriers to quality services.^{4, 7}

International and local NGOs and the private sector: This sector also provide services for birth spacing and reproductive health. Private health care services in Myanmar are now regulated according to the law relating to private health care services (2007) and its amendment law (2013).⁷ The private sector includes international and local NGOs, social marketing and commercial outlets, as well as private practices of health providers.^{4,5,9} Myanmar does not forbid unmarried youth from reproductive health services¹⁸ and therefore contraceptives are easily available at private drug shops.^{16, 31, 32}

Finance resources: The government committed 1.3 billion kyats (\$1.3 million) for the purchase of contraceptives in 2012-13 and pledged to increase the health budget to cover contraceptives for nearly 30 million couples by 2020.^{2,4,5} Government contribution to FP began nearly two years ago in FP2020 commitments. Program management is not strong enough to cover the whole country due to shortages of resources causing

donor-dependence for more than two decades (since 1991). The Ministry of Health commits to working toward increasing the resources allocated to FP in state budgets.^{4,28} Currently the Bill and Melinda Gates Foundation, through UNFPA, is the funding source for the implementation of the program.¹⁷

Although RH commodity security is essential, shortages of commodities frequently occur even though they are received from multiple sources. In reality field health facilities / hospitals need to buy from markets because of commodity shortage.^{5,28} There is not enough stock for commodities of clients' choice such as injection Depo-Provera, or implants. Logistic management is weak and distributed commodities are close to expiry dates due to delay distribution.^{5,28}

Due to limited budgets and inadequate human resources for regular monitoring, surpluses of IUDs in some facilities but shortage at other facilities can be seen at the same time.²⁸ Even though operational policy changes in support of birth spacing are made at the national level, communication gaps between central and regional /state and township levels mean that there is no integrated forecasting of distribution budgets to RHCs.^{5,7,28}

3.2.3 Development programs

MOH provides continuous in-service training on BS for health staff in the public sector in all townships in the country⁵, which includes information on post-abortion contraception¹⁶ but MWs from only project townships get training to provide IUDs and implants.²⁸ The MOH has recruited, trained, and deployed auxiliary midwives (AMW) to improve access to key maternal and new born interventions through task shifting / sharing.^{4,7} AMWs are not allowed to give injections and birth spacing has not been included in the AMW training curriculum. Other non-state actors providing RH/BS services cannot receive the training organized by public the sector.^{7,28} The MMA trains general practitioners for skills in RH services including BS and provides mobile services.^{18,20}

At the provider level, long-recognized and often-persistent barriers including inadequate knowledge, skills, and motivation (or inadequate rewards), bias for or against certain methods (e.g., IUDs), poor management of adverse effects, and unjustified limits on provision by

certain provider cadres are the main factors that hinder access to FP services.^{16,36}

Pharmacy shop owners and drug sellers are not included in social mobilization and training.²⁸ The Myanmar Medical Association (MMCWA) provides contraceptives through its national network of volunteers. The Marie Stopes International Myanmar (MSIM) offers contraceptive services (pills, injectables, IUDs and condoms) through sixteen centres and village-health workers in poor urban areas.^{9,27} Population Service International Myanmar (PSI/Myanmar) launched a franchise network of licensed general practitioners as PSI/Myanmar's Sun Quality Health network in 2001. The PSI clinics are generally located in urban and peri-urban areas and small towns. Total of 1,173 providers have participated in the induction training and 1,006 providers remained active in sexual and reproductive health services including birth spacing, adolescent reproductive health, management and voluntary counselling and testing services in 2009.³⁷

A family planning conference identified challenges which are weak coordination and collaboration between public and private sectors, poor co-ordination among BS stakeholders, and working piece-meal in project townships.^{4, 28}

3.2.4 Service delivery environment

Public health facilities provide BS services in its project townships with RH commodities and training provided by UNFPA.⁵ There is still a gap of approximately 100 townships, whereas in some townships there are overlapping of BS services provided by MOH, PSI, MSIM, and MMA. UNFPA has also supported PSI/Myanmar with six methods of contraception in 177 townships since 2010.^{4,5} 25% of the market share for contraceptives in Myanmar was distributed by PSI/Myanmar in 2009.⁹ The MMA provides BS services by means of social marketing and subsidizing for BS commodities but only a few NGOs are providing services free of charge; in order to meet their project indicators they compete for clients.^{4,9}

INGOs collaborate with general practitioners for birth spacing/family planning services in clinics in urban and peri-urban areas in 244 townships through social franchising and social marketing and through fixed clinics and outreach activities.^{4,9}

Private commercial sectors also import contraceptives. The majority of households and consumers had to buy the services and commodities at private clinics.¹⁶ As a rule, contraceptives are available in the pharmacies, but data is limited for the magnitude and consequences of the use of monthly contraceptive pills offered over-the counter in private pharmacies.¹⁶ Data also show that among currently married women using a contraceptive method, 51.8% received their modern method through the private sector and 42% through the public sector.¹⁶

According to a study in rural Myanmar³⁸, one midwife has to serve five or more villages and it becomes a burden for them to pay enough visits to all villages under their responsibility and limited time for information and emotional support.^{34,38} Rural women still do not have enough knowledge of contraceptives, resulting in poor birth spacing.^{34, 38}

Motivation from contraception providers increased the chance of using contraception more than other factors.^{31,38,39} Insufficient production and distribution of IEC materials, and limited IEC materials in dialects for ethnic minorities are also important barriers²⁸.

In 2014 an FP conference was held in Nay Pyi Taw and group discussion identified challenges for service delivery such as poor infrastructure, transportation difficulties for service providers, and clients in limited outreach rural areas.^{4,28}

3.3 Demand side factors on family planning in Myanmar

3.3.1 Cultural factors

In Myanmar, due to the enshrined traditional norms and practices, virginity and taboos on premarital sex widely remain rooted as traditional cultural values.⁴⁰ Sexual abstinence before marriage is considered a moral norm for young women and therefore sexual and reproductive actions are acceptable only after marriage although it is different for boys. A Family and Youth Survey, 2004⁴¹ revealed that 16% of youth agreed with the pre-marital sex for boys while only 7% of youth agreed with the pre-marital sex for girls. Young Myanmar people perceived that socio-culturally youth should not be involved in pre-marital sex, however, the majority expressed that increased numbers of young people are engaged in pre-marital sex.^{38, 42, 43}

There are no significant religious beliefs, political restrictions, or opposition to birth spacing in Myanmar.⁹ About 90% of the population of Myanmar is Buddhist. Buddhism welcomes large families and traditionally regards them as a blessing.¹⁶ Although this culture is changing in urbanites as a country whose economy is based on agriculture, farmers in rural areas still want to have a large family to work the land.⁹ Conservative cultural norms can sometimes cause limitations on birth spacing. Some such myths and beliefs, hold that having an IUD (a foreign body) in the uterus is harmful.⁹ Sub dermal implants are not socialized adequately in the community and removal rate within a year is high for implant users due to that socialisation.^{4,28}

The social environment plays an important role in the health-related behaviour of young people, including influence and pressure from friends and peers, sexual partners, family members, and the community.^{38,39,42,44} Elderly people, especially grandmothers and mothers-in-law, play an important role in cultural norms with their belief that knowledge about sex and FP is only for married women and talking about them is seen as improper conduct.⁹

Sexual education is not openly discussed in Myanmar society^{25, 26} and parents and teachers²⁴ are reluctant to talk about sexual issues although school sexual education is initiated and introduced in school health programs.^{25, 42,44}

3.3.2 Social and economic factors

Most unmarried women do not seek RH services from public suppliers because they perceive that these services are targeted for married women.^{23,45} Some female respondents reported that they took contraceptive pills regularly to prevent pregnancy when they had sex with boyfriends. They mentioned that contraceptives were not easily available for them and they were reluctant to buy contraceptive pills as they were unmarried. They felt that people would look down on them when they used contraceptives such as pills and injectables.^{23,24} The discrimination and stigma were more prominent among the unmarried women than unmarried men.^{9,45}

Wealth and purchasing power affects the use of a modern methods. Contraceptive use is highest among women in urban areas and among the richest women.^{8,30} The prevalence of contraceptive use increases from 38.3% in the poorest wealth quintile to 51.7% among the richest women.⁸

Although there are many brands of oral contraceptives available in private pharmacies and clinics¹⁶, the majority of users in the study in Myanmar can afford to buy only the cheapest one which comes from China and India. Only a few women get oral pills from the health staff free of charge and some women do not know they have a right to ask for it.^{16,31,32}

Socio-economic status and education of women are also linked. Women's education level is strongly associated with contraceptive prevalence.^{8,30} More educated women can also negotiate the usage of contraception and handle choice of methods more effectively.⁹ The proportion of women using any method of contraception rises from 31.5% among those with no education to 44.3% among women with primary education, and to 52.5% among women with secondary or higher education.⁸ Among young women in the poorest households, 69% are literate, while among the richest the literacy rate is as high as 96.6%.^{9,46}

In a study in 35 low and middle income countries, women not desiring a pregnancy with the lowest education level and poorest quintile were 8.6 (95% CI, 8.2–9.1) and 2.6 (95% CI: 2.4–2.9) times less likely to use any contraception method than with women with the highest educational level and quintile, respectively. Use of contraceptives is low with less educated women and they become pregnant more often.⁴⁶

Due to financial constraints (formal and informal payments) and geographic remoteness of centralized township health centres and facilities for women in rural areas it is much more expensive and inconvenient to travel for counselling and treatment, with the result that their access to such services is limited.^{31,32}

3.3.3 Individual factors

In Myanmar, according to the 2007 FRHS, over 95% of the population had knowledge of at least three methods of contraception and 52% of respondents mentioned private sources and 42% mentioned government outlets as sources for contraceptive supplies.¹⁶ However, among age specific groups, women aged 15-19 have the lowest scores for knowledge

of methods as well as source of supplies.¹⁴ The increase in knowledge is one of the contributing factors leading to the increase in contraceptive prevalence rates.⁴ A local study in Myanmar reveals over 73% of youths have knowledge on contraception. Among contraceptive methods, the most widely known was injection (71.9%), followed by daily pills (66.2%) and condoms (65.4%). More male students (80.8%) than female students (51.1%) had knowledge on condom as contraception.²⁴

Even though dual protection advantage of condoms was recognized by women in the study^{23,47}, most girls perceived that condom use is only for commercial sex to prevent STI/ HIV/AIDS and not for sexual relationships between lovers. The attitudes of young women in the study led them to unsafe sexual practices since they rarely used condoms with their boyfriends. It is still a big barrier for youth to negotiate safe sex.^{23,47} When asked for the reasons for using condoms, the majority (80%) of male interviewees said they were for prevention of infection, and all female interviewees said they was for prevention of pregnancy.⁴⁷

A conservative attitude towards premarital sex was associated with parent-adolescent communication. A great majority (89%) of adolescents have positive attitudes towards reproductive health communication with parents, and 76.9% of the adolescents have intention of asking the parents if they have a reproductive health question in the future.⁴⁸

Perception of the benefits of contraception also influences a woman's decision to use contraceptives. The most common reasons for contraceptive non-use as cited by clients are health reason, infrequent exposure to sex, pregnancy, or spousal disapproval.^{39,46} In the study based on the Demographic and Health Survey (DHS) in 52 countries⁴⁶, the most frequently cited reason for non-use among women with demand to space or limit is general health concerns (29%) about modern contraceptive use, 18%–19% each, by exposure reasons (i.e., not having sex or infrequent sex), pregnancy related reasons (e.g., postpartum amenorrhea or breastfeeding), and opposition (e.g. husband is opposed, or religious reasons are cited).⁴⁶

3.3.4 Women and girls' status and empowerment

The Gender Inequality Index Rank of Myanmar was 83 among 187 countries in 2013.⁴⁹ In the country, gender differentiation is very clear

between male and female youth with regards to sexual desire and control. Boys have more freedom to have sex and less need to control sexuality. In contrast, girls have to control sexuality, sexual desire, and their dignity. Sex outside marriage is impermissible for good women.^{9,45}

There are more stereotypes about the role of men and women, and more prejudice against modern contraception methods and visiting FP facilities among rural women, causing them to rely on traditional and folkloric contraceptive methods with higher failure rates.^{39,42,44} Men are perceived as the head of the household and have the duty of providing for their wives and children. Women carry out the majority of household-related work, including child-rearing, and may sometimes control the household finances.⁵⁰

This responsibility does not stem from a concept of the superiority or inferiority of either sex. In Myanmar traditions, women enjoy the noble role of mother and all the responsibilities this description entails.^{9,50} Traditions and customs involve domination of a man over a woman. This is the reason why in spite of legal norms ensuring equality of the sexes in labour and social life, family relations still remain quite unequal.⁵⁰ The scope of men's rights in the family is considerably larger than that of women, while their obligations are considerably less.⁵⁰ Local studies show that women in selection of FP methods are affected by their husbands' decisions. Her ability to use contraceptives to control her fertility is also affected by her status and degree of empowerment.^{31,32}

Spousal communication was identified as an important related factor for the decision to use contraception. The impact of peers on reproductive and sexual behaviour of young people particularly has been documented to be strong.^{39,42}

Chapter 4: Health outcomes of family planning

This chapter will present findings from the literature review to explore the health outcomes of family planning in order to meet the third specific objective. Based on the chosen conceptual model, the health outcomes concerning maternal morbidity and mortality, under five morbidity and mortality, fertility and other outcomes will be described.

Globally an estimated 225 million women in 2014 were unable to use an effective contraceptive method although they wanted to avoid pregnancy. Compared to the current situation, the decreasing trend of unintended pregnancies from 74 million to 22 million per year (70% drop rate), maternal deaths from 290,000 to 96,000 (67% drop rate), new-born deaths from 2.9 million to 660,000 (77% drop rate) would be seen annually. Moreover pregnancy and delivery related morbidity would drop by two-thirds and transmission of HIV from mothers to new-borns would be nearly eliminated achieving a 93% reduction to 9,000 cases annually.^{1,2} All the above outcomes are estimated to be achieved if their unmet need of family planning are fulfilled and standard maternal and child health services are provided.^{1,2}

4.1 Maternal Morbidity and Mortality

Family planning can prevent unwanted pregnancies and also reduce pregnancy related morbidity and mortality.¹⁹ A systematic review of 22 studies, a third of which were done in LMIC countries, reported a strong relation between short birth intervals and poor pregnancy outcomes and maternal morbidity, but a weak relation with maternal mortality.⁵¹

Abortion is an important factor influencing overall maternal morbidity and mortality among adolescents.^{6,52} Globally estimated number of induced abortions in millions was 45.6 in 1995, 41.6 in 2003 and 43.8 in 2008. In SEAR estimated number of induced abortions in millions was 4.7 in 1995, 5.2 in 2003 and 5.1 in 2008. Worldwide estimated unsafe abortion rate was increasing trend of 44%, 47% and 49% in 1995, 2003 and 2008 respectively. In SEAR estimated unsafe abortion rate was 60%, 59% and 61% in 1995, 2003 and 2008 respectively. This study reveals that investments in family planning services and safe abortion care are crucial steps to achieve MDGs.⁵³ Contraceptive use among partnered women aged 15–49 years in the developing world rose from 14% in the mid-1960s to 62% in 2008 and from protecting approximately 70 million to more than 600 million couples from unintended pregnancies.⁵⁴

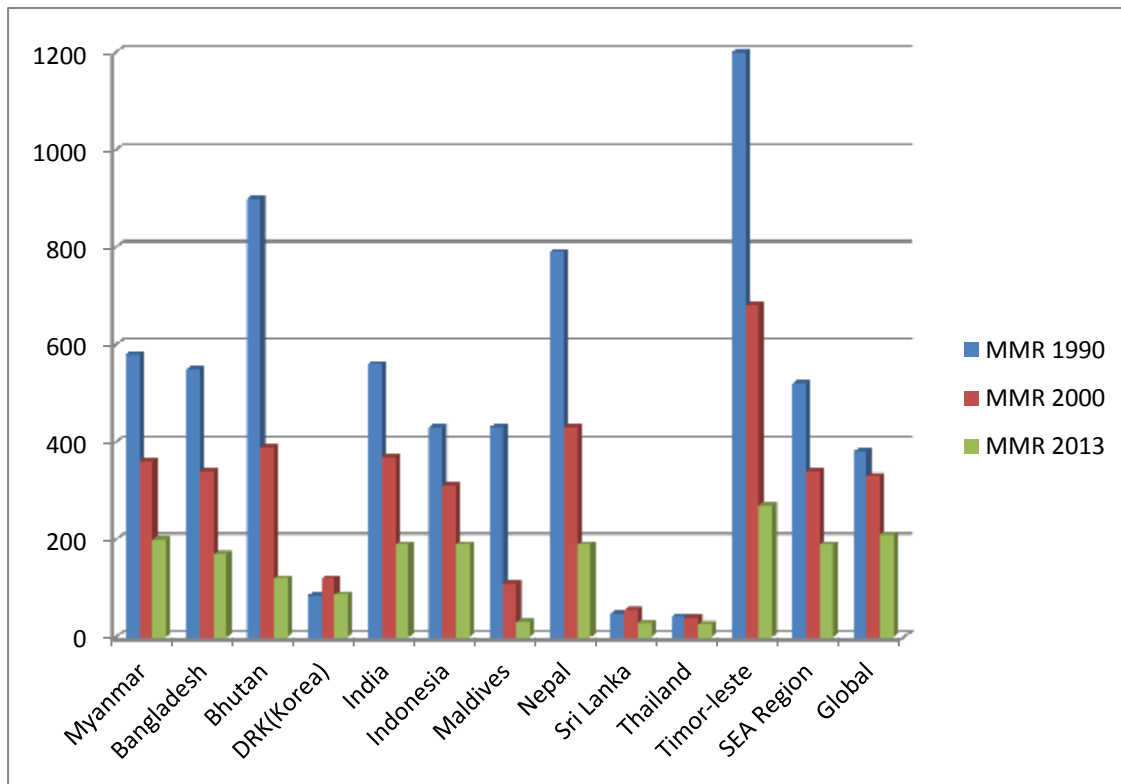
Increasing contraceptive use and reducing unmet need for family planning are central to improving maternal health.⁵⁵ Darroch and Singh⁵⁶ estimate that 43.8 maternal deaths are averted per 100,000 modern contraceptive users every year.

In the lecture given by Ali⁵⁷, through access to FP, outcomes are reducing total fertility and the number of high-risk births for women of very young maternal age (under 18) and women at high parities, benefiting health of both mothers and children and avoiding pregnancy of too late, too early, too many, too soon.⁵⁷

Increasingly, FP is being recognised for its direct and indirect effects on maternal mortality.⁵⁸ FP directly reduces the number of maternal deaths because it reduces the chance of pregnancy and the associated complications (exposure reduction), lowers the risk of having an unsafe abortion (vulnerability reduction), delays first pregnancy in young women who might have premature pelvic development, and reduces hazards of frailty from high parity and closely spaced pregnancies.^{57,59}

In SEAR, Myanmar, Bangladesh, Bhutan, India, Nepal and Timor-Leste were the countries with MMR above the average of 520 per 100,000 live births in 1990.³ After two decades, Bangladesh and Bhutan reduced MMR below regional average in 2013 and Nepal, India, and Indonesia achieved the regional average. Myanmar and Timor-Leste were the only countries with higher than regional average MMR in 2013.³ See figure (5).

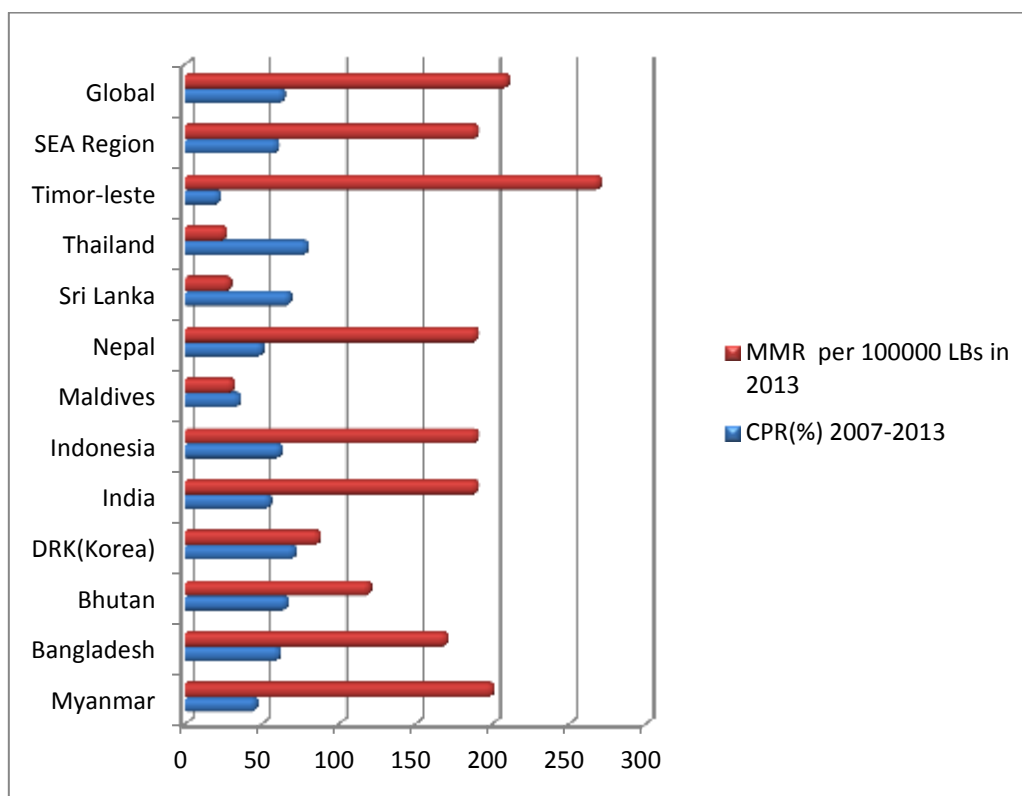
Figure 5: Trend of maternal mortality from 1990 to 2013 in South East Asia Region



Source³ WHO. World Health statistics Report, 2015

Myanmar, Maldives, Nepal and Timor-Leste had a CPR of <50% in 2013, while in the rest of the countries the CPR ranges from 55% to 79%.^{3, 60} It is seen clearly that MMR is low in countries with high CPR. See figure (6).

Figure 6: Comparison between CPR and MMR among countries in SEA region in 2013



Source ³ WHO, World Health statistics Report, 2015

4.2 Under five children Morbidity and Mortality

From a health perspective, the prevalence of short birth intervals is appropriate because of the effect on child morbidity and mortality.⁶¹ FP also brings large potential health and survival benefits for children, mainly as a result of wider intervals between births. Infants conceived 18–23 months after delivery of the previous child had the lowest risks of adverse perinatal outcomes. Inter-pregnancy intervals shorter than 18 months and longer than 59 months were significantly associated with increased risk of preterm birth, low birth weight, and small size for gestational age.⁵⁰

A conservative view of evidence suggests that about 1 million of the 11 million deaths per year of children younger than five years could be averted by elimination of inter-birth intervals of less than two years. FP is one of the most cost-effective ways of reducing infant and child mortality.⁶² For children younger than one year, the shorter the interval of 18 months or less, the greater the mortality risk. If all children were spaced by a gap of at least two years, estimates suggest that the infant

mortality rate would fall by about 10%, and mortality of children aged 1–4 years by 21%.⁶³

Contraceptive use has also improved child survival by lengthening birth intervals, thereby reducing sibling competition for scarce family and maternal resources.⁶⁵ By using FP, children can get longer breastfeeding and good nutrition. Mother/child bonding is improved and most childhood diseases are prevented. Child illness and death could be reduced.^{57,64}

Benefits of FP for people with HIV will be the same additional benefits include ability to time pregnancy when HIV transmission risk is lowest, reduction in number of children born HIV-positive (by reducing number of unintended pregnancies) and reduction in number of children born who could become orphans.^{1,57}

4.3 Fertility

Ross and Blanc⁶⁵ estimate that fertility decline between 1990 and 2008 in LMIC countries averted 1.7 million maternal deaths, and related to a 54% reduction in the MMR. Increased contraceptive use accounts for 73% of fertility decline, and the 40% reduction in the MMR during these 18 years can be attributed to contraception.^{66,67} Contraceptive use averts almost 230 million births every year, and FP is the primary strategy for prevention of unwanted pregnancies.^{20,66,67}

Decline in fertility has several non-health benefits such as less acute stresses on public services and infrastructure, boosts to the economy and rapid labour force growth.^{1,2} Children of women with better access to FP and health services are healthier and better educated than those women without access. Parents can invest more money and time per child on health, education and nutrition. Household level behavioral effects on the female labor supply, child health, and education can lead to large macroeconomic demographic benefits. Decrease in fertility strengthens economy directly and improve health indirectly.^{1,2}

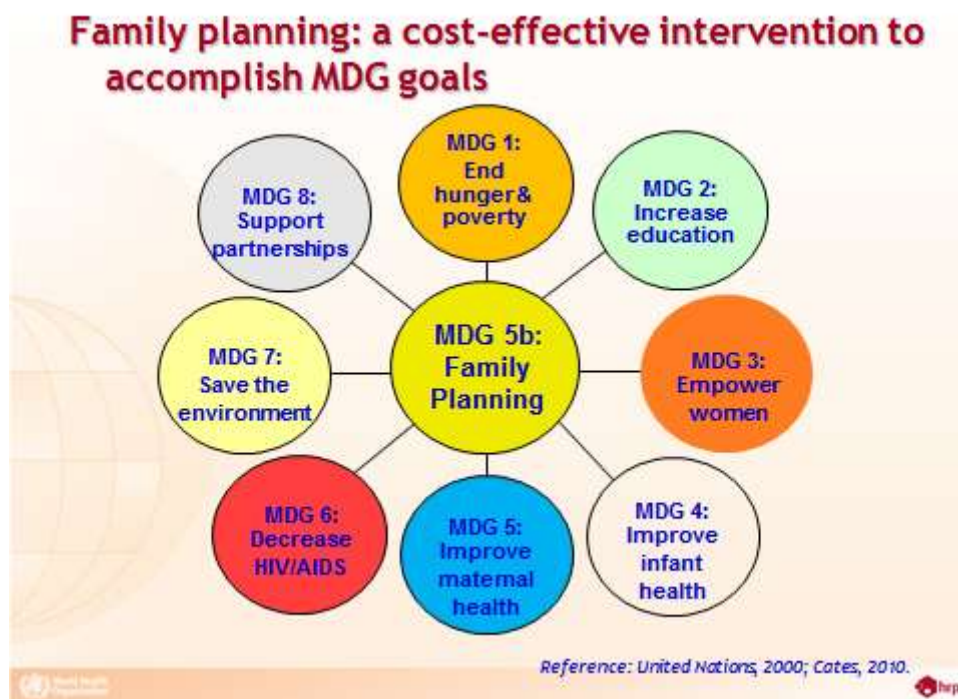
4.4 Other outcomes

It is directly concerned with the outcomes of sexual relationships leading the way in promoting sexual health.⁵² Due to dual protection of condoms, FP efforts to prevent sexually transmitted infections and HIV transmission^{52,66}

Specific contraceptive methods have health benefits that far outweigh the health risks, although minor side-effects result in high probabilities of discontinuation, particularly of hormonal methods.⁶⁴ Tubal sterilisation is associated with a reduced risk of ovarian cancer.⁵⁷ Combined oestrogen–progestogen oral contraceptive pills (OCPs) are among the most widely used modern contraceptive methods in many countries. They reduce the prevalence of anaemia and decrease the risk of endometrial and ovarian cancer^{57,68} with this effect increasing with length of use and persisting long after discontinuation. IUDs have been associated with a reduced risk of endometrial cancer, and a pooled analysis suggests a possible reduced risk of cervical cancer.⁵⁷

Contraceptives prevalence rate and unmet need for family planning are specific indicators of MDG 5, target B: To achieve, by 2015, universal access to reproductive health. Outcomes of family planning are related to other MDG goals^{19,57} and new social development goals.⁵⁷ See Figure (7).

Figure 7 Family planning and related MDGS



Source ⁵⁷ Ali M. Benefits and Impact of Family Planning [unpublished lecture notes]. ICHD2014-2015: Sexual and Reproductive Health and Rights incl. HIV/AIDS, Royal Tropical Institute (KIT); lecture given 2015 March 16.

Chapter 5: Best Practices in other countries

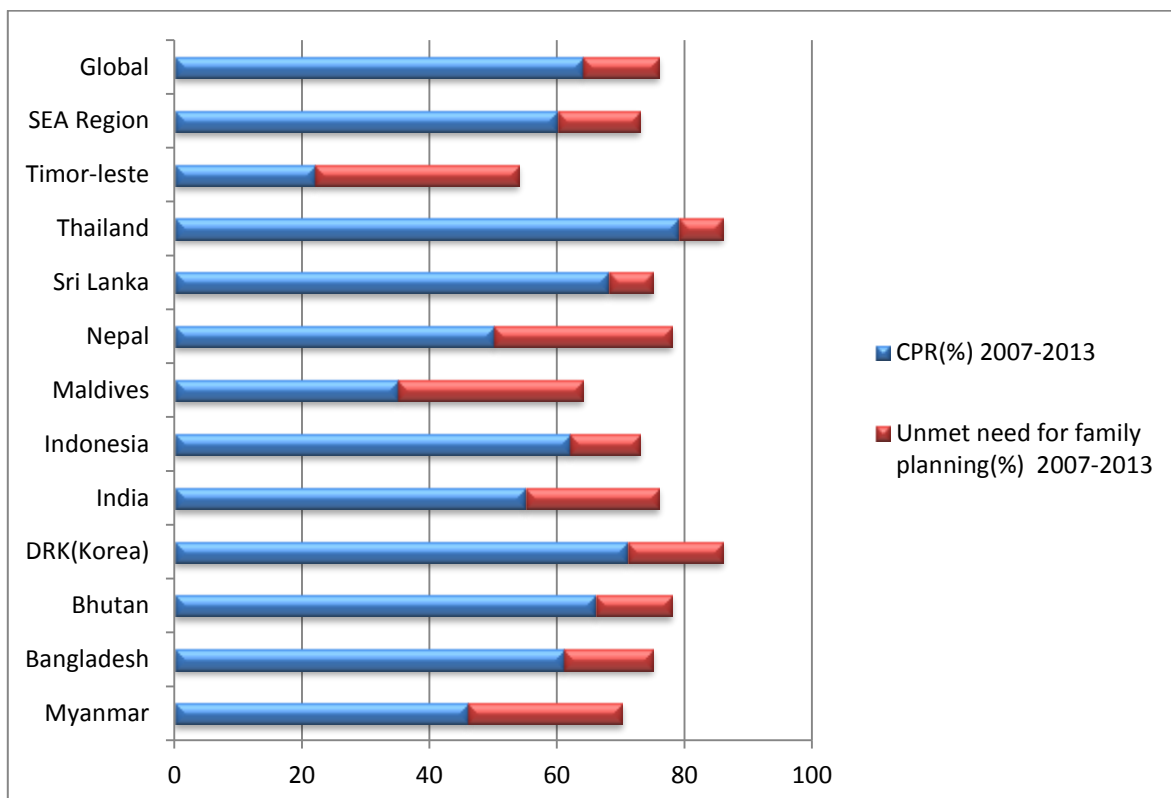
In this chapter, findings are presented from literature review to analyse best practices in other countries with similar context in order to meet fourth specific objective.

5.1 Rationale for choosing countries for best practices

In LMIC countries overall, as one in four women wanting to avoid pregnancy was not using effective contraception in 2012, the need for improved contraceptive services remains very high.⁶⁹ Countries of the SEAR have made steady progress in increasing the availability and use of modern contraceptive methods.⁶¹ The sum of contraceptive prevalence and unmet need provides the total demand for family planning.²

In 2013, CPR and unmet need for contraceptives were compared among the countries in the region.³ Myanmar, Maldives and Timor-Leste have lower CPR and higher unmet need than other countries in the region. See Figure (8).

Figure 8: Comparison between countries on CPR (%) and unmet need for family planning (%) 2007-2013



Source³ WHO, World Health statistics Report, 2015

Based on findings of a review in the SEA region in chapter 4, Bangladesh's success is helpful for finding suitable practices applicable in Myanmar. Among the six countries with highest MMR in the region in 1990, only two countries, Bangladesh and Bhutan, were lower MMR and higher CPR than the regional average in 2013.

Bangladesh is a neighbouring country with similar context with Myanmar although it's religion is different. Moreover Bangladesh was recognized as one of 10 fast-track countries towards MDGs 4 and 5 in 2013⁷¹. These 10 fast-track countries are Bangladesh, Cambodia, China, Egypt, Ethiopia, Lao PDR, Nepal, Peru, Rwanda and Viet Nam.⁷¹

Among these countries Bangladesh, Cambodia, Lao PDR and Viet Nam may have some applicable interventions to improve family planning in Myanmar due to neighbouring countries with similar context. See Table (3).

Table 3: Demographic profiles in five countries

| No. | Country | Year | Population ('000) | Density (per sq.km) | Inter-censal Growth Rate | Urban Population (%) | TFR |
|-----|------------|------|-------------------|---------------------|--------------------------|----------------------|------|
| 1 | Myanmar | 2014 | 51,486 | 76 | 0.89 | 30 | 2.29 |
| 2. | Bangladesh | 2013 | 156,595 | 1,087 | 1.19 | 29 | 2 |
| 3. | Cambodia | 2013 | 15,135 | 84 | 1.75 | 20 | 3 |
| 4. | Lao PDR | 2013 | 6,770 | 29 | 1.86 | 35 | 3 |
| 5. | Vietnam | 2013 | 91,680 | 276 | 0.95 | 32 | 2 |

Source:⁷¹ UN DESA. World Population Policies 2013 .Available from <http://www.un.org/en/development/desa/population/publications/policy/world-population-policies-2013.shtml>

Table (3) shows that Bangladesh is the most populous country. All the countries have similarity of 65 to 80 % of total population are rural population. TFR varies between 2 to 3. Myanmar and Vietnam have population growth rates of less than 1% per annum.

Table 4: MDG 4 and MDG5 Indicators of five countries in 2013

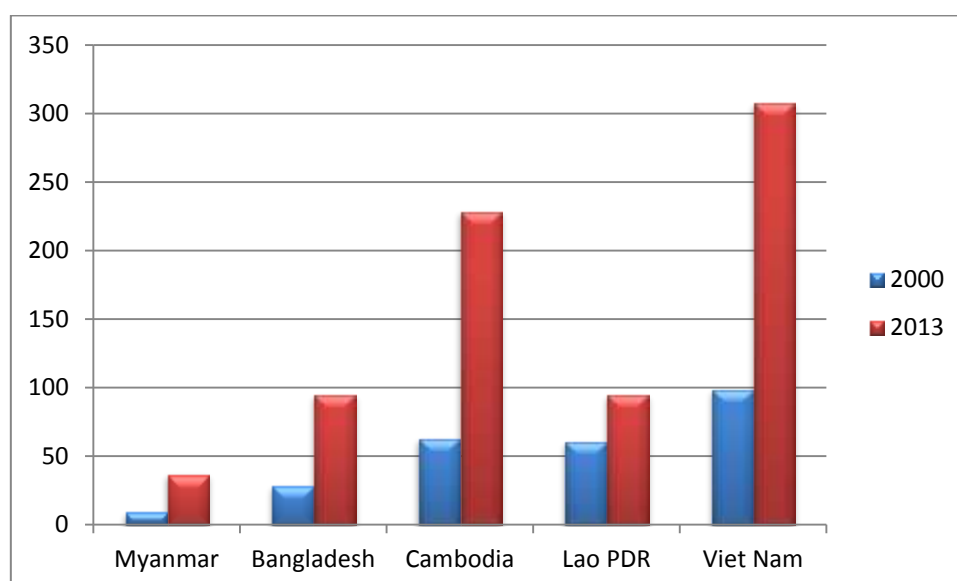
| Country | MMR 1990 | MMR 2000 | MMR 2013 | U5MR in 2000 | U5MR in 2013 | CPR (%) 2007-2013 | Unmet need for family planning(%) 2007-2013 |
|------------|----------|----------|----------|--------------|--------------|-------------------|---|
| Myanmar | 580 | 360 | 200 | 81 | 46 | 46 | 24.2 |
| Bangladesh | 550 | 340 | 170 | 313 | 129 | 61 | 14 |
| Cambodia | 1200 | 540 | 170 | 32 | 14 | 51 | 17 |
| Lao PDR | 1100 | 600 | 220 | 19 | 13 | 50 | 20 |
| Vietnam | 140 | 82 | 49 | 44 | 33 | 78 | 4 |

Source³ WHO. World Health statistics Report, 2015

The burden of MMR in 1990 was highest in Cambodia and Lao PDR and lowest in Vietnam. See table (4). Myanmar's MMR was a little higher than Bangladesh's MMR. In 2013, Vietnam has still the lowest MMR, Myanmar and Lao PDR had highest MMR. The MMR reduction rate in Lao PDR is better than that of Myanmar. For U5MR, Bangladesh was the highest country in both 1990 and 2013 but had reduced to less than half of the situation of 1990. Myanmar's CPR is lowest among these countries.

From 2000 to 2013, over a decade, per capita total expenditure on health (PPP int. \$) increased in each country but the amount of increase was different. In 2000 and 2013, Viet Nam was highest and Myanmar was lowest in per capita total expenditure on health (PPP int. \$). See Figure (9).

Figure 9: Per capita total expenditure on health (PPP int. \$) among five countries



Source³ WHO. World Health statistics Report, 2015

5.2 Findings in selected countries

5.2.1 Bangladesh

Bangladesh is moving ahead in achieving MDG 5 and is on-track to achieve the MDG 4 target by 2015. TFR continues to decline and the CPR continues to increase.^{3,72}

Bangladesh has expanded the RH and FP services, particularly to underserved populations. Bangladesh's mass communication campaigns were also engaged to increase demand for FP services. The media play an important role in communicating messages about FP and television is the most popular source.^{72,73}

Bangladesh was separated from Pakistan as an independent country in 1971.⁶¹ From 1976, population stabilisation became a top priority in Bangladesh with support from all sectors of society.⁶¹ Bangladesh extended its FP program with different methods of contraceptive choice. Staff were trained to do sterilisations at district hospitals. Married women with ability to read and write were recruited as community-based workers and trained to provide pills and condoms in their communities and to refer women for clinical contraception.⁶¹

The community-based approach was highly effective because workers acted as credible local leaders of reproductive change and overcame severe access barriers. 44% of pill users and 18% of injectable contraceptive users received services and supplies at their doorstep.⁶¹

When populations are growing rapidly, major implications for future population size can occur due to delayed onset of fertility decline by a decade; a broad alliance of support for FP is crucial and culturally and socially appropriate services are key ingredients of effectiveness.⁶¹

According to BDHS 2011⁷³, the four most popular modern methods used by married women are the pill (27%), injectables (11%), the male condom (6%), and female sterilization (5%). Fourteen per cent of currently married women in Bangladesh have an unmet need for family planning services; 8% have an unmet need for limiting births and 5% have an unmet need for spacing births.^{72,73}

The government made sustained efforts to ensure women's access to family planning services with the support of donors and NGOs, particularly through the provision of services at the community level and in rural areas.⁷³ Rural study⁷⁴ in Bangladesh reveals the prevalence of contraceptive use among the married women of reproductive age group from 15 to 49 years in a rural area in Bangladesh was 62.3% in 2012. The enhancement of contraceptive supply through visits by field workers to the individual level improve the current picture of family planning program in Bangladesh although general improvement of the status of women in the family and society is compounded to this success.⁷⁴

Bangladesh has an on-going commitment to ensuring social protection for underserved populations. The country has set a national target of reaching the status of a 'middle-income country' by 2021.⁷³

5.2.2 Cambodia

In Cambodia, the dominated pro-natalist policies were reversed in the early 1990s and a focus was placed on increasing access to FP methods to respond to maternal and reproductive health needs.⁷⁵ A birth spacing policy was implemented in 1995, which lead to substantial improvements in access to and use of family planning methods.⁷⁵ In Cambodia, there is almost universal knowledge of modern contraceptive methods presenting 99% of women in 2010, while the use of modern methods of

contraception continues to increase from 19% in 2000 to 35% in 2010 to 39% in 2014.⁷⁵

Cambodia's population is predominantly rural. The Cambodia study revealed social support of husbands, peers and elders are associated with women's contraceptive use.^{76,77} The public sector is the main provider of female sterilization and of the injectable and IUDs. Income levels determine contraceptive choices. In 2005 of the 27% of married women using modern contraceptives (out of an overall CPR of 40%), about 75% used short-term and re-supply methods, mainly injectables and pills, due to their affordability and availability through health centres and community-based distributors. IUD and female sterilization are the choices of richer consumers, as the majority of the population living at or below subsistence level cannot afford to invest in LAPMs.⁷⁸

The expansion of RMNCH services since the early 1990s, particularly to underserved populations, has been a key strategy in reducing maternal mortality. As a result of legalization of abortion up to 12th week of pregnancy since 2005, more women now have access to safe abortion services, with noted declines in maternal deaths resulting from unsafe abortion.⁷⁹

5.2.3 Lao PDR

Reductions in maternal mortality are associated with a halving of the total fertility rate, and socioeconomic and educational improvements.⁸⁰ The National Birth Spacing Policy (1997) gives priority to extending reproductive health services including FP to all areas of the country. The expansion of reproductive health care services to underserved populations in peripheral and remote areas has improved the uptake and use of modern contraceptive methods.^{80,81}

The public sector is the major provider of contraceptive services, offering two types of combined pills, a mini-pill, the three-month injectable DMPA, IUDs, male condoms, and female sterilization. Sterilization can only be performed at hospitals.⁸¹ In 2000 it was documented that 40% of couples were willing to use contraceptives, but were unable because of the lack of facilities or the compounded costs of transportation and service. The community-based FP project was initiated in June 2006 to improve access to information and services amongst marginal groups. Volunteers were selected and trained to serve as community-based FP service providers (agents).⁸¹ These agents belong to their communities, speak the same

language and share the same social norms. Agents were responsible for providing outreach FP services (including provision of condoms, oral contraceptives and injectables) free of charge to all those in need. The contraceptive prevalence rate increased sharply in several areas, for one catchment area the rate was reported to have reached 61% in 2009 from a baseline of 0.6% in 2006. The level of FP services also exceeded service levels in some district hospitals.^{70, 81}

Promoting family health for the people in the remote areas of the country in collaboration with relevant stakeholders and empowering individuals through awareness-raising on reproductive health knowledge, information and services are key strategies in Lao PDR's success.⁸⁰

5.2.4 Viet Nam

Viet Nam's two child policy was officially relaxed with an ordinance in 2003 to meet some of the rights-based ICPD recommendations. The establishment of a small-family norm remains a top national priority, as does enhancing access to long-lasting contraceptive methods.^{36, 82}

Having just achieved below-replacement levels, Viet Nam is now experiencing a period of "demographic bonus" with an age dependency ratio under 50%.⁸³

In 2002 the public health system, especially its community health centers and fieldworkers, delivered 86% of modern contraceptives. The remaining share was provided by the private sector, mainly by pharmacies and NGOs.^{83,84} Since 1990, Per capita government expenditure on health has increased more than five-fold, FP services are integrated in reproductive health interventions. Universal coverage is a stated objective of Viet Nam's health systems including general health insurance and a specific health care fund targeted at the poorest.^{83,84}

Reproductive health services are provided by a service delivery network ranging from central- to commune-level provision. Every province in Viet Nam has reproductive health centres and most district health centres also provide reproductive health services.⁸⁴ At the local level, 99% of communes have health centres, 93% of communes have midwives and 66% have doctors; 84% of hamlets and villages have health care

workers. All hamlets and residential blocks have volunteer family planning collaborators.⁸⁴

Overall findings in this chapter point out increased allocation of financial resources at the local and country level is essential to improve access to contraceptive services and expand capacity where needed by strengthening health facilities and human resources. Public education interventions are needed to reduce barriers to contraceptive use and to create demand for services through community support mechanisms and media channels. Increasing modern contraceptive method use requires community-wide, multifaceted interventions. Findings show that community-based family planning by using trained volunteers could ensure accessibility and availability of family planning services. Mass communication campaigns could increase demand for family planning services and acceptability by reducing socio cultural factors. Universal coverage and a specific health care fund targeted at the poorest is essential to provide family planning services free of charge to ensure affordability.

Chapter 6: Discussion

This chapter discusses and analyses the findings of the literature review according to the thesis objectives.

6.1 Existing situation on family planning in Myanmar

Myanmar is at transition period from birth spacing project to family planning program. Political commitment to family planning is an opportunity to expand the program. The government is trying to increase health expenditure and has committed to increase state budgets for family planning.

Public sector provides 49% of the FP services covering 163 out of total 330 townships. The INGO, NGO and private sector also plays a significant role and the remaining 51% is assumed by the INGO/NGO and private market but available data is limited. Collaboration among the public sector and the private sector, civil society organizations, and other development partners in service delivery is not well established. Findings reveal that there are overlapping in some townships by INGO, NGO while there is still service gap in 100 townships where people have to buy and use from private market themselves.

Social franchising and social marketing through fixed clinics and outreach activities are implemented by INGOs and NGOs and so availability and accessibility are improved but affordability is still problem for the poor. Weak coordination and collaboration between the public and private sector is causing inequality in FP services within the country. The contraceptives requirements of even those targeted married couples are not fulfilled due to inadequate human and financial resources. In townships where there is no coverage of any FP services, only those who have knowledge and who are affordable can use FP services from private sources. Unmarried people are mainly left out of public services nationwide.

6.2 Influencing factors

According to conceptual model, FP service provision and utilization is shaped by the social, cultural, economic, political, and legal systems in the society. Findings show that the political and cultural factors are the strong determinants of FP in Myanmar.

The population to health staff ratio in Myanmar is lower than the WHO minimum criteria. The consequences of shortages of health staff in health system are overburdening existing staff, inadequate quantity and quality of services, gaps between demand and supply, and also negative effects on potential demand for FP services.

This is in turn related to the functional areas in the conceptual model and these factors influence both demand for health care and the service delivery environment. Government support of resources for programs is not strong enough to cover the whole country causing donor dependency for more than two decades (since 1991). Government contribution to FP began only about two years ago by means of FP2020 commitments. Contraceptive commodity security and logistics are insecure even in project townships. Research/evaluation are not done properly or not well documented as available data is limited.

Capacity development activities are not covered enough to different cadres of service providers in the whole country. Although pre-service training and in service training are providing to health care providers, evidence shows it is still inadequate. Existing community health volunteers (AMW and CHW) are used as a bridge between health providers and community. They are not well trained for family planning information and services and they are not eligible to provide FP services but they can be used as family planning promoters after training.

Due to the policy on birth spacing project targeting to married couples, unmarried women rarely get needed services from public sector. It is compounded by stronger stigma against them leading to un-necessary problems for them. As sexually active unmarried women also need access to contraceptive information and service, they tend to have higher unmet needs than married women and account for a notable proportion of overall unmet need for family planning.

Political and cultural factors influence the availability and access to reproductive health services including FP. They also are influenced by gender norms and make unmarried ones more vulnerable to pregnancy related morbidity and mortality.

There is lack of data regarding sexual behaviours and sexual orientation of unmarried people. Contraceptives are easily available at private drug shops although discrimination and lack of confidentiality do act as inhibitors of effective utilization. The young unmarried women have social

economic and cultural barriers to use contraceptives and condoms. Gender inequality is also the underlying cultural factor for low utilization of contraceptives and poor health outcomes.

Evidence shows that wealth and purchasing power affects the use of a modern contraceptive methods. Contraceptive use also differs according to the residence as it is seen to be highest among women in urban area. Low socio economic status and huge urban rural gaps influencing FP as 25% of people in Myanmar are below the poverty line and 84% of those poor live in rural areas.

Although literacy rate is high in Myanmar, sexual education is not openly discussed and sexual knowledge is not widely assessed in society even though small scale studies were conducted. The sources of correct information on contraceptives are very limited although contraceptives can be bought in private outlets easily. Pharmacy shops owners and drug sellers are not well informed and have no training to provide accurate information on contraceptive methods, including use, continuing use and side effects. Low awareness among certain segments of the population due to language barriers and limited IEC materials were recognized as bottlenecks to contraceptive use. Misconception and myths on contraceptives methods perceived by clients and the community are acknowledged to be a barrier to use of modern contraceptives, particularly IUDs and implants. Lack of knowledge about methods or sources of supply are also influencing factors.

Studies in Myanmar revealed that self and community attitudes towards premarital sex, perception of the benefits of contraception, contraceptive awareness, motivation from a provider, involvement of peers, and spousal communication significantly influence the decision to use contraception.

6.3 Health outcomes

FP can prevent unwanted pregnancies and also reduce pregnancy related morbidity and mortality. The outcomes of family planning for the survival and health of mothers and children are fairly straightforward. FP allows spacing of pregnancies and can delay pregnancies in high risk women, thus, reducing maternal deaths, can reduce infant mortality by preventing closely spaced and ill-timed pregnancies which are termed as the contributor for infant mortality.

The countries with higher CPR have greater outcomes of reduction in fertility, maternal and child morbidity and mortality in comparison with countries with lower CPR in findings of review in SEA Region.

Especially in rural areas with poor health infrastructure, FP is the most cost effective and feasible way to reduce maternal deaths because it does not rely on complex technology, unlike some alternative interventions. Such a health rationale has long been one of the reasons for supporting family planning programs in LMIC countries.

The use of contraceptive methods is to ensure healthy population development, with a target for individuals or all couples to have access to information and services to prevent pregnancies that are too early, too closely spaced, too late, or too many. Family planning program could provide wide and equitable access to a broad range of modern contraceptive methods and services, thereby enabling women and men to freely and responsibly realize their reproductive intentions (to delay, space, or limit) across their reproductive life cycle.

6.4 Evidence and best practices in family planning from other countries and it's applicability for Myanmar

Evidence from success in other countries highlighted how they implemented and what they achieved.

In 1990, MMR in Myanmar and Bangladesh were nearly similar but it became much lower in Bangladesh in 2013. The combined approach of Bangladesh's mass communication campaigns and community-based approach is the best approach to balance demand and supply in order to good outcome. This approach could increase demand for FP services through mass media and then follow with supply with a community-based approach to overcome severe access barriers in order to reach services and supplies at the doorstep. It is applicable in Myanmar as community volunteers are still working with health staff. Mass communication campaigns could be applicable to sensitize the community on family planning services as well as their awareness on rights and gender equity to overcome barriers.

Myanmar and Cambodia have some similarities of predominantly rural population and pro-natalist policies which were reversed in the early

1990s. In Cambodia, a focus was placed on increasing access to FP methods to respond to maternal and reproductive health needs. Cambodia's success is based on the expansion of RMNCH (Reproductive Maternal, New-born and child health) services including FP since the early 1990s, particularly to underserved populations. Based on these similarities, Myanmar can follow the example of the expansion of RMNCH services including FP to marginal populations because in Myanmar FP is the branch of RMNCH and already in existing and integrated in other related programs. In Cambodia maternal death due to unsafe abortion has declined due to combined effect of FP services and the result of legalization of abortion up to 12th week of pregnancy since 2005. In the Myanmar context, legalization of abortion is not applicable due to strong cultural and religious reasons.

There was a similar success story in Lao PDR and Vietnam. The community-based FP project was initiated in Lao PDR in June 2006. Community volunteers are selected and trained as agents with specific duties and responsibility for providing outreach FP services including provision of condoms, oral contraceptives and injectables free of charge to all those in need. In Viet Nam, reproductive health services are provided by a service delivery network ranging from central- to commune-level provision. All hamlets and residential blocks have volunteer family planning collaborators.

Based on practices of Lao PDR and Viet Nam, trained volunteer family planning collaborators are rooted in community and distributed in each village to provide FP services at the doorstep.

In Myanmar the community-based FP project is applicable as there are trained volunteers as AMW in most of the villages for maternal and child health services and they can be trained and equipped with adequate knowledge and skill as conducted in Lao PDR and Viet Nam. By adding financial resources for training and contraceptives commodity to existing human resources, quick wins of high CPR and reduced unmet need for FP can be seen within short period.

Viet Nam has shown an extra good example in health care financing. Viet Nam's population control is seen as instrumental to improve the welfare of individuals, society and the country's development. Per capita government spending on health has increased more than five-fold since 1990. According to findings, Viet Nam's per capita government expenditure on health and per capita total expenditure on health is

highest among these five countries and Myanmar is the lowest. Viet Nam has a specific health care fund targeted at the poorest and universal coverage is a stated objective of Viet Nam's health systems. Myanmar is in transition and trying to initiate the universal coverage and is not implemented yet but it may be the opportunity to integrate FP into universal coverage. Political interest and commitment to FP2020 is the driving force to expand the FP program in Myanmar.

Three types of these best practices are replicable, feasible and very much likely to be successful in Myanmar. Financing is the basic requirement to conduct any approach.

- Combined approach of mass communication campaigns and community-based approach is the best one to increase awareness on rights and gender equity and to overcome access and cultural barriers.
- The expansion of RMNCH services including FP through existing providers with affordable price are applicable.
- Providing outreach family planning services including provision of condoms, oral contraceptives and injectables free of charge to targeted groups through at least one trained volunteer in each village.

Actual findings of supply and demand side factors linked to actual situation in Myanmar according to the model. There still are gaps in FP services for married and more for sexually-active unmarried people. The main factors influencing these gaps are human and financial resources in both public and private sectors, the absence of programs targeting unmarried people and the deep-rooted cultural norms in the country. FP service utilization helps the clients to practice health behaviours through information, counselling and provision of supplies and clinical procedures. Health behaviours in FP represent use of contraception and use of condoms for dual protection. However, health behaviours and health outcomes are influenced by other non-program factors, findings show FP program is strongly related to pregnancy related health outcomes. Taking all these factors in the conceptual model into consideration, replicable and feasible best practices are identified and explored to achieve better health outcomes.

Chapter 7: Conclusion and Recommendations

7.1 Conclusion

Maternal and child morbidity and mortality have declined remarkably over the last decade in Myanmar. Despite the remarkable achievements, Myanmar still faces a wide range of constraints which impede the path towards the goals of MDG 4 and 5. Family planning is one of the main influencing factors for maternal and child health outcomes. Current barriers and challenges regarding FP gaps in Myanmar stem from resource deficiencies in the supply side while cultural factors also played a key role. However, regional and international cooperation, increase public expenditure and external funding, public private coordination and collaboration, community involvement and empowerment, and engagement of other related sectors are potential opportunities and strengths for FP in Myanmar. Overall it is worthwhile to invest in FP programming as it directly contributes to MDG 4 and 5 and it indirectly relates to other MDGs and new social development goals. Taking all these factors into consideration and a feasibility assessment of financial, technical and operational capacities, Myanmar can start the community based FP program first as a pilot project in some townships which have low CPR and high unmet need and then scale up nation-wide based on success and lessons learned. With the recent expression of commitment and interest by the government and support by international community together with the restructuring and improvements in the MOH and better relationship with INGOs, NGOs and community, we will be able to work together to ensure better access to FP services in Myanmar.

7.2 Recommendations

The recommendations are based on evidence of the findings for the purpose of improving the quality family planning services in order to get good health outcomes in Myanmar. The recommendations are specified in three areas: at the policy level, research level and intervention level recommendations.

Policy recommendations

The government of Myanmar, MOH, politicians and other stakeholders need to review the current health policy for better improvement of the

availability, accessibility, acceptability and quality of family planning services in the country. This includes:

- ❖ The government of Myanmar needs to revise the health financing policy to increase the current government budget expenditure on health for allocation and reallocation of budget and resources to finance family planning interventions.
- ❖ The government of Myanmar through MOH needs to integrate family planning program and Universal Health Coverage (UHC) and develop policy aiming to increase effective and equitable coverage of family planning services to the poorest people in remote areas. The government needs to implement the most suitable social health insurance scheme / Community-based health insurance (CBHI) strategies to address the huge out-of-pocket expenditures and prevent impoverishment.
- ❖ The MOH needs to extend the birth spacing project to a rights-based family planning program in order to provide the services without exception and to promote the involvement of private health facilities and INGOs and NGOs on provision of family planning services through effective collaboration.

Research recommendations

The research plan is briefly discussed in Annex 4.

- ❖ Further research on FP-related cultural norms is highly recommended to utilize in designing approaches and in future programs.
- ❖ The MOH and the private sector need to conduct research in order to explore the actual factors influencing health professionals to provide high-quality, low-barrier contraceptive care.
- ❖ The MOH and private sector need to conduct research on markets to identify consumption on contraceptives and types of contraceptives and to explore the knowledge, attitude and behavior of providers (Pharmacists/ shop owners / retail shopkeepers) in private markets.
- ❖ Further studies are needed in reproductive health concerns among unmarried people including adolescents because of longer sexually active period between adolescence and age of marriage.
- ❖ After a feasibility study, the MOH and private sector need to address unmet needs of FP and to integrate unmarried people's needs in the

programs in order to reduce MMR significantly. Continuing research is essential to adapt challenges in the process phase and re-planning again if necessary.

Intervention recommendations

- ❖ The combined approach of mass communication campaigns and community-based approaches is the highly recommended best approach in Myanmar in order to balance demand and supply for satisfactory outcome of reproductive rights, gender equity, and maternal and child health. This approach includes awareness raising through providers including volunteers and mass media and then supply of different choices of contraceptives methods followed by a community-based approach.
- ❖ The MOH and private sector needs to improve the availability of essential resources (equipment, drugs and supplies) in the existing health care facilities especially township health facilities in order to strengthen the backbone of health system. This could be by creating good communication and stock management of resources and advanced procurement of the essential resources.
- ❖ The MOH and private sector have to provide short courses and on job training / workshops programs to update the knowledge, skills and attitude of both public and private family planning providers with an inclusive approach. Efforts should be taken to gear up counselling and health education from healthcare providers to enhance the level of attitude towards FP among women and the people who influence them.
- ❖ The MOH and the private sector have to introduce quality assurance programs and conduct regular evaluation and monitoring to assess the performance and quality of FP services in order to measure the effectiveness and impact of interventions.
- ❖ The MOH and private sector need to implement client friendly family planning services with a full range of contraceptives available and qualified providers to provide the voluntary use of contraceptives free of charge or at minimal cost.
- ❖ The MOH and the private sector need to train community health workers , axillary midwives and traditional birth attendants and work jointly to sensitize the community on family planning services as well as their awareness on rights and gender equity and to maintain

the flow of information or communication between the community and health care facilities.

- ❖ The MOH and the private sector need to develop context specific and attractive IEC materials to convey family planning promotion messages for adolescents and married couples that could be disseminated through the media with special focus for rural areas and private sector needs to expand social marketing of contraceptive commodities to cover populations in difficult-to-reach areas of identified states/regions.

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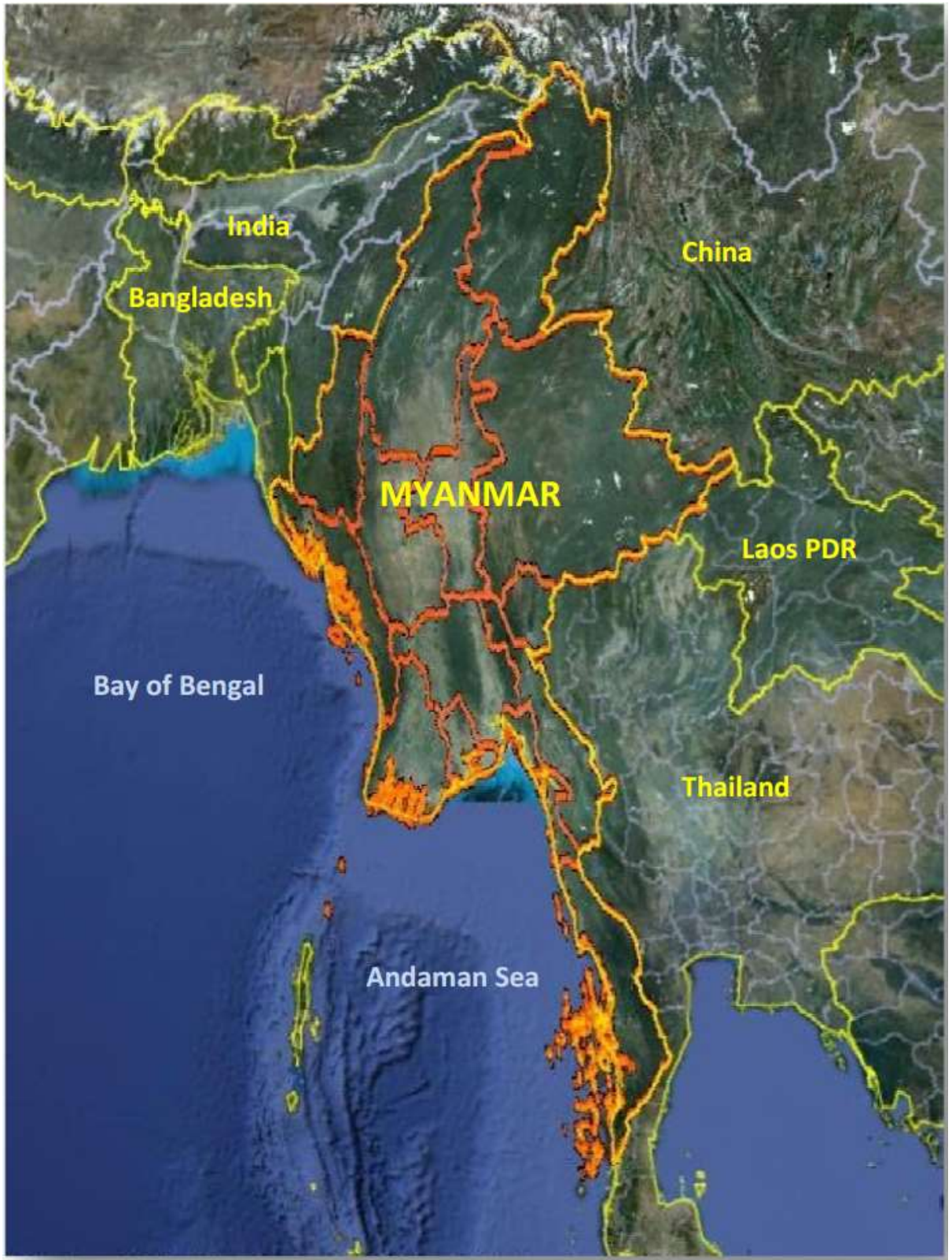
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Annex (1) Map of Myanmar



Source⁷ MOH, Health in Myanmar, 2015

Annex (2) Demographic and Health financing of Myanmar

| Item | Description | Source |
|--|-----------------------------|---------------------------------|
| Population in millions in 2014 | 51.42 million | Census, 2014 |
| - Men | 24.82 million | Census, 2014 |
| - Women | 26.6 million | Census, 2014 |
| Population growth rate between 2003 and 2014 | 0.89 per cent per annum | Census, 2014 |
| Total Fertility Rate | 2.29 per women | Census, 2014 |
| Contraceptive Prevalence Rate before 2007 | 40.9 per cent | 2007 FRHS |
| Contraceptive Prevalence Rate between 2007 and 2013 | 46 per cent | WHO,2015 |
| Unmet need for contraception | 17.7 per cent | 2007 FRHS |
| Unmet need for contraception | 24.2 per cent | 2010 IHLCA |
| Adolescent Fertility Rate | 16.9 per 1,000 | 2007 FRHS |
| Maternal Mortality Ratio in 2013 | 200 per 100,000 live births | UN estimates, 2013 and WHO,2015 |
| Infant Mortality Rate in 2013 | 48 per 1,000 live births | UN estimates, 2013 |
| Infant Mortality Rate in 2013 | 46 per 1,000 live births | WHO,2015 |
| Total expenditure on Health as % of GDP in 2012 | 1.8% | WHO,2015 |
| General government expenditure on health as % of total expenditure on health in 2012 | 23.9% | WHO,2015 |
| Per capita total expenditure on health at average exchange rate(US\$) in 2012 | 20 | WHO,2015 |

| | | |
|---|----|----------|
| Per capita total expenditure on health at purchasing power parity (PPP international \$) in 2012 | 35 | WHO,2015 |
| Per capita government expenditure on health at average exchange rate(US\$) in 2012 | 5 | WHO,2015 |
| Per capita government expenditure on health at purchasing power parity (PPP international \$) in 2012 | 8 | WHO,2015 |

Annex (3) National Population Policy (1992)

1. Improve the health status of Women and Children by ensuring the availability and accessibility of birth-spacing services to all married couples voluntarily seeking such services.
2. Provide the community with information, education and communication measures on birth-spacing in advance as it is important.
3. Encourage Myanmar women to fully participate as equal partners in national development by giving them equal status with men.
4. Promote the awareness of citizens of the nation on the responsibility of the reproductive behavior and also educate the male population of their responsibility.
5. Utilization of young people in national development efforts as youth population of under 18 constitutes about 50% of the total population.
6. The government is committed to a strategy of providing essential health care using the primary health care approach. Therefore, to attain the prevention of diseases and promotion of healthy life-style, the basic facts included in the primary health must be emphasized.
7. Raise the social status of the rural community by taking into account the internal and international migration issues. Integration of comprehensive urbanization policy into the overall development planning process while ensuring effective economic interdependence between towns and villages.
8. Raise the awareness of the importance of population information and vital statistics for socioeconomic planning.
9. Review and amendment of existing legislation to support the achievement of the objectives of the population policy.

Annex (4) Recommendations for further research in Myanmar

| No | Description | Usage | Responsibility | Main participant | Type |
|----|--|--|-------------------------|--|------------------------------------|
| 1. | FP-related social and cultural norms | to utilize in designing approaches and in future program | MOH and Private sectors | unmarried reproductive-age women and men, community | Qualitative study |
| 2. | Factors influencing health professionals to provide high-quality, low-barrier contraceptive care | | MOH and Private sectors | service providers, married and unmarried reproductive-age population, community | Quantitative and qualitative study |
| 3. | Research to identify consumption on contraceptives and types of contraceptives and to explore the knowledge, attitude and behavior of providers(Pharmacists/ shop owners/ retail shopkeepers) in private market | | MOH and Private sectors | private sector service providers, married and unmarried reproductive-age population, community | Quantitative and qualitative study |
| 4. | CPR and other indicators related to FP among unmarried people | | MOH and Private sectors | Health service centers, providers | Quantitative study |