Factors contributing to the uptake and use of contraceptives among adolescents in Myanmar: A Literature Review

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57th Master of Public Health/International Course in Health Development

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

by

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Abbreviations

BHS	Basic health staff
CBOs	Community-based organizations
DFAT	Department of Foreign Affairs and Trade
DHS	Demographic and Health Surveys
DoP	Department of Population
FBOs	Faith-based organizations
FP	Family planning
GDP	Gross domestic product
HIV	Human immunodeficiency virus
IHME	Institute for Health Metrics and Evaluation
INGOs	International non-governmental organizations
IUD	Intrauterine device
LHV	Lady Health Visitor
LMICs	Low-and-middle income countries
LSE	Life Skills Education
MDSR	Maternal Deaths Surveillance and Response
MMR	Maternal mortality ratio
MoE	Ministry of Education
MoH	Ministry of Health
MoHS	Ministry of Health and Sports
MSI	Marie Stopes International
NCDs	Non communicable diseases
NGOs	Non-governmental organizations
OOP	Out-of-pocket payment
PAC	Post abortion care
PSI	Population Services International
SRHR	Sexual and reproductive health and rights
STI	Sexually transmitted infections
TFR	Total fertility rate
THE	Total health expenditure
U5MR	Under-five mortality rate
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization

Glossary of terms and definitions

All the terms and definitions below were retrieved from World Health Organization (WHO), The global health observatory website. (Available at: https://www.who.int/data/gho/indicator-metadata-registry)

"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".

"Adult literacy rate (%)_ The percentage of population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life. Generally, 'literacy' also encompasses 'numeracy', the ability to make simple arithmetic calculations".

"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".

"Maternal mortality ratio (per 100 000 livebirths) _ 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 health expenditure as % of total health expenditure _ The ratio of out-of-pocket expenditure on health to total expenditure on health, expressed as a percentage".

"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".

"Total health expenditure as % of total budget_ The percentage share of total expenditure on health with respect to a country's total budget**"**.

"Under-five mortality rate (per 1000 live births) _ 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".

Abstract

Background: In Myanmar, the adolescent fertility rate (aged 15-19 years) has increased two folds over the past years (from 17 per 1,000 girls in 2007 to 36 births per 1,000 girls in 2015). Complications of early pregnancy and childbirth become major causes of death among adolescent girls in Myanmar. The contraceptive use among adolescents is lower than those of other age groups.

Objectives: To explore the factors influencing the contraceptive use among adolescents and to provide recommendation to policy makers and service providers in improving contraceptive service provision in Myanmar.

Study method: A literature review and document review using an adapted McLeory ecological framework (1988) was done.

Findings: Myanmar has policy to tackle adolescent SRHR issues, however, there are still some gaps in accessing contraceptive services including information and knowledge, cultural and health system barriers among adolescents. There is lack of complete SRH knowledge including conception and contraception among adolescents. Due to cultural belief, stigma and judgment around premarital sex and this hinder unmarried adolescents in accessing contraceptive information and services. Sex education program at schools and youth friendly service at public health facilities are not well established due to limited funding, inadequate training and staff shortage that hinders adolescents in accessing contraceptive information and services.

Recommendations: Current policy and programs for adolescent SRH should be adapted to provide contraceptive services tailored to the adolescents. Community sensitization and community engagement is recommneded to addres cultural issue. In order to improve sexuality education, combined approach of school-based education, mass media education and peer led community-based education is recommended.

Key words: Adolescents, contraceptives or contraception, unintented pregnancies, influencing factors, Myanmar.

Word count: 11879

Chapter 1: Background

In this chapter, the background introduction of Myanmar including population, social and economic condition and health system in brief are described.

1.1 Geography

Myanmar is the second largest country in South East Asia. The country has a total land area of 676,600 square kilometers with a population density of 76.1persons/ km^2. It is surrounded by China (at north and north east), Thailand (at east north), Lao (at east), India (at north west) and Bangladesh (at west). The Bay of Bengal and Andaman sea are lying at the west and at the north of the country respectively. The country is divided into 7 States, 7 Regions, and one Union territory (Naypyitaw), 74 Districts and 330 Townships (Department of Population, 2015).

Figure 1: Myanmar with states and regions with capital cities (ANU College of Asia and the Pacific, 2012)

1.2 Demography

As of 2019, Myanmar has total population of 54 million with an estimated annual growth rate of 0.6%. Women constitute 52% of the total population (World Bank, 2021a). The population is distributed as 71% rural population and 29% urban population. Reproductive age (15-49) represents 52% of the total population. Adolescents account for 18.2% of the total population (DoP, 2020). It is estimated that 27.9% of the population are under 15 years and the median age is 27.7. The elderly population (above 65 years) composes of 5.9% of the population only (Teo and Cain, 2018).

The total fertility rate (TFR) is 2.3 children per woman (1.9 in urban and 2.4 in rural) and is declining (from 3.4 in 1990 to 2.3 in 2017) (MoHS, 2017a and World Bank, 2021b). According to World Bank, total life expectancy at birth for male is 67 years and for female is 70 years in 2018 (World Bank, 2018).

The majority of the population are Buddhists (87.8%) followed by Christians (6.2%) and Muslims (4.3%). The country has a diverse ethnicity containing 135 ethnic groups with major eight tribes; Kachin, Kayah, Kayin, Chin, Mon, Bamar, Rakhine and Shan (DoP, 2015). There are more than 100 dialects speaking in the county and Burmese language is used as the official language. The adult literacy rate in Myanmar is high in both women (85%) and men (91%), and it is lower in rural areas compared to urban areas (MoHS, 2017a).

1.3 Economy

The main source of economy of the country is agriculture and it constitutes one-half of gross domestic product (GDP). The country is also rich in natural resources including jade mines, gold mines, natural gas, mineral and marine sources and the sector contributes to one-third of GDP. Tourism is also one of the income sources for the country. GDP per capita is 1407 USD, however, due to Covid-19 pandemic, it is expected to decline (World Bank, 2020a). Due to the pandemic, export of agricultural and mineral products was declined than previous years. Due to restriction and lock-down measurements to control Covid-19, tourism and transport is interrupted (World Bank, 2020b). As of 2017, 32.1% of the population is living below poverty line (World Bank, 2020a). According to World Bank, more households are at risk of poverty due to Covid-19 crisis. (World Bank, 2020b).

1.4 Political Situation

Myanmar, previously called Burma, is a former British Colony country. The country got its independence in 1948. Since then, the political situation was unstable and the military took power in 1961. The leadership of the military regime resulted in a situation of political and economic instability and left Myanmar as one of the poorest countries among South East Asia region. The political instability led the longest civil war (over 60 years) between military and ethnic armed groups.

The military ruled the country until 2010 where there was a transition to civilian government after an election. After transformed into democratic government, the country started opening up to the world, and there was increased in economic investment flowing into the country. Political dialogue for ceasefire and armed-conflicts was started. Myanmar got rapid economic growth leading a decline in poverty from 25.6% in 2010 to 19.4% in 2015 (Teo and Cain, 2018 and World Bank, 2021b).

There was an increased tension between the civilian government and military over an issue of election irregularities after the third round of election in late 2020. On the first of February 2021, military declared a coup and took over the country. The military coup draws back Myanmar's democratic transition and causing a threat to political and economic crisis (Rocha et al, 2021). Many civil servants have stopped working as a peaceful protest against military coup. As a result, government system is not functioning well including health system (Han et al, 2021). The international investment is significantly affected and the country's development has jeopardized (World Bank, 2021c).

1.5 Health system and health financing

The Myanmar health system is a diverse mix of public and private systems in terms of both service provision and financing. Both public and private sectors contribute for health care provision while Ministry of Health remains as a major provider for comprehensive health services which include promoting health, preventing diseases, providing effective treatment and rehabilitation (MoH, 2014). Private sector is diverse with profit and non-profit. Most of the people who can afford their health care expense use profit private services while majority of the poor access to private non-profit or public services.

Public health care system is organized as state/ regional, district and township levels health departments. Township level health care is composed of township hospitals, station hospitals, and rural and sub-rural health centres. Rural health center is providing ambulatory care and outreach services including delivery care at the grassroots level while township hospitals are providing emergency care and clinical care (general medicine, surgery, obstetrics and gynaecology, paediatric care). The proportion of health worker (doctors, nurses and midwives) is 1.33 per 1,000 people which is below WHO recommendation of 2.3 (Ministry of Health and Sports, 2016).

The private, both for profit and non-profit, sector provide ambulatory care mainly though some provides institutional care in large cities. Non-governmental organizations including faith-based organizations (FBOs) and community-based organizations (CBOs) also play an important role by sharing some service provision especially in promotive and preventive services for sexual and reproductive health and infectious diseases (Human Immunodeficiency virus (HIV), Tuberculosis, Malaria) in collaboration with Ministry of Health (MoH, 2014).

Health financing in Myanmar is among the lowest in South East Asia regions. In 2018, government contributed only 16.7 percent of total health expenditure (THE) and health financing mainly depended on private out-of-pocket payment (OOP) which was 76 percent of THE. External

funding sources were also limited, and it contributed around 7.7 percent of THE. In Myanmar, 39 percent of household spend more than 40 percent, 41 percent of household spend more than 30 percent and 47 percent of households spend more than 20 percent of their income for health care respectively (Myint et al, 2019). Every year, an estimated of 3.4% of the population are at risk of entering poverty due to their health spending (Teo and Cain, 2018).

In 2019, the Covid-19 pandemic started in the country and budget allocation for the emergency response for the pandemic became a challenge. The Government of Myanmar revised the budget allocation within ministries including Ministry of Health and relocated some amount to Covid-19 prevention, control and treatment plan. Although it was not documented, this revised budget plan may affect the health budget allocation for other health related activities (World Bank, 2020b).

1.6 Major health outcomes

Over the past few decades, life expectancy at birth has improved from 43 years in 1960 to 66 years in 2015. Starting from 1990, the under-five mortality rate (U5MR) has declined from 106 to 50 per 1,000 live births and infant mortality rate reduced from 76 to 40 per 1,000 live births in 2015. There was a significant reduction in maternal mortality ratio (MMR) from 520 to 227 per 100,000 live births within the same period. However, compared to other regional countries, Myanmar's health outcomes are relatively lower and yet to improve (MoHS, 2017a and Teo and Cain, 2018).

Like other developing countries, Myanmar encounters the burden of communicable diseases and Tuberculosis, HIV and Malaria are the major diseases. There is an improvement in communicable diseases outcome. In 1990, it shared 57% of all health outcomes and reduced to 26% in 2016. Over the past few years, there is an epidemiological transition from communicable diseases to non-communicable diseases (NCDs) and NCD shares largest disease burden at 65%. In 2016, 7 out of the top 10 disease burdens were contributed by NCDs with cardiovascular disease being the leading cause of disease burden (IHME, 2017 and Teo and Cain, 2018).

Chapter 2: Problem Statement, Justification and Objectives

2.1 Problem statement

Adolescents are people who are between the age of 10 to 19 years. Globally, adolescent accounts for 16 percent of total population and more than half of them are in Asia (UNICEF, 2019a). Adolescents are vulnerable and disproportionately affected by sexual and reproductive health problems including HIV, unintended pregnancies leading to risks resulting from childbirth or unsafe abortions (UNFPA, 2014). Adolescent pregnancy is an important public health problem worldwide.

Every year, there is an approximate of 21 million girls aged 15 – 19 years who become pregnant and 10 million of them are unintended pregnancies in low-and-middle income countries (LMICs). Each year, an estimated of 777,000 child births occur among adolescents who are under 15 years It is estimated that 5.6 million abortions occur among adolescent girls aged 15-19 years and 3.2 million are unsafe causing maternal mortality, morbidity and lasting health problems every year (WHO, 2020a).

The unmet need for family planning in adolescents is 23 percent which is higher than that of 15 percent of women ages 30 – 34 (UNFPA, 2015). Although, there is a decline in adolescent fertility rate globally, the rate remains high in South East Asia region which is 47 per 1,000 girls. Myanmar is one of the highest adolescent fertility rate countries among South East Asia region (UNICEF, 2018). One in five girls in South Asia region start childbearing before they turn 18 years (Noe et al, 2018).

In Myanmar, adolescents account for 18.2 percent of the total population (DoP, 2020). The adolescent fertility rate (aged 15-19 years) is significantly high which is 36 births per 1,000 girls in 2015 (UNICEF, 2018). The rate has been increased over the past years (from 17 per 1,000 girls in 2007) (WHO, 2018a). According to Ministry of Health, around 7.4 percent of adolescent girls (aged 15- 19) are married and 2 percent of them had their first birth before age 15 and more than 25 percent had their first birth before age 20. More proportion of teenage girls in rural areas (57%) begin childbearing when compared to those in urban areas (47%) (MoHS, 2017c). The proportion of childbearing among adolescents is increased significantly with growing age (1% at age 15 to 18% at age 19) (Jhpiego, 2017).

The unmet need for family planning among adolescents (age group 15-19) is 25 percent in Myanmar (Guttmacher Institute, 2021). The contraceptive use is lower in adolescent women (aged 15-19) when compared to other age groups. According to Demographic and Health Surveys (DHS), 54% of married adolescent women (aged 15-19) are using any method of contraceptive and almost all of them (53.2%) use modern contraceptive (any method). The contraceptive prevalence among sexually active unmarried adolescents is not known (MoHS, 2017a).

Unintended pregnancies may end up with induced abortion and other maternal complications. According to UNFPA, adolescent girls aged 15 – 19 years have the highest rate of induced abortion

rate which is 11.4% of total pregnancies of that specific group in Myanmar (Myintzu et al, 2019). Since abortion is illegal except for saving the life of the woman under severe medial conditions, almost all of induced abortions are said to be unsafe in Myanmar (WHO, 2020b).

As health consequences, early pregnancies, either planned or unplanned, can result adverse health outcomes for both mothers and children. Complications of pregnancy and childbirth become major causes of death among adolescent girls in Myanmar (MoHS, 2019). Maternal mortality ratio (MMR) between age 15-19 years is high which is 228.6 per 100,000 live births (MoHS, 2017c). According to 2017 Maternal Deaths Surveillance and Response (MDSR) report, 5.7% of maternal deaths were contributed by adolescents aged 15-19 years. Post-partum haemorrhage was the first leading cause of death followed by abortion and hypertensive disease in pregnancy respectively (MoHS, 2018a).

Early childbearing is more likely to result higher neonatal risks and complications as well. Neonates born by adolescent mothers are more likely to get complications like low birth weight, preterm delivery and other severe neonatal conditions. According to DHS, 2017, neonatal mortality rate among mothers with age at birth less than 20 years is 47 per 1000 live births and it is the highest among all age groups. In addition, postneonatal, infant, and under-5 mortality rates are the highest among mothers who aged less than 20 years at the time of giving birth (MoHS, 2017a).

Moreover, as social consequences, unintended pregnancies among adolescents, especially unmarried ones, face social complications which include violence, abandonment, stigma and discrimination from partner, parents, peers or community (WHO, 2018b). Due to cultural beliefs, most of adolescent girls are forced to get married when they become pregnant from premarital sex and this may end up them in early marriage. Additionally, unintended pregnancies causing adolescent girls drop out from schools and losing their education and employment opportunities (Asnong et al, 2018).

Due to its significant public health problem, Myanmar developed policies and national strategic plan to tackle adolescent SRHR issues including unintended pregnaices and related complications. However, the contraceptive use among adolescents is still low and the adolescent fertility rate (age 15-19) increased for two folds over a decade as mentioned above (Myintzu et al, 2019). There is still lack of policy in place to address high adolescent fertility rate (MoHS, 2019). Adolescents are facing challenges in accessing and utilizing contraceptive services especially for unmaried ones (Asnong et al, 2018).

The knowledge gap and misconceptions for sexual behavior and contraceptives use still exist among adolescents. Traditional and cultural beliefs, stigma and discrimination and poor economic status also influence on contraceptives uptake and use among adolescents. There is limited data on adolescent contraceptive use and their sexual behavior and the area needs to be addressed (PATH, 2018). According to Guttmacher Institute, 2021, if unmet need for contraception were met, unintented pregnancies among adolescents aged 15-19 would drop by 66% in Myanmar. To improve the adverse outcomes of adolescent pregnancies and related complications, it is important

to understand the various factors that hinder or promote adolescents in using contraceptive services.

2.2 Justification

Adolescence is a transition phase of development from childhood to adulthood in which there is an experience in physical, cognitive and social changes. This period of transition is important in structuring a foundation for good health (WHO, 2021). Depending on their life circumstances and development stages, adolescents need different set of knowledge and skills to face challenges that will encounter in adult life including sexual and reproductive health problems. Compared to other age groups, adolescents need special attention and support to build their self-trust, decision making, and their engagement to families and communities which will pave them to positive health and social outcomes (WHO, 2018b).

However, in Myanmar, adolescents are not well prepared and unable to address the challenges and complexity around their puberty, sexuality and reproduction. Adolescents are disproportionately affected by SRH problems including STI, HIV, unintended pregnancies leading to the complications resulting from early childbirth or unsafe abortions (UNFPA, 2014 and WHO, 2018b). As described before, the adolescent fertility rate (age 15-19) has increased two folds over the past years and maternal mortality ratio (MMR) between age 15-19 is still high. Complication from pregnancy, childbirth and unsafe abortion becomes the leading cause of death among adolescent girls in Myanmar (MoHS, 2019).

Adolescent mothers who are aged 10-19 years have higher risk of maternal complications such as eclampsia, puerperal endometritis and systemic infections when compared to women aged 20–24 years. Early childbearing causes higher neonatal risks including low birth weight, preterm delivery and severe neonatal conditions as well. In Myanmar, highest neonatal mortality is found in mothers who aged less than 20 years at the time of giving birth (MoHS, 2017a). In addition, unintended pregnancies lead to induced abortions which are unsafe in Myanmar and resulting major cause of maternal death among adolescents (MoHS, 2018a and Myintzu et al, 2019).

Moreover, unintended pregnancies among adolescents, especially unmarried ones, face social complications which include rejection, stigma and discrimination, violence from partner, parents or peers. There is a higher chance of experiencing violence from partner for adolescent girls who become pregnant before the age of 18 years. Adolescent pregnancy also hinders girls from continuing their education, leading drop out from schools and losing their career opportunities (WHO, 2018b). These issues highlight urgent needs to address unintended pregnancy and its consequences among adolescents (MoHS, 2019).

Contraception is one of the key elements to prevent the adverse outcomes of early and unintended pregnancy. Contraception allows adolescents to delay or prevent childbearing and attain their desired numbers or timing or spacing for childbearing. By using contraceptives, united pregnancies among adolescent can be prevented thereby reducing further consequences of maternal morbidity, mortality and unsafe abortions. In addition, condoms (both male and female) can provide dual

protection against unintended pregnancy and HIV and other STIs. According to Guttmacher Institute, 2021, if unmet need for contraception were met, unintented pregnancies among adolescents aged 15-19 would drop by 66% in Myanmar.

As one of the countries signatory to the Convention on the Rights of the Child, the Programme of Action of the International Conference on Population and Development, the Millennium Declaration and the WHO Global Reproductive health Strategy, Myanmar is committed to improve the adolescents' reproductive health outcomes during the transition period to adulthood including access to reproductive health information, education and services. Investment in adolescent reproductive health has implications not only on improved health outcome but also on social and economic development (MoHS, 2017c).

Although the country has policy and national strategic plan to tackle adolescent SRHR issues, there are still some gaps in accessing contraceptive services including information and knowledge, socio-economic, cultural and policy barriers among adolescents (MoHS, 2019). Due to cultural reasons, adolescent contraceptive use and their sexual behavior is rarely addressed and it is understood poorly (Thin Zaw et al, 2013). Except for adolescent birth rate, there is no other health indicators for adolescent SRH included yet in the Helath Information Management system of the country (MoHS, 2017c). These gaps are highlighting the need to invest and improve research area in adolescent sexual behavior and contraceptive use.

There is a high need to provide contraceptive services tailored to the adolescents. In order to do so, it is important to explore which determinats are influencing contraceptive use among adolescents. This literature review aims to investigate influencing factors on adolescents in using contraceptives and make recommendations to main policy makers such as Ministry of Health, local and international non-governmental organizations for making policies and designing service models.

2.3 Objectives of the study

2.3.1 General objective

To explore the factors contributing to the uptake and use of contraceptives among adolescents and provide recommendations based on the findings to policy makers in improving contraceptive service provision in Myanmar.

2.3.2 Specific objectives

1. To explore the individual and interpersonal factors including knowledge, attitude and practice that influence the uptake and use of contraceptives among adolescents in Myanmar
2. To identify the organizational and contextual factors that influence the uptake and use of contraceptives among adolescents in Myanmar
3. To explore the laws and policies on adolescent SRHR that hinder or promote the contraceptive uptake and use in Myanmar

4. To use the findings in formulating recommendations for policy makers (Ministry of Health, local and international non-governmental organizations) and service providers in policy making and designing service models and implementation to improve contraceptive service provision among adolescents in Myanmar.

Chapter 3: Study Method, Limitations of the study and Analytical framework

3.1 Study method

Literature review and document review is used for this study. Country reports, peer- reviewed journals and grey literatures were retrieved using different search engines and websites; Pubmed, Google, Google Scholar, VU library, WHO, UNFPA, Ministry of Health and Sports, Myanmar websites and universities libraries. In order to attain up to date information, the literature search was done from the year of 2010 to 2021. The ones which were published before 2010 were excluded in this study as the behavior and health outcome could change by time and the information may not reflect the current situation.

The literature search was focused on literatures that described the situation of adolescent's contraceptive use and its influencing factors and challenges in access and utilization of contraceptive services. As all the articles, reports and grey literatures in Myanmar were written in English, only English language was used in search strategy. Some of the guidelines had both Myanmar and English versions and the later version was used for reference.

The search strategy was started with broad search as adolescents sexual and reproductive health and then focused to contraceptives use area. The literature search was focused specifically on Myanmar first and then expended to South East Asia countries with similar contexts. To reflect the global situation and background for the problem, low-and-middle income countries were included in the search. The literature search was done by using key words from each layer of ecological framework which was used in this study and was done layer by layer. Snow balling method were also applied to attain articles, documents and grey literatures.

As can be seen in the search table overview, key words included adolescents, sexual and reproductive health, family planning, contraceptives or contraception, teenage pregnancy, unintended pregnancy, influencing factors, South East Asia, Myanmar. Key words were connected by using "OR", "AND", "AND/OR". Detail search strategy was described below.

Key words	Specific objective 1	Specific objective 2	Specific objective 3	Geographical area
Adolescent, Youth, Teenage	Perception, attitude, knowledge, practice, sexuality, premarital sex, sexual relationship, sexual debut, high risk sexual behavior, contraceptives use contraception, puberty, pregnancy, conception,	Sex education, Sexuality education, CSE, sexual and reproductive health, contraception, contraceptives, family planning, post-abortion care, counselling, health care provider, attitude, cost, media, source of information, cultural norms, gender,	Policy, guidelines, national strategic plan, youth -friendly services, contraception, contraceptive, abortion, health system, health care providers, attitude	Myanmar (OR) South East Asia

	Reproductive health, internet, mobile phones, social media	migration, migrants, premarital sex		

3.2 Limitations of the study

Sexual and reproductive health among under 15 adolescents is a very sensitive topic to talk in Myanmar. Most of the studies in Myanmar were conducted among adolescents who aged more than 15 years and there was complete lack of knowledge and information for those who are under 15. Due to less development in research area of adolescent SRH in Myanmar, there was limitation to retrieve the articles. As literature review was the main method of the study, the findings were totally dependent on the existing data and analysis. There was limitation in obtaining the background data for adolescent reproductive health, especially for unmarried one. Most of the data collection, DHS for example, focused on married adolescents only.

3.3 Analytical Framework

Among different frameworks to analysis adolescent SRH, an adapted ecological framework was used for this study. The framework was adapted from McLeroy (1988) by the Vietnamese researchers Vinh and Tuan. The adapted framework was used before in exploring factors influencing unintended pregnancy and abortion among youth in Vietnam (Vinh and Tuan, 2017).

The adapted framework was used because the McLeory ecological framework had been used in many settings to analyse sexual behavior and unintended pregnancy among adolescents and it had been proved effective. The adapted framework was modified from the MacLeory framework and it was used in the study of similar issues and target population that this study intended to focus. Due to similarity in context and its effective use in similar sexual and reproductive health problem, the adapted framework was used for this study.

By using the framework, factors which influence the uptake and use of contraceptives among adolescents were critically analysed at five different layers; intrapersonal, inter-personal, organizational, contextual and public policy. At interpersonal level, individual knowledge, attitude and practice on sexuality, premarital sex and contraceptive use were explored. At intra-personal level, communication among parents and adolescents, communication among partners and peer regarding sexuality and contraceptive use were identified. Programs related to sex education, contraceptive services provision including counselling and media influence were discussed at organizational level. Cultural values and norms, gender roles and socio-economic condition which contribute the uptake and use of contraceptive were explored at contextual layer. At public policy level, polices regarding adolescent SRHR program especially on contraception and teenage pregnancy were studied.

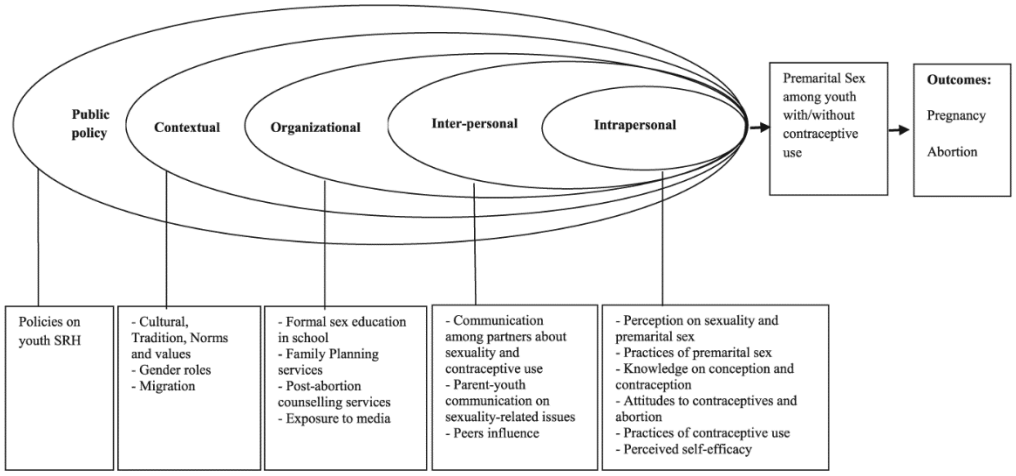

Figure 2: Adapted ecological framework from McLeroy (1988) by Vinh and Tuan (2017)

Chapter 4: Findings

In this chapter, factors influencing the uptake and use of contraceptives among adolescent were explored by using the adapted ecological framework as mentioned before. The findings was started from the organizational factors and public policy factors to understand the existing policy environment and services and how they influence the adolescent contraceptive use. Then it was extended to intrapersonal personal factors, interpersonal factors and contextual factors to explore how these factors promote or hinder the adolescent's decision on contraceptive uptake and use.

4.1 Intrapersonal Factors

4.1.1 Perception and attitude towards sexuality and premarital sex

In Myanmar, premarital sex is unaccepted by culture norm and most people believe that it should be engaged only after marriage (DFAT, 2019). Intimate relationship like kissing or hugging among couples is accepted by the community. However, premarital sex practice is considered as opposing Myanmar's traditional norms and customs and most people especially older people think it should not be permitted (Nu Oo, 2011). Some adolescents also have conservative attitude towards premarital sex as they are afraid of being stigmatized or blamed by the society. This negative attitude toward premarital sex is found more in adolescent girls than boys (Lat et al, 2020).

However, with the globalization and modernization, the attitude toward premarital sex is shifting to more permissive attitude among adolescents. Most adolescents think that premarital sex is a natural phenomenon and it should be accepted (Lat et al, 2020). Adolescents are more accessible to internet and mobile phones and social media use and consuming pornography is rapidly increased in Myanmar. Facebook is the most popular social media in Myanmar and it plays a role in exposing premarital sex among adolescents through chatting about sexual talks via this platform (Hein et al, 2013). During a local study, adolescents reported that they have increased access to Facebook and learned premarital sex practice. (Lat et al, 2020).

The permissive attitude allows adolescents to increased exposure in premarital sex practice and it is more common among adolescent boys and in urban areas (Hein et al, 2013 and Lat et al, 2020). Although there is permissive attitude and increased premarital sex practice, there is still a knowledge gap in understanding reproduction and contraception among adolescents. The possible explanation for this gap is that due to cultural norms, adolescents do not discuss about sex openly (DFAT, 2019). From the parents or guardian's perspective, premarital sex is not appropriate to discuss among adolescents (Asnong et al, 2018).

Most adolescents have knowledge on physical changes during puberty like changes in voices, hair growth in face and body in boys and enlarged breast, growth of pubic hair and menarche in girls. However, they still have limited knowledge on reproduction and contraception. A study conducted in upper Myanmar showed that only 58% of adolescents knew that "a woman can get pregnant the first time she has sex" and 51% knew that "there is a chance of pregnancy with every sexual intercourse" (Burnet Institute, 2018).

In addition, due to fear of stigma and discrimination, they are reluctant to seek for contraceptive services as they believe that the service is for married people. Some unmarried adolescents reported that they experienced negative attitude from health care providers while accessing contraceptive services (Asnong et al, 2018). This hinders adolescents especially unmarried ones in attaining and utilizing contraceptive services.

4.1.2 Practices of premarital sex

In Myanmar, the practice of premarital sex among adolescents is difficult assess due to influence of culture norms. Adolescents tend to hide their premarital sex practice as it is considered shameful and wrong (CCLC, 2016). Premarital sex practice among adolescents may under-report. A local study showed, 11% of adolescents reported that they had premarital sexual exposure and it was more common in male than female (17.8% vs 5.0%). The premarital sex practice was more common in urban areas when compared to rural areas (23.8% vs 9.9%) (Lat et al, 2020).

Male adolescents have more high-risk sexual behaviors when they become sexually active. High risk sexual behaviors include early sex before the age of 16 or younger, having sex with multiple or non-regular partners, having unsafe sex (without using condoms/contraceptives) or having sex under the influence of alcohol. During a local study, having sex with non-regular partners was documented higher among male adolescents, 37% while only 3% of female adolescents had this behavior. As an overall, 79% of male and 60% of female experienced any kind of risky sexual behaviors when they become sexually active. More female adolescents experienced having sexual debut unwillingly or forced sexual debut (Thin Zaw et al, 2013).

The practice of premarital sex is influenced by various factors including age, educational level, attitude on premarital sex, relationship status. The practice has been increased with growing age and it is 3.5 times more common in adolescents who are more than 18 years. Adolescents who have boyfriends or girlfriends tend to engage premarital sex. Adolescents who have positive attitude towards premarital sex practice are more likely to expose the practice. Having friends who have premarital sex exposure also encourage the practice (Asong et al, 2018 and Latt et al, 2020).

The mean age of adolescents at first sex was 17.9 years and female adolescents was 0.5 years younger than male while exposing first sexual debut (Myintzu el al, 2019). According to DHS, 15% of female adolescents (aged 15-19) and 6% of male adolescents (aged 15-19) had their early sexual debut before age 18. This early sexual debut among adolescents was more common in rural areas (16.2% in female and 6.2% in male) than urban areas (10.1% in female and 4.6% in male). The proportion of early sexual debut was highest among adolescents with no education in both male and female groups and it was lowest among those who have education more than secondary level. It was also highest in poor wealth quintile (MoHS, 2017a).

4.1.3 Knowledge on conception and contraception

As mentioned before in previous sessions, knowledge gap on conception and contraception is existing among adolescents in Myanmar. According to a local study among poor urban youths, adolescents had limited knowledge on sexuality although they had high exposure to SRH information. It was reported that 61.9% of male and 73.4% of female adolescents had high exposure to SRH information, however, only 6.0% of male and 3.5% of female adolescents had high knowledge on sexuality. One of the possible explanations was getting information from unreliable source such as peers, parents who did not have compete knowledge of SRH. (Thin Zaw et al, 2013).

During a local study conducted among high school adolescent students, it was documented that only few respondents know how to use condom (16% of boys and 3% of girls) and oral contraceptive pills (7% of boys and 8% of girls). Female adolescents were more likely to know that taking contraceptive pills daily can prevent pregnancy than male adolescents (72% vs 64%) while male adolescents were more likely to know condom as a prevention for pregnancy (69% vs 30%). Less than 6% of adolescents reported that they knew how to use each of other methods; emergency contraceptive pill, injectables, implant, intrauterine device (IUD), withdrawal method, female sterilization and male sterilization. It was noted that older adolescents (15-19 years) were more knowledgeable than younger adolescents (11-14 years) during the study (Burnet Institute, 2018).

According to DHS,2017, 16.7% of female adolescents and 31.6% of male adolescents know sources of condom rather than family or friends. Adolescents from urban areas have better knowledge (30.8% in female and 65.8% in male) than those residing in rural areas (19.2% in female and 31.6% in male). Adolescents who have more than secondary level education are more knowledgeable (60.7% in female and 80.3% in male) than those with no education (5.2% in female and 10.6% in male). The knowledge of condom source is higher among highest wealth quintile when compared to lowest wealth quintile (67.7% vs 34.6%). The knowledge related to sources of other contraceptives among adolescents was not documented in the survey (MoHS, 2017a).

Regarding contraceptives use, over 40% of adolescents believe that contraceptive is to be used by married couples only. This misconception is one of the main reasons for not using contraceptives among unmarried adolescents (15-19 years) in Myanmar according to WHO (WHO, 2020c). More than 50% of adolescents (both male and female) think that preventing unintended pregnancy is the woman's responsibility while 50% of male adolescents think that it is a responsibility of a man to carry condom, but its main intention is to prevent HIV and STIs rather than prevention of pregnancy (Burnet Institute, 2018). Condom use is considered as a sign of distrust or unfaithful to the partners and it is not used consistently used among couples (Benner et al, 2010).

4.1.4 Practices of contraceptive use

In Myanmar, over half of currently married female adolescent aged 15-19 years (53%) are using modern contraceptive methods (MoHS, 2017a). The most common contractive method used by married adolescents (aged 15-19) is injectables (70%), followed by oral contraceptive pill (28%), IUD and withdrawal method respectively (WHO, 2020c). The contraceptive use is more common in married female adolescents residing in urban areas than in rural areas (59.6% vs 49.6%). The use of contraceptives among unmarried adolescents was not documented in DHS or WHO data.

The use of contraceptive among married female adolescents is more common in those who have 1-2 children than those who do not have any child (MoHS, 2017a). The possible explanation for this may be cultural norm that getting pregnant and childbearing is considered as a routine task after marriage and contraceptive use is not common before first child. This cultural belief and practice are more common in rural areas (CCLC, 2016).

The contraceptive prevalence among male adolescent (15 -19 years) is 28% and the use is more common among married ones (42%) when compared to unmarried ones (14%). The most common method used is condom. The contraceptive use among male adolescents is associated with desired number of children. Those who do not want to have no more than two children use contraceptives more than those who want to have more than two children (45% vs 37%)(Aung, 2019).

As discussed in previous sessions, the use of contraceptives is also associated with age, level of education, knowledge and availability of information. The use is more common in older age (over 18 years) when compared to younger age. It is found that contraceptives use more in adolescents with high level of education or those who have knowledge on how to use contraception (Aung, 2019). There is a documented report that some male adolescents from conflict affected areas tend to have early marriage and have children as they want to avoid serving in ethnic armed organizations (CCLC, 2016).

Concern about side effects of contraceptives and fear also influence and reduce on contraceptive use especially in rural areas where the information is limited (Najafi-Sharjabad, 2013). According to WHO, reasons for not using contraceptives among married adolescents are respondent opposed (16.5%), not having sex (16%), breast feeding (11.6%), inconvenient to use (11.4%) and fear of side effects (10.8%) (WHO, 2020c). A study local conducted among unmarried adolescents, the main reason for not using contraceptives were unplanned sex (nearly half of the respondents). The rest of the reasons were don't know about contraceptive method (26.1%), fear of side effects (17.4%) and don't know how to get a contraceptive (13%) (Myintzu et al, 2019).

Other social and religious factors have impact on the contraceptive use, and it will be discussed detail in contextual layer.

4.1.5 Perceived self- efficacy to use contraceptives

As a cultural belief, men are more superior than women in Myanmar. This gender norms plays a role among adolescents in negotiating contraceptive use. During a study in central Myanmar, more than half of male adolescent (52%) reported that boys can suggest condom use to their partners and 45% reported that girls can suggest condom use. Among adolescent girls, only 21% reported that girls can suggest condom use to their partners and 27% believed that boys can suggest condom use (Burnet Institute, 2018).

Among married adolescent girls, decision to use contraceptives or getting pregnant is dependent on their husbands and sometimes on the elder family members like mother-in-law. The possible explanation may be men are usually bread winner of the family and most of the decision power is controlled by them (CCLC, 2016). As discussed before, the contraceptive is more common in men who want to have more than two children (Aung, 2019). The negotiation of contraceptive use among unmarried adolescents was not documented.

4.2 Inter-personal Factors

4.2.1 Communication among partners on sexuality and contraceptive use

In Asia, communication related to sexuality and contraceptive use among adolescents and their sexual partners is said to be poor. Female adolescents are reluctant to start the conversation in sexual relationship and using contraceptives. Usually, male adolescents initiate the communication. In addition, under the influence of social and gender norms that girls should maintain virginity before marriage, adolescent girls hesitant to talk about contraceptive use and their sexual relationship. Moreover, there is less male involvement in contraceptive use as most of them believe that it is responsibility of a woman to prevent pregnancy and using contraceptive (Vinh and Tuan, 2017).

With similarity in context, Myanmar is expected to be facing similar situation like in other Asian countries. Communication among partners is proved to increase contraceptive use. Studies conducted in Nepal and Myanmar showed that there was significant positive association between partner communication and contraceptive use. In married couples, the positive attitude of husbands towards contraceptive use can increase the uptake and use (Najafi-Sharjabad, 2013 and Aung, 2019). However, it was not described how male partner involved in the family planning, how the partner communication is going and what topics are discussed in their communication among adolescents in Myanmar.

4.2.2 Communication among parents and adolescents on sexuality and contraceptive use

Parents-adolescents communication regarding sexuality and related issue can delay early sexual debut and other high risk sexual behaviors (Vinh and Tuan, 2017). However, in Myanmar, communication among parents and adolescents on SHR issue is poor due to traditional customs. Sexual relationship and contraceptive use are not common topics to discuss among parents and adolescents. Parents think that starting conversation related to sexuality may encourage their children to engage sexual relationship. They desire their adolescent children to abstain from premarital sex or early sexual debut and they tend to avoid the topic to discuss. Some parents think that contraception is considered only after marriage and it is not age appropriate if they discuss with their children especially under 18 (Noe et al, 2018).

From the adolescents' side, they are reluctant to start a conversation with their parents. Adolescents are afraid of being misunderstood as sexually active by their parents if they initiate the discussion (Nu Oo, 2011). A local study showed that only 2.7% of adolescent girls discussed SRH issues with their mothers in the past six months. Most topics discussed were menstruation (91%), romantic relationship (27.7%), pubertal changes (24%) and STIs (18.8%) (Noe et al, 2018). Another study showed that 93% of adolescent participants had never discussed with their parents on SRH related issues (Asong et al, 2018).

Adolescent girls prefer to discuss with their mothers while boys prefer to discuss with their fathers as a traditional habit. Some adolescents reported that they receive information on contraceptive use from their mothers, sisters, aunties or friends. Some claimed that they prefer to attain information from friends as they want to avoid their parents' judgement when they show their interest on the topic (Asnong et al, 2018). The parents - adolescents communication depends on knowledge of mother on reproduction and related issues. Mothers who have good knowledge have more open communication with their adolescent children (Noe et al, 2018). Sources of sexual and reproductive health information for parents or family members were not documented.

4.2.3 Peer influence

Peer plays a major role in adolescent's knowledge, attitude and behavior regarding sexuality and contraceptive use by passing their experience and norms. Adolescents who have friends who are sexually active tend to have permissive attitude on premarital sex and are sexually active more than those who do not have (Vinh and Tuan, 2017). Adolescents think that if they do not engage sex with their partners, friends would assume that their relationship is not real and strong (Latt et al, 2020).

Peer also influence on attaining SRH related information by sharing information among them. Majority of adolescents prefer to get the information from their peers as they are comfortable to discuss issue and they want to avoid judgmental attitude from their parents or teachers. However, as discussed before, adolescents have limited knowledge on how to use contraceptives and the knowledge passed by the peers is said to be low. Contraceptive use is more common in adolescents

who have friends with positive towards the premarital sex and contraceptive use (Asnong et al, 2018).

4.3 Organizational factors

4.3.1 Formal sex education in school

School based sexuality education program is important in providing information and knowledge and influence on adolescents' attitude, values and skills related to sexuality. The program is a foundation to provide necessary knowledge for reproductive health among adolescents (Vinh and Tuan, 2017). In Myanmar, sexuality education has been introduced as a part of Life Skills Education (LSE) curriculum since 2006 by the collaboration of Ministry of Health and Ministry of Education. The curriculum is developed by Ministry of Health in collaboration with UNICEF. LSE is supposed to be taught starting from Grade 4 (primary school).

The curriculum covers seven age-appropriate topics including social skills, emotional intelligence, reproductive health, HIV and STIs, substance use, disease prevention and nutrition, environment and sanitation. Adolescents are taught for puberty, menstruation, reproduction and how to prevent HIV/ STIs and unintended pregnancy as part of their LSE (Htet et al, 2020). However, according to a survey conducted in middle schools in 14 townships in Myanmar, the reproductive health knowledge was the lowest among all topics conducted. The possible explanation for that was cultural sensitivities related to reproductive health and lack of training among teachers to deliver the topic (MoE and UNICEF, 2012).

The teachers reported that they are not confident to teach the topic due to insufficient training and they feel that it is not appropriate to talk about sex and reproduction at school. High turnover of teachers, time constrains, and insufficient teaching materials also influence on the provision of LSE. The teachers have difficulty in allocating timetable for LSE as they have to cover many other subjects which are said to be mandatory and do not have enough time to cover all topics in LSE. In addition, most of the schools do not have enough copies of teaching materials called "Facts for life" book and in most cases, it is only used for teachers (Burnet Institute, 2018).

Adolescents are not getting enough information related to reproductive health although there is LSE program in place. During a local study, only one third of adolescent students reported ever receiving information regarding puberty, reproduction or relationships. Both adolescent boys and girls claimed that they want to receive more information on puberty, reproduction, contraception, relationship and STI prevention (Burnet Institute, 2018). According to Ministry of Education, seven out of ten adolescents (71%) were enrolled for secondary school program and quite a number of adolescents are in need for SRH education (Aung, 2019).

Due to Covid-19 crisis, all the schools across the country were closed since 2020 March and all the education were disrupted including LSE curriculum. The school closure is still ongoing and one of the SRH knowledge sources for adolescents is interrupted. There was no documented

alternative channel for formal SRH information (World Bank, 2020b). This condition hinders adolescents for getting SRH information and use of contraceptive services.

4.3.2 Family planning services

Since 1991, Myanmar started family planning program as a pilot project in one township. With the support of UNFPA, the program was extended up to 164 out of 330 townships in 2014. Since 2012, government has increased the overall budget allocation for health and there was more investment in family planning program ((Aung et al, 2017 and MoHS, 2018b). Family planning services are provided in both public and private sectors (MoHS, 2017b). For reproductive health services in public health sector, midwives and Lady Health Visitors (LHV) are the main service providers at the community level while doctors and nurses provide at the hospitals (MoH, 2014).

Although government contributes some amount of funding for commodities, UNFPA acts as a main actor in supporting public reproductive health services in terms of commodities, training, logistics system and health education (UNFPA, 2019). Due to decline in funding availability, only long-acting methods and emergency pills were provided by UNFPA in 2018 (Win and FPSA, 2018). Family planning services in public sector are provided with free of charge in most of the time.

At all level of public health facilities, family planning counselling is established, however, more than 50% of the facilities have no job aids or visual aids for counselling. Compared to other family planning services, family planning counselling has the lowest standard achievement across all facilities. People usually do not ask for more information and only very few service providers encourage for queries coming from clients. Only around 50% of FP counselling provided at all public health facilities were be able to provide according to standard guideline including ensuring privacy and confidentiality of clients, providing information on all available FP methods, using job aids during counselling in 2016 (Jhpiego, 2017). The counselling skills for providers was not documented.

For private sector, there are a variety of service providers including non-governmental organizations (NGOs), private general practitioners (GPs), private hospitals and drug shops. Marie Stopes International (MSI) and Population Services International (PSI) are the main NGOs providing contraceptives services with subsidized price (Aung et al, 2017). However, adolescent have limited capacity to pay as most of them are dependents/students (MoHS, 2017c).

Currently, 51.8% of modern contraceptive methods are provided by private sector including NGO, profit clinics, private hospitals and 42.4% by public sector. However, most of long-term methods like implant, IUD and permanent method like male and female sterilization are provided at public sector and they are not usually offered at the private sector. However, many women prefer to use private sector and NGOs as they feel more comfortable because of less judgmental behavior and perceived higher quality (Aung et al, 2017).

This same perception also applies to adolescents when accessing their contraceptive services. Most public family planning programs targets married couples and are not designed for youth friendly

services. Some clinics staff members have negative attitude towards adolescents accessing contraceptive services and sometimes, they deny providing contraceptives to them especially to unmarried ones. Although there is no documented regulation of limiting contraceptive provision to unmarried adolescents, stigma around premarital sex hinders unmarried adolescents in accessing contraceptive services. Due to stigma and social judgement, adolescents are reluctant to attain the services from public facilities (Asnong et al, 2018).

In addition, adolescents feel shy to visit family planning clinics as this could mean that they are sexually active and are interested in premarital sex. In rural areas, adolescents reported that they are not comfortable to ask condoms or pills from the health staff working in their villages. They usually buy contraceptives (condoms and pills) from pharmacies or regular shops and sometimes ask help from relatives or friends to get them as they are afraid of being caught while buying them (Asnong et al, 2018). Moreover, adolescents have limited financial capacity to pay for the cost of commodities and travel cost to health centers (MoHS, 2017c).

In 2014, youth friendly health services were implemented in 71 townships and it was expanded nationwide currently. However, limited financial resources and human resources influence on the quality and sustainability of the adolescent health program both in urban and rural areas. Due to rapid staff turnover, there is frequent drop out of trained staff to provide adolescent's health services and there are training gaps including refresher training for health staff (MoHs, 2017c). There are no separate appointment days and opening hours for youths in public health centers (Jhpiego, 2017).

Ministry of Health established youth information corners in collaboration with UNFPA to provide SRH information and source of services. However, due to lack of funding support and shortage of volunteer staff, the corners are not functioning well (UNFPA, 2017). Although consent age is 18 years in Myanmar, there is no documentation that there is limitation in accessing contraceptive service among adolescents who are under 18. As government funding is not yet available for monitoring and evaluation of programs, there are no M& E system in place in some regions to evaluate the effectiveness of program outcomes (Win and FPSA, 2018).

Since 2020, public health facilities are limited to essential and emergency medical care due to Covid-19 crisis. Other out-patient services including family planning/contraception were interrupted. Pre-existing human resource shortage also delays in providing contraceptive service provision. Logistic system is prioritized for essential commodities related to Covid response and there is delayed in transport of commodities required for contraception. All these factors cause adolescents in limited accessed to contraceptive services (World bank, 2020, 2020b). In addition, recent military coup causes sever disruption of health system across the country (Han et al, 2021).

4.3.3 Post -abortion counselling services

Post-abortion counselling plays a role in providing necessary information related to contraceptives use to women who seek for post-abortion care. This may promote contraceptive use and safe sex practice that can avoid repeated unintended pregnancy (Vinh and Tuan, 2017). In Myanmar, post-abortion care (PAC) including counselling is provided since 2014. However, there are barriers to access the service. In Myanmar, abortion is illegal except to save the life of the women and abortion service is allowed to provide at public health facilities only. There is a punitive law (Penal Code-1860) and it includes imprisonment up to 3 years. There is also stigma and discrimination towards abortion and lack of information on service availability. Women are reluctant to seek post-abortion care and this may hinder them for getting post-abortion contraceptive information and service (Sheehy et al, 2015). Although there was no documentation for adolescents who seek for post-abortion care, the same situation may apply to them assuming they are not getting enough information and service for post-abortion contraceptives.

4.3.4 Exposure to media

With increased coverage of internet network and easily accessible mobile phones, the media messages are becoming more popular among adolescents in Myanmar. Although there is no exact data documented for adolescent internet users, it is undeniable that adolescents expose more social media as a globalization. Social media becomes one of the main sources of information related to sexuality and reproductive health. Adolescents feel more comfortable to access information through social media than talking to teachers, parents or health staff. Exposure to media increased the odds of positive attitude towards pre-marital sex and contraceptive use among adolescents (Zaw et al, 2012 and Vinh and Tuan, 2017). As discussed before, internet and mobile phones also influence on attitude and practice of premarital sex. Through chatting via Facebook platform, adolescents are exposed to sexual relationship and premarital sex (Lat et al, 2020).

On the other hand, exposure to media can increase access to SRH information (Das et al, 2021). In Myanmar, “Adolescence Sexual and Reproductive Health and Rights” app was introduced by UNFPA in 2016. This app is targeted for adolescents to be able to access the necessary information without violating their privacy. However, there was no documented update for implementation of app and using among adolescents. According to DHS, more than 50% of reproductive age women reported that their never had the family planning message exposure from any media (Jhpiego, 2017).

4.4 Contextual factors

4.4.1 Gender roles

As mentioned in previous session, men are believed to be superior to women in Myanmar and they usually hold the position of head of the family. According to UNICEF, 2019, Myanmar has high level of gender discrimination among Asia regions. Gender inequality causes less opportunity of education, employment and less decision power among women and girls. Adolescent girls are disproportionately affected by gender disparities in accessing reproductive health and information services in Myanmar (UNICEF, 2019a).

Although the premarital sex is not culturally accepted for both adolescent boys and girls, adolescent girls experience more judgment and social control than boys. It is believed that female "dignity" is important, and girls should maintain virginity before marriage. If a girl has sex before marriage, this will give bad image to the girl herself and the family (CCLC, 2016). Due to this cultural and gender norms, unmarried adolescent girls hesitant to seek contraceptive information and services (UNDP, 2016).

Access to information and services related to contraceptive use differ between adolescent boys and girls. As discussed before, adolescent girls are reluctant to discuss frankly with their partners or husbands or family members regarding sexual matters (including contraceptive use) (UNDP, 2016). Most of unmarried girls rely on their boyfriends in using condom during sex. For married adolescent girls, the negotiation and decision to use contraceptives and having children mainly depends on the husbands as described before (CCLC, 2016). However, as mentioned in interpersonal factors, there was less report on how male involved in family planning/contraceptive use among adolescents and it was poorly understood.

4.4.2 Migration

In Myanmar, approximately one in five adolescents have migrated internally or externally due to conflict or better job opportunities or education. Older adolescents (15-19 years) migrate for better employment opportunities. Adolescents from rural areas migrates more than urban areas. There is no difference in male and female adolescents' migration (UNICEF, 2019b). Migrant adolescents live together with their families or separately. According to UNICEF, 10% of children (under 18 years) migrates independently to their destination. Migrant adolescents especially who migrant alone may be more vulnerable to sexual violence or forced marriage or early marriage (Soe et al, 2012 and UNICEF, 2019b). Being away from home may encourage adolescents to engage high risk sexual behaviors.

There is limited availability for SRH information and relative services among migrant adolescents especially for unregistered ones. There is reported knowledge gap on how to use contraception among migrant adolescents. According to a study conducted in a Thai-Myanmar border refugee camp, only 19% of adolescents aware that first time sexual intercourse can get pregnancy. 37.8% of them knew how to use condom and 35.2% knew where to get condom. This knowledge level

was higher in male adolescents than female (Benner et al, 2010). This limited knowledge and service provision hinders adolescents in using contraceptives.

4.5 Public policy factors

The Government of Myanmar has addressed adolescents' reproductive health issues as a priority area. Ministry of Health developed current "Five-Year Strategic Plan for Young People's Health (2016-2020)" to improve reproductive health outcomes of adolescents and young people. In this strategic plan, the government committed to improve adolescents' sexual and reproductive health by prioritizing to reduce adolescent pregnancy and prevent poor reproductive health outcomes in adolescents. Adolescent contraceptives provision is included in essential package of RH intervention and is provided at different levels of health care; health centers, township hospitals and community level (MoHS, 2017c).

The government formed reproductive health strategy and working groups; Lead Reproductive Working Group and the Lead Birth Spacing/Family Planning According to Ministry of Health, to improve reproductive health outcomes in Myanmar and adolescent health is one of the agendas in the working groups. In 2013, National Standards and Guideline for Adolescent and Youth Health were developed and launched. In addition, to improve youth friendly health services, a manual for youth friendly health services for Basic Health Staff (BHS) was developed. The manual includes a package of health information, counselling, commodities and services including referral linkage. However, as mentioned before, due to funding limitation and shortage of staff, the youth friendly services are not well established (MoHS, 2017c and Jhpiego, 2017).

Chapter 5: Discussion, conclusion and recommendations

5.1 Discussion and conclusions

In Myanmar, there is double increased in adolescent fertility rate (15-19) years and unintended pregnancy and related complications become a major public health problem. There are various factors that influence on sexual behavior and use of contraceptives among adolescents. From the analysis by using the adapted conceptual framework, there were some significant determinants that stand out from all the findings. The framework helped to identify multiple social determinants that influence on behavior and health outcomes of adolescents related to contraceptives use from different aspects. The linkage between the different determinants among different layers was seen in the study. The framework helped to identify and highlight which factors were most likely to influence on the specific health behavior. From these findings, effective recommendation and intervention could formulate to improve contraceptives provision and reproductive health outcomes among adolescents.

Myanmar is largely influenced by cultural and social norms and talking about sex is sensitive and considered a taboo. This cultural belief influences on the knowledge, attitude and practice of premarital sex and contraceptive use among adolescents especially unmarried ones. It was found that some adolescents have conservative attitude towards premarital sex. This attitude may make adolescents feel shy and reluctant to seek information and services related to sexuality and contraceptives which hinder them from discussing openly on their sexual behavior. On the other hand, there is a shift attitude towards premarital sex due to increased access to internet and mobile phones.

Adolescents are more exposed to social media and website where they can talk and learn about sex. These may enhance their engagement to premarital sex and even high-risk sexual behavior. According to finding, a considerable number of adolescents had exposure to any type of high-risk sexual behavior. Due to culture norms and social judgment, premarital sex practice among adolescents may under report. To my opinion, it is undeniable that there will be more opportunity to engage premarital sex in future because of globalization and developing technologies.

Despite the potential to increased premarital sex practice, there is lack SRH knowledge among adolescents. Although adolescents have exposure to SRH information (heard about contraceptive methods), they do not know how to use contraceptives in practice. Only few adolescents reported they know how to use condom and oral contraceptive pills. There is limited knowledge on the source of contraceptives as well. This lack of knowledge becomes a major barrier in adolescents' contraceptive use.

Quite a few adolescents believe that contraceptives are only for married women. Among unmarried adolescents, unplanned sex and not knowing how to use contraceptives are the main reasons for not using contraceptives although there are other reasons such as not knowing how to get a contraceptive method, fear of side effects. It is assumed that most of unmarried adolescents are not

well prepare for their sexual exposure and not consider the risk of unsafe sex. This highlights the need of more SRH information/education and service provision among adolescents.

The knowledge gap is also contributed by other factors such as poor parent-adolescent communication, peer influence, education. In Myanmar, parents do not usually discuss with their children related to sexuality and contraception as they believe the discussion can cause their children sexually active and engaging in pre-marital sex according to their perception. If they discuss, they usually talk about puberty (body changes), menstruation and romantic relationship. They desire their children to avoid sex before marriage.

From the adolescents' side, they are reluctant to talk to their parents. They are afraid that their parents might misunderstand they are sexually active if they initiate the discussion. To my opinion, this poor parents-adolescents communication hinders the adolescents in attaining right and appropriate SRH information and causes low utilization of contraceptive services. It is obvious, when mothers are better educated, they are likely to discuss more on the topic. It is important to inform parents to have better knowledge on SHR. This could be improved by conducting workshops and training at community level and providing SRH information through TV and radio program.

Partner communication is also important in improving contraceptive use. Unmarried adolescent girls usually rely on their boyfriends for contraceptive use. For married female adolescents, the decision on having children mainly depends on their husbands according to traditional customs. It was obvious that male involvement is important. However, there was less documentation on partner communication related to contraceptive use, and this should be explored more among unmarried and married adolescents.

Peer influence is also another important factor for perception and practice of premarital sex and contraceptive use. It can have either negative or positive influence depending on their knowledge and attitude. Adolescents who have friends with positive attitude towards premarital sex and contraceptive use, are more likely to use contraceptive. As adolescents prefer to pass information among their peers, it is important to improve their knowledge by reliable and correct information. Training of peer and providing health education at community level could be an effective intervention. All the above parents-adolescents communication, partner communication, and peer influence are in turn influenced by cultural belief that mentioned before.

Gender norms also influence on decision making and negotiation to use contraceptive among female adolescents. Although the premarital sex is not culturally accepted for both adolescent boys and girls, adolescent girls experience more judgment and social control than boys. Due to this cultural and gender norms, unmarried adolescent girls hesitant to seek contraceptive information and services. This highlights the need to address the cultural and gender norms issue. Community sensitization through workshops, gender trainings, and community engagement in contraceptive services at community level could improve the issue. This needs active participation of MoH, international donors, other implementing partners and community. There is a proven improvement

in contraceptive use among youths by community engagement in India (Gottschalk and Ortayli, 2014)

Related to sexuality education at schools, it seems to be not effective despite the policy in place. Since Grade-4, adolescents are expected to be start introducing the SRH topic. Due to lack of training and insufficient skill among teachers, high staff turnover and shortage of teaching aids, the school health program is not functioning well. This highlights the need of evaluation and adaptation of current health education program in schools. Teachers should be trained to be able to conduct LSE. As seven out of ten adolescents enroll for secondary education program, it is important to promote sexuality education among adolescents with increasing number of school enrollment. As the school health program only covers for adolescent students, it is obvious that adolescents who are out of school have limited opportunity to attain the information.

School closure due to Covid-19 pandemic also predisposes the LSE program. School health education program is interrupted and there is no documented alternative channel for education. As described before, adolescents are more accessible for internet and mobile phones, providing SRH information through Facebook, most common used social media, could be another option. From Facebook, adolescents can chat and ask questions related to SRH without exposing their identities and this can reduce their fear and worries of stigma and social judgement. In addition, combined approach of school-based education, mass media education through radio or TV program and peer led community-based education is recommended as current school-based program is insufficient especially for out of school adolescents. There is significant increase in contraceptive use among adolescents by multimedia and peer education intervention in many developing countries including China, India, Nigeria, Ghana (Gottschalk and Ortayli, 2014).

In terms of health policy, Myanmar has favorable environment for adolescent SRH. There is a national strategic plan young people's health including adolescents. There are guidelines and manual developed to improve adolescent's health. However, limited financial resources and human resources influence on the quality and sustainability of the adolescent health program implementation. There is high staff turnover in public facilities and frequent drop out of trained staff to provide adolescent's health services. There is significant need of training among health staff.

Related to family planning/ contraceptives services, they are provided by both public and private sectors. Long-acting family planning methods such as implant, IUD, sterilization (unlikely to be the best method of choice for adolescents) are mainly provided at public health facilities. Almost all of the contraceptive services are free at public sector. According to findings, many people prefer to use private sector due to less judgmental attitude.

Private sector includes a range of NGOs, profit clinics, private hospitals and CBOs. Despite some NGOs such as MSI and PSI provide contraceptive services with subsidized price, adolescents cannot afford the price as most of them are dependents/students. They have limited financial capacity to pay for the services and transport cost to the facilities. There is limited health budget

allocation and the country still depends on international donor for family planning commodities. As funding availability is declining, there may be shortage of FP commodities in future and this may increase the current share of out-off pocket money by users. This financial barrier limits them in accessing contraceptive services. More government funding allocation for FP commodities should be consider for future as there can be funding shortage and the donor is not sustainable.

There is negative attitude towards premarital sex and unmarried adolescents among some health care workers. Most of the public health facilities target to provide services to married adolescents. Due to the stigma and social judgement towards premarital sex, unmarried adolescents rarely visit health facilities for contraceptive services. Although youth friendly health services and youth information corners are implemented, it is noted that they are not fully functioning. As being a major service provider for contraceptive services, it is important to have youth friendly services in public health facilities.

It was noted that family planning counselling at public health centers was limited especially in tertiary centers due to over workload, limited space and shortage of staff. This may hinder to get right information while accessing the service. In addition, due to punitive law on abortion, adolescents are reluctant to seek PAC and there is limited access to post-abortion counselling which can provide necessary information for post-abortion contraception. Training for youth friendly services should be done in multisectoral approach between MoH, international donors and partner organizations as MoH has limited funding and human resource capacity. Community health workers should be trained and community based contraceptive program should be implemented especially in rural area while there is shortage of health staff.

Current implementation of youth friendly services among public health facilities should be evaluated and policy on sustainable youth friendly program should be considered. Revising of current health budget and funding allocation or finding new funding opportunities from international donors for youth friendly services should be considered. However, as mentioned in health financing session, funding allocation is shifted to Covid-19 emergency response and this may affect the current health budget. So, recommendation for financial investment in youth friendly services is not provided at the moment although youth friendly intervention has been proved as an effective intervention to improve in accessing adolescent contraceptive services in many countries.

Due to Covid-19 pandemic and there is limitation in contraceptive service provision. The public health centers prioritized essential and emergency contraceptive service provision is interrupted. In addition, due to recent military coup, most of the civil servants have stopped working as a peaceful protest against the coup and health system in Myanmar is severely disrupted. There is no documentation yet for the private sector how they are operating for the service provision. This political crisis is difficult to predict and it is obvious that it will impact on adolescent's reproductive health in long run.

In terms of geographical areas, adolescents from rural areas have limited access to SRH information and have low level of knowledge on sexuality and contraception. The use of

contraception is less in adolescents residing in rural areas. On the other hand, adolescents from rural area start more early sexual intercourse before aged 15 than those from urban area. This highlights the need of intervention programs in rural areas. With the shortage of health staff, community-based contraceptive service provision could be an alternative option. From the findings, it was noted that there is limited research in adolescent SRH especially very young adolescents (10-15 years) and unmarried adolescents. It is important to understand their sexual behavior, knowledge, attuite and practice on premarital sex, conception and contraception so that service provision, education and use of contraceptives can be improved.

5.2 Conclusion

Myanmar is one of the highest adolescent fertility rate countries among South East Asia region. Adolescent pregnancies and complications from early childbirth become one of the major public health problems in Myanmar. Contraception is one of the effective elements to tackle the problem. In Myanmar, the contraceptive use among adolescents (aged 15-19) is low when compared to other age groups. From the findings, there are significant factors that influence on uptake and use of contraceptives among adolescents. Cultural norms, premarital sex is unaccepted and considered a taboo, largely influence on the knowledge, attitude and practice of premarital sex and contraceptive use. There is stigma and judgment around premarital sex and contraceptive use among unmarried adolescents. There is lack of complete SRH knowledge including conception and contraception among adolescents. In addition, inadequate formal sex education program in schools hinders adolescents in getting enough information. Insufficient training, inadequate job aids and high staff turn-over are the major barriers in providing school health education. Youth friendly services at public health facilities are not well established due to limited funding and staff shortage and adolescents especially unmarried ones are not accessing the contraceptive at the facilities. Limited funding and shortage of health staff are the major challenges in implementing youth friendly services in Myanmar. There is limited research in unmarried adolescents and their sexual behavior and contraceptive use is poorly understood.

5.3 Recommendations

Based on the findings above, the recommendations were formulated in order to improve the provision of contraceptive use among adolescents in Myanmar. The recommendations were focused on three areas: policy level, intervention level and research area.

Policy recommendations

In order to improve current provision of information and service related to sexuality and contraceptives among adolescents, current health policy should be reviewed.

- Current National Strategic Plan on Young People's Health should be revised and adapted for policy on sustainable youth friendly program.
- Training policy on sexual and reproductive health training among schoolteachers should be considered

Intervention recommendations

- In order to improve sexuality education, combined approach of school-based education, mass media education and peer led community-based education is recommended as current school-based program is insufficient especially for out of school adolescents.
- Community health workers should be trained and community based contraceptive program should be implemented especially in rural area while there is shortage of health staff.
- Community sensitization through workshops, gender trainings and community engagement in contraceptive service provision at community level should be considered.
- Implementation of health education program through social media platform (Facebook page) is recommended as adolescents can ask related questions via chat room without exposing their identities and this can reduce their fear and worries of stigma and social judgement
- Current implementation of youth friendly services among public health facilities should be evaluated and policy on sustainable youth friendly program should be considered

Research recommendations

- Conduct research among unmarried adolescents in order to understand more on their sexual behavior and contraceptive use
- Conduct research on knowledge, attitude and practice on sexuality and contraception among adolescents under 15 years old.
- Develop operational research framework in the youth friendly RH program in order to evaluate the effectiveness of the program

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