

Factors affecting contraceptive utilization in Myanmar youth migrants in
Samutsakhon Province, Thailand.



Miss Myat Thwe

จุฬาลงกรณ์มหาวิทยาลัย

บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR)
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ปัจจัยที่มีผลต่อการใช้การคุมกำเนิดของแรงงานข้ามชาติวัยรุ่นชนเมืองในจังหวัดสมุทรสาคร ประเทศไทย



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต
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จุฬาลงกรณ์มหาวิทยาลัย
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เมื่อยท เว : ปัจจัยที่มีผลต่อการใ้การคุมกำเนิดของแรงงานข้ามชาติวัยรุ่นชาวเมียนมา ในจังหวัดสมุทรสาคร ประเทศไทย (Factors affecting contraceptive utilization in Myanmar youth migrants in Samutsakhon Province, Thailand.) อ.ที่ปริภษาวิทยาลัยพนธ์หลัก: มนทกานต์ เชื่อมชิต, 137 หน้า.

ปัจจุบันวัยรุ่นชาวเมียนมากำลังเผชิญกับปัญหาการเข้าถึงบริการอนามัยการเจริญพันธุ์ โดยเฉพาะอย่างยิ่งวัยรุ่นที่เป็นแรงงานข้ามชาติไม่สามารถเข้าถึงบริการสุขภาพได้เมื่อเทียบกับแรงงานข้ามชาติกลุ่มวัยอื่นๆงานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยที่มีผลต่อการใ้การคุมกำเนิดของแรงงานข้ามชาติวัยรุ่นชาวเมียนมา ในจังหวัดสมุทรสาคร ประเทศไทย

การวิจัยครั้งนี้เป็นการศึกษาภาคตัดขวาง ในกลุ่มวัยรุ่นแรงงานข้ามชาติชาวเมียนมา ที่มีอายุระหว่าง 15-24 ปี จำนวน 372 คน ที่อาศัยอยู่ในจังหวัดสมุทรสาคร ประเทศไทย เป็นการเลือกกลุ่มตัวอย่างตามความสะดวก โดยใ้กลุ่มตัวอย่างตอบแบบสอบถามด้วยตนเอง ระหว่างเดือนพฤษภาคม ถึงเดือนมิถุนายน พ.ศ. 2561 สำหรับการวิเคราะห์ข้อมูลนั้น ได้ใช้สถิติการวิเคราะห์ตัวแปรเดี่ยว ตัวแปรสองตัว และตัวแปรหลายตัว ที่ระดับความเชื่อมั่นร้อยละ 95.

ผลการวิจัย พบว่า แรงงานข้ามชาติวัยรุ่นชาวเมียนมาใ้การคุมกำเนิดร้อยละ 59.7 เป็นวัยรุ่นที่แต่งงานร้อยละ 66.9 และวัยรุ่นที่ยังไม่ได้แต่งงานร้อยละ 46.5 วิธีการคุมกำเนิดที่วัยรุ่นส่วนใหญ่เลือกใช้ คือ ยาเม็ดคุมกำเนิด ยาฉีดคุมกำเนิด ถุงยางอนามัย และการหลั่งภายนอก นอกจากนี้ การวิจัยยังพบว่า วัยรุ่น ร้อยละ 21.5 ใ้วิธีการคุมกำเนิดแบบธรรมชาติซึ่งถือว่าเป็นวิธีการคุมกำเนิดที่ไม่ค่อยมีประสิทธิภาพในส่วนของปัจจัยที่เกี่ยวข้องกับการใ้การคุมกำเนิด พบว่า ระดับการศึกษา (P value=0.000) สถานภาพสมรส (P value=0.033) การเคยได้ยื่นเกี่ยวกับวิธีการคุมกำเนิด (P value=0.008) ระดับความรู้ (P value=0.001) การพูดคุยกับคู่ครอง (P value=0.006)อิทธิพลจากคนรอบข้างต่อการใ้การคุมกำเนิด(P value=0.001)การมีข้อมูลเกี่ยวกับการคุมกำเนิด(P value=0.037)การมีสื่อและอุปกรณ์เกี่ยวกับสุขภาพ(P value=0.004)สะดวกในการเดินทาง (P value=0.000)เวลาใ้บริการ (P value=0.000)และเวลารอคอยในการรับบริการ (P value=0.001)มีความสัมพันธ์กับการใ้การคุมกำเนิดของแรงงานข้ามชาติวัยรุ่นชาวเมียน

การวิจัยนี้ชี้ให้เห็นว่าแรงงานข้ามชาติวัยรุ่นชาวเมียนมาในจังหวัดสมุทรสาครมีความรู้และการใ้การคุมกำเนิดค่อนข้างต่ำดังนั้นจึงมีความจำเป็นที่จะต้องใ้สุขภาพและจัดบริการสุขภาพและอนามัยการเจริญพันธุ์ที่เป็นมิตรใ้กับแรงงานข้ามชาติวัยรุ่น ซึ่งถือเป็นกลุ่มเปราะบางและมีความเสี่ยงต่อปัญหาสุขภาพทางเพศและอนามัยเจริญพันธุ์

คำสำคัญ: การคุมกำเนิด วัยรุ่นและเยาวชน แรงงานข้ามชาติชาวเมียนมา จังหวัดสมุทรสาคร ประเทศไทย

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ปีการศึกษา 2560

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In present, Myanmar youths have to face several barriers in accessing reproductive health care services for many reasons and especially migrant youths suffer more health problems and inaccessibility to health care services compared with older migrants. Therefore, this study aims to identify the factors affecting the contraceptive utilization among Myanmar youth migrants in Samutsakhon Province, Thailand.

The study was a cross-sectional descriptive study among 372 Myanmar youth migrants between 15- 24 years of age residing in Samutsakhon Province, Thailand. Data was collected by using self-administered questionnaires with convenient sampling method between May 2018 to June 2018. Analysis of the variables was done using univariate, bivariate, and multivariate analysis at 95% confidence level.

The contraceptive utilization rate among Myanmar youth migrants in this study was 59.7% in which married youths accounted for 66.9% and unmarried youths for 46.5%. Moreover, higher percentage of traditional contraceptive methods use (21.5%) was found in this study that were considered to be ineffective methods. Most commonly used contraception among sexually active youth migrants were OC pills, injections, male condom and withdrawal method. We found that education (P value=0.000), marital status (P value=0.033), ever heard of contraception (P value=0.008), level of knowledge (P value=0.001), discussion with partners (P value=0.006) and peer pressure to use contraception (P value=0.001) were significantly associated with current use of contraception in multi-variate analysis. In addition, among health system factors, availability of contraceptive information (P value=0.037), health education materials (P value=0.004), easy availability in need (P value=0.000) and working or opening hours (P value=0.000) had significant associations with current use of contraception. Moreover, significant association was also found between waiting time responsiveness factor (P value=0.001) and current use of contraception in multivariate-analysis in this study.

This study indicated that low level of contraceptive utilization rate among Myanmar youth migrants and poor level of contraceptive knowledge indicating the needs of health education and information among Myanmar youth migrants in Samutsakhon Province. Providing comprehensive sexual and reproductive health knowledge, education and youth friendly health care services were critical needs to youth migrants who were vulnerable to sexual and reproductive health risks.

Field of Study: Public Health

Student's Signature

Academic Year: 2017

Advisor's Signature

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List of Abbreviation

UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization
USAID	United States Agency for International Development
IOM	International Organization for Migration
DHS	Demographic and Health Survey
MOH	Ministry Of Health
NGO	Non-government Organization
PHAMIT Thailand Project	Prevention Of HIV/AIDS Among Migrant workers in Thailand Project
MICS	Multiple Indicator Cluster Survey
FRHS	Family and Reproductive Health Survey
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Syndrome
STI	Sexually Transmitted Infection
RH	Reproductive Health
COC	Combined Oral Contraceptives
POP	Progestogen-Only Pills
IUD	Intrauterine Device
LAM	Lactational Amenorrhoea Method
SDM	Standard Days Method
BBT	Basal Body Temperature

CHAPTER I: Introduction

1.1 Background

Globally, young population are becoming sexually active before marriage nowadays. In many countries, sexual activity begins in early adolescence and according to UN adolescent and youth , there are higher numbers of males who practiced pre-marital sex than females before age of 15(1). However, in some South East Asia countries, the prevalence of pre-marital sex varies from regions to regions, ranging from less than 1% to over 50% in Oceania. According to demographic health survey and multiple indicator cluster surveys, three quarters of youth in these regions have had sex before marriage. (2). In Myanmar, sex before marriage had been common although pre-marital sex had been regarded as a restriction for young people due to existing cultural taboos and religious beliefs. The study of reproductive health issue among 15-24 years out of school youth in Myanmar presents that there were higher prevalence of pre-marital sex among youths in Myanmar. In this study, 45% of married boys and 21% of girls said that they had already engaged in sexual intercourse before marriage while 20% and 2.5% of unmarried boys and girls had pre-marital sex before marriage.

There are many negative consequences of pre-marital sex such as unwanted pregnancies, abortions and HIV/STI transmission. Sexually transmitted infections and HIV/AIDS transmission is one of the consequences of unprotected sexual intercourse. According to UNICEF 2017, younger population have higher prevalence of HIV transmission and there are 610,000 young people newly infected with HIV infection globally in 2016. According to HIV situational analysis in Myanmar by UNFPA, Myanmar is one of the third highest HIV prevalence countries in Southeast Asia (3) and there were 11000 new HIV infections in 2015 and the second highest rate of HIV infection was found in low risk women(24%) (4) . UN world population in 2012 said that there were higher numbers of youth death globally due to communicable diseases like HIV/STIs when compared with that of older people.

Communicable diseases account for 47% of young female and 26% of young males' death worldwide and in South East Asia, there were 40% and 29% of female and male deaths respectively due to communicable diseases(1).

Having pre-marital sex does not necessarily mean having poor reproductive and sexual health, however, studies in Asia and Pacific regions represents that pre-marital sex usually occurs in low level of knowledge of using contraception (2). There are many barriers that limit the access of reproductive health services to unmarried youths such as policy and legislation, socio-cultural norms and unfriendly youth services in giving reproductive health care services (2).

Globally, the contraceptive prevalence rate of married or in union women between 20-24 age group is 32% that is lower than the contraceptive prevalence rate of other age group 50% in 25-29 age group and 60% in 30-34 age group. In 2015, there are 12.8 million of girls who have unmet need for family planning and more than half of girls who are sexually active are not using modern contraception. The unmet need of contraception among young women is another major problem and the highest level of unmet need is found in 15-24 years age group with 43% when compared with the unmet need of 25-29 age group (17%) and 30-34 age group (15%). The unmet need of unmarried sexually active girls is higher (41%) than that of their married or in union girls (23%) (5). In Myanmar, the unmet need for contraception among young women is also the highest with 32.4% for 15-24 age group when comparing with 13.6% for 25-29 age group and 14.7% for 30-34 age group (4).

In frequent sex, fear of side effects, inconvenience use and perception of low risk of pregnancies are causes of unmet need of contraception among young women. Health education, information, counselling, and communication about the risk of pregnancies, the need of contraception and choice of methods are important for reducing the unmet need of contraception among young women. However, they might have fear of shyness and stigmatizing in accessing contraceptive services due to unfavorable community attitude and service providers in most of the conditions (6) .

According to Guttmacher Institute, half of pregnancies among young women in developing regions are unintended and 84% of unintended pregnancies occur among women who have unmet need for contraception in developing countries (7). According to 2007 family and youth survey in Myanmar, the highest rate of abortion was found in 15-19 years age group and 11.39% of pregnancies in this age group of women ends in abortion (8). Abortion accounts for at least 50% of maternal deaths and 20% of all hospital admissions and are due to complications from unsafe abortions which is the third leading cause of maternal mortality (9.68%) according to Nation Wide cause specific mortality survey in 2004-2005(9). In Myanmar, abortion is illegal and it is only legal when there is a danger to the life of mothers and therefore, unmarried young women mostly do abortions under unsafe conditions (8).

1.2 Rationale

Globally, there were 244 million international migrants in 2015. Of these, nearly 58 percent lived in the developed regions while the 42 percent lived in developing region. Among them, 28 millions of youth migrants are living in worldwide ,constituting 12% of the global migrant population(10). Youth have to make their own decisions about their lives regarding their social, educational, cultural and political aspects during the transition stage from childhood to adulthood.

Young people have to face so many challenges and experiences both positive and negative in migration process. Indeed, there are so many risks faced by migrants and this condition is even worse especially among young migrant population. As young migrant people are not under the guidance of their parents and families and the new environments or surroundings may be stressful and unhealthy, they have higher chances of high-risk sexual behaviors such as early pre-marital sexual intercourse, having sex without use of contraception. These can result in high rates of unwanted pregnancies, unsafe abortions and, transmission of HIV and sexually transmitted infections among young migrants (11).

According to MAP Thailand country profile, there are over three million migrant workers from Myanmar, Lao and Cambodia in Thailand including both documented and undocumented(12). Among them, 2.3 million of Myanmar migrants are staying in Thailand according to IOM 2015, however, there were estimated one million of Myanmar migrants who were documented legally in Thailand (Beesey , Limsakul and MuDougall, 2015) .So, there were still higher population with over 1 million of Myanmar migrants who were not legally documented in Thailand (13).

The situational analysis on health system strengthening for migrants in Thailand by WHO said that the reproductive health problems of Myanmar migrants are higher when compared with Thai population. Abortion is another serious consequences of high unplanned pregnancies and low use of contraception among migrants(14) .Moreover, migrants cannot access to hospital facilities for post-abortion care and post-abortion family planning health care services, as they fear stigmatization from health workers. Moreover, some Myanmar migrants face transportation problems due to their unregistered migration status or the health service facilities which are far away from their place or home (15).

There are many challenges for migrants in accessing health care services especially for unregistered migrants who have no legal documentation to go to hospital and clinics for receiving reproductive health care services due to fear of arrest or harassment(UNICEF 2011). Once they go to public hospitals, they use to face language and culture barrier, some complex health services provision at various stages in hospitals and they had to use out-of-pocket money when receiving health care services in public hospitals (16).

In addition to unregistered migrants, registered migrants also find difficulties in accessing health care services because of the location and time of health services provided at hospitals as many of the migrant workers have to work long hours in each day(12). According to UNFPA, majority of migrants from Myanmar tend to have lower educational status and are usually engaged

in low-skilled jobs. Majority of them do not know their rights to health care including reproductive health care service (17). Migrant youths have lower access to contraceptive information and services than older migrants .In addition, youth migrants face more barriers in accessing health care due to tradition and culture ,fear of negative community attitude towards them, lack of youth friendly health care services and feeling of discriminated due to prejudicial views of service providers (17). For these reasons, youth migrants become the most vulnerable population who suffered from the highest risks of negative health outcomes in the migrant community.

There were studies on contraceptive utilization among Myanmar youth migrants in Thailand. Some studies were qualitative and some were quantitative. Qualitative studies among young refugees and migrants in Thai-Burma border mainly focus on use of only one method of contraception among Myanmar youth migrants and did not emphasize on the utilization of other methods of modern and traditional contraception(15), (18), (19). There was one survey about contraceptive utilization among Myanmar migrants in Samutsakhon province that was conducted in 2012 by Mahidol Migration Centre. However, this mainly focused on the use of contraception among married reproductive aged women (15-49) but not for unmarried youth migrants (20).There was also one quantitative study about contraceptive utilization among Myanmar youth migrants in Bangbon District in Bangkok which was conducted in 2009 (21). Although some studies were done among Myanmar youth migrants in Thailand, there are changes in time period and geographical location in update study. Therefore, this study aims to identify the factors affecting the contraceptive utilization among Myanmar youth migrants in Samutsakhon Province, Thailand.

1.3. Research Questions

1. What is the rate of contraceptive utilization in Myanmar youth migrants in Samutsakhon Province?

2. What are the predisposing, enabling, need, health system factors and responsiveness factors influencing the contraceptive utilization among Myanmar youth migrants in Samutsakhon Province?

3. Are there any associations between pre-disposing, enabling, need factors, health system factors, and responsiveness factors and the contraceptive utilization among Myanmar youth migrants in Samutsakhon Province?

1.4. Research Objectives

1.4.1 General Objective

1. To identify the factors affecting the contraceptive utilization among Myanmar youth migrants in Samutsakhon Province, Thailand.

1.4.2 Specific Objectives

1. To find out the rate of contraceptive utilization in Myanmar youth migrants in Samutsakhon Province.

2. To identify the predisposing factors such as demographic, socio structural and health belief factors towards pre-marital sex and contraceptive use of Myanmar youth migrants in Samutsakhon Province.

3. To identify the enabling factors such as personal, family and partner factors affecting the contraceptive use of Myanmar youth migrants in Samutsakhon Province.

4. To identify the need factor such as sexual activity status of Myanmar youth migrants in Samutsakhon Province.

5. To identify the health system factors affecting the contraceptive use of Myanmar youth migrants in Samutsakhon Province.

6. To identify the responsiveness factors affecting the contraceptive use of Myanmar youth migrants in Samutsakhon Province.

7. To evaluate the association between the pre-disposing factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

8. To evaluate the association between the enabling factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

9. To evaluate the association between the need factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

10. To evaluate the association between the health system factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

11. To evaluate the association between the responsiveness factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

1.5 Research Hypothesis

1.5.1 There is an association between predisposing factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

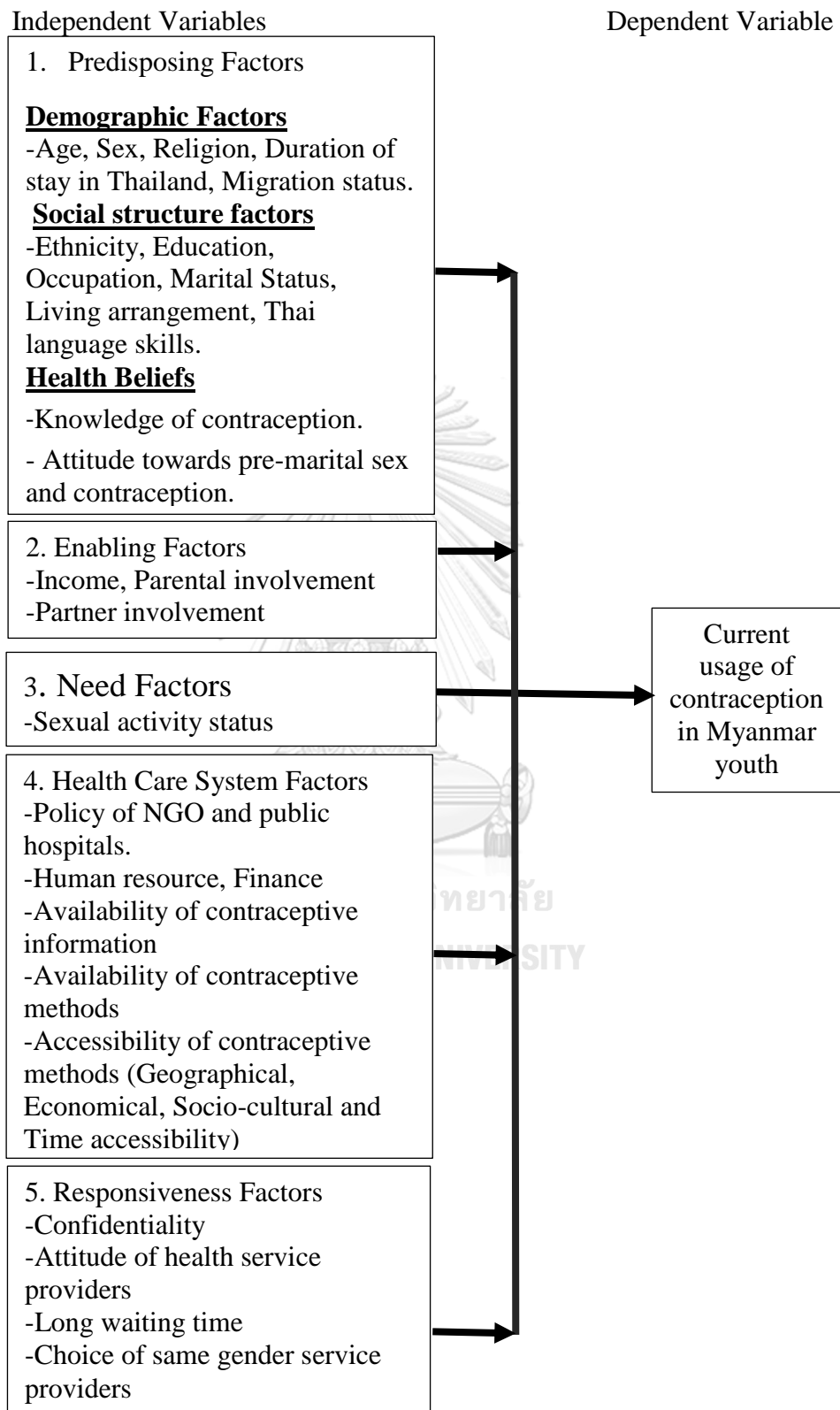
1.5.2 There is an association between enabling factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

1.5.3 There is an association between need factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

1.5.4 There is an association between health system factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

1.5.5 There is an association between responsiveness factors and contraceptive utilization among Myanmar youth migrants in Samutsakhon Province.

1.6 Conceptual Framework



1.7 Operational definitions

- The following variables in operational definitions from participants are obtained by self-reporting method.
- Youth: refers to the age group between 15-24 years according to United Nations definition and in this research, it refers to both male and female between 15-24 years of age who are staying in Samutsakhon Province, Thailand.
- Myanmar migrant: refers to any person who is moving or has moved across an international border or within the state regardless of legal status, causes for movement and the length of stay according to IOM. In this research, it refers to Myanmar people who are crossing Thai-Burma border and migrating to Thailand to work to make their living better.
- Sexual intercourse: refers to vaginal intercourse where male reproductive organ enters into the female reproductive tract excluding anal and vaginal intercourse.
- Pre-marital sex: refers to sexual intercourse practiced by persons before they are legally married.

Independent Variables

- Age: refers to the last completed birthday of the respondents at the time of interview and age is identified by self-reporting method.
- Sex: refers to sex characteristics of respondents either male or female as observations by interviewers.
- Religion: refers to respondents' religion and it is classified into four groups: Buddhist, Muslim, Christian, Hindu and others.
- Duration of stay in Thailand: refers to respondents' total length of stay in Thailand in years.
- Migration status: refers to the respondents' legal permission to stay in Thailand and their status are registered or not.
- Ethnicity: refers to the original ethnicity of respondents. It is classified into "Burma", "Karen", "Mon", "Shan" and others.

- Education: refers to the highest level of education of respondents and it is classified into illiterate (never go to school), primary school level (Grade 1 to 4), Middle school level (Grade 5-8), high school level (Grade 9 to 10) and higher education level (University).
- Occupation: refers to the current job of respondents and is classified into “Factory worker”, “Construction worker”, “Agricultural worker”, “Domestic helper”, “General /Random laborer” and others.
- Marital status: refers to current marital status at the time of interview and it is classified into single, legally married, living together but not legally married, widow and divorced/separated.
- Living arrangement: refers to anyone who is staying together with the respondents and it is classified into parents, spouse, partners, friends or others.
- Thai language skill: refers to the respondents’ ability to know and understand the Thai language and is classified into can read and speak fluently, cannot read but can speak fluently, cannot speak fluently but can understand and do know at all.
- Knowledge about contraception: refers to the knowledge and understanding of respondents about different types of contraception methods and their effects. Three level of knowledge are used with poor, fair and good level of knowledge and are determined by using 16 contraceptive knowledge questions.
- Attitudes towards pre-marital sex and contraception: refers to respondents’ opinion about pre-marital sex and contraception use. Respondents’ opinions on agreement or disagreement to the eight questions concerning contraception usage and pre-marital sex by using Likert’s scale which includes the range from strongly agree to strongly disagree. Three level of attitudes are used: negative, neutral and positive attitude.
- Income: refers to the respondents’ current own income and whether income is sufficient or not for covering living expenses.
- Parental involvement: refers to discussing about the use of contraception with parents and the influence of parents in using contraception.

-Partner involvement: refers to discussing about the use of contraception methods with their partners and the influence of partners in using contraception.

-Sexual activity status: refers to the presence of history of sexual intercourse .If the respondents had sexual intercourse history, the respondents were regarded as sexually active and history of sexual intercourse such as age at first sex, types of partners, use of contraception at first sex, history of SI due to peer pressure and usage and history of SI with commercial sex workers and usage of contraception. If the respondents had no history of sexual intercourse, the respondents were be regarded as non-sexually active.

-Policy: refers to laws and policies that restrict the provision of health services by age ,sex or any other area of difference (22). In this research, it refers to the policy of NGOs, clinics, or public hospitals, which gives contraception services by free of charge or by out-of-pocket-money system depending on the legal or illegal registration status.

-Resources of health system (Human resource and Finance): refers to the availability of sufficient supply of health workers with the competencies and skill-mix to match the health needs of the population (WHO 2018). In this research, human resource refers to sufficient quantities of health service providers who have good competencies and skills to provide contraceptive health care services and finance refers to the respondents' health insurance for receiving contraceptive services.

- Availability of contraception information: refers to the availability of sufficient quantity of health care facilities, goods, services and programs (WHO 2017). In this research, it refers to availability of contraceptive information from different types of health education sessions and from health education materials and from friends or family members or from health personals from NGO, private or public of from working place.

-Availability of contraceptive method: refers to the availability of sufficient quantity of health care facilities, goods, services and programs for all(WHO 2017) and in this research, it refers to availability of different types of

contraception and where respondents get contraception from drug stores, public hospitals, private clinics, health personals from NGO or friends.

-Accessibility to contraceptive method: refers to the geographical, economical, socio-cultural and time accessibility (WHO 2017). In this research, it refers to geographical accessibility which includes duration of travel to clinics, economical accessibility which includes affordability to pay for services, socio-cultural accessibility which includes cultural norms and taboos which deter the respondents from receiving contraceptive services and time accessibility which includes working hours/ opening hours of NGOs/private/public hospitals which coincide with the working times of respondents .

- Attitude of health service providers: refers to unfriendly welcoming of health service providers and negative judgement towards young people in giving contraceptive services concerning with their age or not being married.

-Confidentiality: refers to the maintenance of respondents' confidentiality by health care service providers during the consultation with health service providers(22).

-Long waiting time: refers to waiting time of respondents in NGOs/clinics/public hospitals before consulting with health care providers with or without an appointment.

-Choice of same gender service providers: refers to services which respondents can choose same gender service providers for receiving health care services, which means female preference of female service providers and male preference of male service providers.

Dependent variables

-Current contraceptive usage: refers to the current use of contraception among Myanmar youth migrants in Samutsakhon Province.

- Modern contraceptive methods: refers to OC pills, injection, IUD, implant, emergency contraceptive pill, female condom, male condom, female sterilization and male sterilization.

-Traditional contraceptive method-refers to withdrawal and safe period.

CHAPTER II: Review of related literature

2.1 Youth and Migration

In 2013, there were 28.2 million youth migrants aged 15 to 24 in the world, accounting one-eighth of the total 232 million international migrants worldwide. The proportion of migrant is higher in developing countries (14.9%) than in developed countries (10.2%), however, the proportion of girls and young women who migrate constitute higher in developed countries (48.9%) than in developing country (43%). Globally, 15 % of all international migrants were under the age of 20 in 2015 and the proportion of young migrants were significantly higher(22%) in the developed region than in developed regions (less than 10%)(10). There are many reasons for youth migration such as for getting higher education, searching for work, getting married or following together with their families. However, the major reason for youth migration continues to be seeking employment for 71 million unemployed youth globally in 2016. Youth can be defined as those persons between the ages of 15 and 24. Youth can be understood as a period of transition from the dependence of childhood to adulthood's independence(23).

2.2 Background of Myanmar migrant workers in Thailand

There had been centuries that cross border migration between Myanmar and Thailand had occurred. Since after 1988 political unrest in Myanmar, there had been an increasing trend in the number of Myanmar people who migrated to Thailand. According to IOM 2015, there were 2.3 million of Myanmar people living in Thailand and among them, 1186,805 of Myanmar migrant were registered in 2012 and 619,644 were regular skilled and unskilled workers and 567,161 were irregular unskilled workers(13).

Among Myanmar migrants, 778,258 migrant people have work permits which is 86% following the process of national verification in 2012 and most of them are usually engaged in low-skilled jobs (24). According to Myanmar risks faced abroad by IOM 2016, there were 70% of Myanmar migrants in

Thailand and 57% are male and 43% are female migrants. The highest number of Myanmar migrants are working in construction with 16.16% followed by fishery and its related work (15.56%) , agriculture and husbandry work 12.49% .However, the types of jobs depend on gender and larger numbers of male migrants are working in construction and fishery while more female migrants are employed in garment factories and domestic work(25).

According to the study by World Vision Foundation of Thailand and the Asian Research Center for migration, there are five major reasons for Myanmar people to migrate to Thailand. They are lack of unemployment in Myanmar, poor earning in Myanmar, poor family socio-economic status , bad experiences such as working under the violent conditions and the last one is due to not enough qualifications for employment(26).

2.3 Myanmar migrant youths in Thailand

Thailand government started the formal recruitment and national verification process for Myanmar migrants in 2009 and there were total 1,186,805 Myanmar migrants registered in Thailand in 2012 (27). According to IOM 2015, it estimates that there were more than 2.3 million Myanmar migrants in Thailand including unregistered migrants and the majority (76 %) are from Myanmar according to Thailand Ministry of labor statistics on registered migrant workers (IOM 2013). The migration status can be divided into regular(legal status) and irregular(illegal status).The legal ones are the migrants who have working permits and appropriate travelling documents and the illegal are the ones who hold temporary work without travelling documents and another is irregular migrants who have no documents at all. Total migrant workforce in Thailand is about 3 million with the majority of Myanmar workforce accounting 7% of total Thailand's working population. Some economies of Thailand such as fisheries and agriculture mainly rely on migrant labor force which is 75% of total labor force in Thailand (24). The statistic from Ministry of labor points out that the Central region of Thailand, including Samutsakhon and it is one of the Top Ten provinces which has the second

largest Myanmar migrant community and it is a preferred destination for many Myanmar migrant workers and most of them work in the fishing and seafood processing industries. According to Department of employment and Ministry of labor (2012), the provinces of Thailand, which has the greatest population of Myanmar migrants, are as follows: Bangkok (101,489), Samutsakhon (73,225), Tak (35,635), Samutprakan (28,128), Ranong (22,988), Pathum Thani (22,591), Surat Thani (21,228), Songkhla (19,306), Phuket (19,235) and Chon Buri (18,425). There are five associations or foundations in Samutsakhon Province namely Myanmar Migrant Worker Association (“See Lone In Arr Library”), Rakthai Foundation, National Catholic Commission on Migration (NCCM), Labour Rights Promotion Network (LPN) and Migrant Workers’ Rights Network (MWRN) according to a case study in Samutsakhon by Labor Rights Promotion Network conjunction with Chulalongkorn University Social Research Institute (CUSRI) and Asian Research Center for migration (ARCM)(2009) (28) and a guide for migrant workers in Thailand (29). Myanmar migrant worker association (See Lone In Arr Library) is a volunteer library association, which supports Myanmar migrants to increase their general knowledge. It was operated by Myanmar migrant workers members’ fund and was established in Mahachai sub-district in Sasmutsakhon Province last three years ago. There are estimated 30-35 migrant youths coming to the library on weekend and the delivery service system of borrowing books to groups of migrants in factories is more common and there may be estimated 150-200 books per month borrowed if there are orders from households or factories through the volunteers of MMWAs living in different sub-districts in Samutsakhon Province and ,so, these volunteers have contact and extensive network to Myanmar migrants who are living in Samutsakhon Province.

2.4 Contraception and migration

There are many studies showing the impact of migration and contraceptive utilization among migrant and non-migrant population. There are some studies showing that the contraceptive utilization of migrants is higher than that of non-migrant people depending on the duration of migration and

direction of migration whether migration place is rural or urban area. One study showing the effect of internal migration on contraceptive utilization in Africa states that use of modern contraception is higher among all migrants who migrated more than one year ago to Kenya when compared with non-migrants. Rural to rural migrants and urban to rural migrants have higher 1.39 and 1.4 times use of modern contraception than rural non-migrants and this is significant at P value <0.001 and <0.0001 level respectively. Moreover, rural to urban migrants group has the highest level of use of contraception and has 1.41 times contraceptive use when compared with that of non-migrant streams and this is significant at <0.05 level. Moreover, this study points out that duration of migration more than one year, adaptation and cultural change seems to give more positive health outcomes for migrants when compared with non-migrants (30).

However, another study comparing the modern contraceptive use of rural migrants, urban migrants and urban non-migrants in Peru states that rural migrants were least likely to use modern contraception than urban migrants and urban non-migrants. The lowest percentage of contraceptive use was found in rural migrants with 50.5 % while urban migrants and urban non-migrants had a higher percentage of use of modern contraception with 55.3% and 58.2% respectively. Moreover, this study said that rural migrants have lesser 0.70 chance of using modern contraception than the contraceptive use of urban non-migrants and this is significant at P value <0.001 level (31). Another study among female migrants in Ethiopian shows that Ethiopian migrants have low utilization of contraception (34.5%) due to low level of awareness and knowledge about unprotected sex and use of contraception (42.53%). Among ever users of contraceptive methods, 38.3% of migrants use injection method, 28.3% use EC pills to prevent unwanted pregnancies, 26.7% use condoms to prevent unwanted pregnancies and 25% use condoms to prevent STI/HIV/AIDS (32).

Another study comparing the knowledge and practice of contraception among migrants and non-migrants in Mumbai also presents that the condom use among male migrants is very low (10.3%) when compared with

non-migrant males 'condom use with 23.1%. This study also said that the lower condom use is due to lower level of knowledge about condoms among migrants(66.6%) which is lower than that of non-migrant population with 74.8% and this is significant at P value 0.031 level (33). Because of high-risk behavior among migrants, there are high prevalence of STI symptoms among migrants than non-migrant population. PHAMIT project in Thai Burma border said that one-third of migrants had health conditions of syphilis when they received health examination in 2004 and studies among Burma migrants in Chiang Mai and Ranong in 2000 said that 21% of migrant women and 30% of migrant men had suffered from STIs (Caouette,2000)(34). According to one study among China migrants, there are also high prevalence of STIs symptoms in both married and unmarried migrant workers than non-migrant population. However, married migrants than unmarried migrants suffer more from symptoms of STIs with 33.4% and 23.1% respectively and this difference is statistically significant at P value <0.001 level(35).

Another qualitative study among adolescent migrants in Thai-Burma border shows that there is very low knowledge level of EC pills among adolescent migrants, which can result in higher unwanted pregnancies and unsafe abortions among migrants when compared with non-migrants. Unplanned pregnancy is one of the common reproductive health problems among migrant women. Major reason for unplanned pregnancies is due to sexual intercourse without contraception in early age, which is also due to the new independent migrant environment without traditional and familial control. One study showing the impact of migration on unwanted pregnancies among Mexico migrants in US shows that migration to US during youth for at least one year is a higher risk factor for having unwanted pregnancies than those who did not migrate to US during youth time. There is positive correlation between migration to US and having unwanted pregnancies and this correlation is significant at 95% confidence interval(36).

Another study among Chinese migrants also show that there is a higher incidence of unwanted pregnancies and unsafe abortions among Chinese migrants. Among sexually active migrants (51.6%), 38.6% of migrants reported

that they had unmet need of modern contraception and 10.3% of sexually active migrants reported that they had unplanned pregnancies in the last six months and 8.7% reported that they had an abortion during the last year. Moreover, this study points out that not accessing to family planning services is two times higher the risk of having unmet need for contraception among Chinese migrants and this association is significant at P value <0.001 level(37). Due to high rate of unwanted pregnancies among migrants, abortion is another serious problem occurring among migrant when compared with non-migrant people. According to one survey in Mae Tao clinic in Thai –Burma border, abortion is widespread among migrants in Thai borders and is the most common direct and indirect cause of maternal mortality among migrants and 10% of OG admission cases were due to post-abortion complications. This study also said that most of the abortions are done at home by themselves by using traditional methods or by unskilled birth attendants as abortion is also illegal among migrants in Thailand, resulting in higher numbers of unsafe abortions (34).

In addition, access to reproductive health care services are higher in married migrants than in unmarried ones as most of the reproductive health care services are targeted mainly for married people .One study among Laos migrants in Thailand shows that marital status has an significant association with the migrants' access to health care services. In this study, there were 3 times higher use of reproductive health care services among married migrants than that of unmarried ones with odd ratio=2.48;95% CI=1.54-3.97 and this association is significant at p value <0.001 level(38).

One qualitative study among adolescent migrants in Thai-Burma border states that there is little access to family planning counselling and supplies for migrant people. OC pills and male condoms are commonly available, however, long acting forms such as IUD and implants are only freely available for migrants with work permit and ID cards. Moreover, this study also states that adolescent migrants cannot access easily to all these services due to long distance of health facilities, longer duration for receiving health care services, financial constraints and some security checked conditions especially for illegal and unregistered migrants (15). Another qualitative study among

Laos, Cambodia, Thailand and Vietnam migrants also states that geographical barriers such as location of healthcare facilities, transportation, economical barriers such as affordability of health care services and environmental factors such as long waiting time and service factors such as absence of youth friendly services, opening of clinic hours and availability of medications are the major factors that prevent migrants from accessing the reproductive health care services (39).

2.5 Anderson Health Service utilization Model

The behavior model was initially developed in 1960 by Ronald M. Anderson . The model was originally focused on the family health service utilization, however, the writer later changed and focused on the individual health because it is more efficient to pay attention to individual's health service utilization as there are some heterogeneous characteristics of family members which can be difficult to be taken into account. Initial behavioral model shows the peoples' utilization of health service and the three major factors including predisposing, enabling and need factors, which support or impede the health service utilization.

Under predisposing factors, there are three main components, which are demographic, social structures and health beliefs. Demographic factors include age and gender which are the biological imperatives, which suggest the use of health services. Social structure include the ability of a person to cope with the presenting problems in the environment and it involves education, occupation, ethnicity, marital status .However, social structure does not mainly consider about the social network and culture, which should be under the title of social structure. Health belief components include knowledge and attitudes concerning with health and health service uses and all these reflect how well a person perceived the need to use health service based on attitude towards their health status.

Enabling factor is the second characteristic of this model and it includes personal and family enabling characteristics such as income, parental

involvement, and partner involvement. Moreover, it involves easy access to health service providers who give health services and health service facilities such as clinics or hospitals, which means the service providers and the health service facilities, should be near the people who want to get health services. It also contains the distance to source of health services, the ability of people to know how to get to those services and the affordability of the people to use health services.

The third factor is need factors and is composed of perceived need and evaluated need in this model. The effort of the health service utilization depends largely on how people think of their own health, how much worries they give to their health status. Perceived need can be mainly explained by the two of pre-disposing factors: social structure and health beliefs. Evaluated need is influenced by biological characteristics of demographic factors, which is mostly related to the suggestions and advice from the professional experts, the need to medical care and the kind and amount of treatment given after seeing the professional experts.

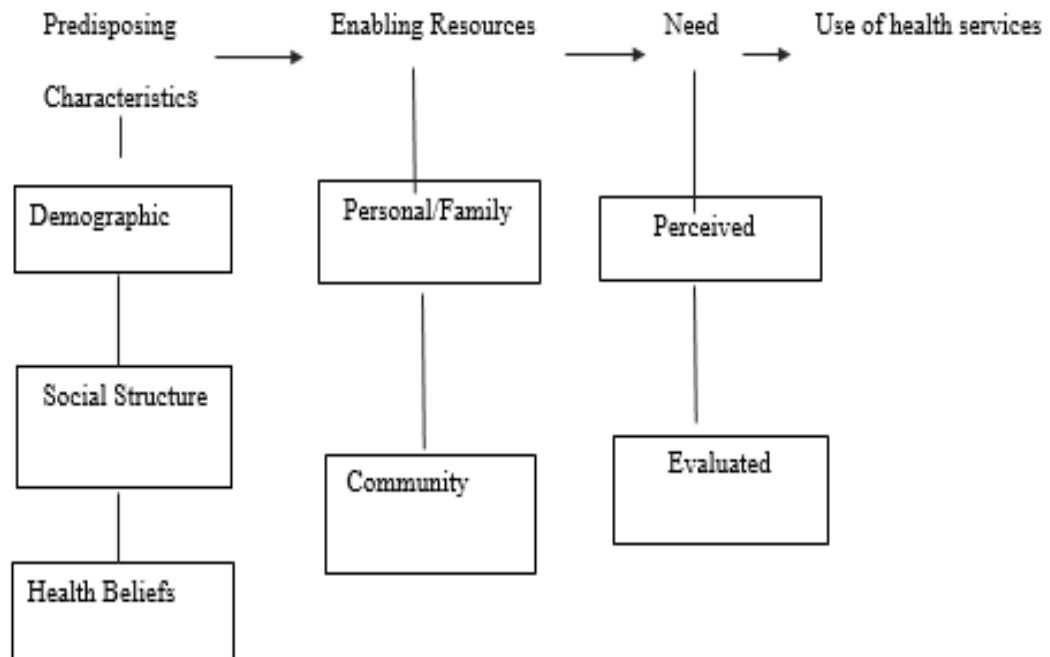
Moreover, according to 1970 Anderson Model, health care system factors are also major factors, which should be considered in determining the use of health care services in population. Health care system factors include the policy of public hospitals and organizations, resources such as qualified and skillful health workforce and finance including health insurance. In addition, responsiveness factors such as attitude of health service providers, confidentiality or privacy, long waiting time and choice of same gender service providers are other important factors, which should be taken into consideration in utilization of health care services.

By combination of these two models, I would like to explore factors affecting the utilization of contraception among Myanmar youth migrants. According to my conceptual framework based on the model, age, sex, religion, duration of stay in Thailand and migration status are under the demographic factors and ethnicity, education, occupation, marital status, living arrangement,

Thai language skills are described under the social structure components. Health belief components include knowledge about contraception and attitude towards pre-marital sex and contraception. Income, parental involvement and partner involvement are considered as enabling resources as these can reflect personal and family enabling resources. Moreover, sexual activity status is assumed as the need factor because youth migrants have increased likelihood to use contraception if they are sexually active. In addition to three main factors, health system factors such as policy of NGOs, clinics and public hospitals, resources of health system such as qualified and skillful workforce and presence of health insurance in migrants play an important role in determining the contraceptive utilization among youths according to Anderson model in 1970. Besides, availability of contraception information, availability of contraceptive methods and accessibility of contraceptive methods including geographical, economical, socio-cultural and time accessibility are categorized under the health system factors as the researcher combine the original Anderson model (1960) and Anderson model (1970). In addition to health system factors, responsiveness factors such as attitude of health service providers, confidentiality, long waiting time and choice of same gender service providers are additional important factors, which can determine the contraceptive service utilization among migrant youths.

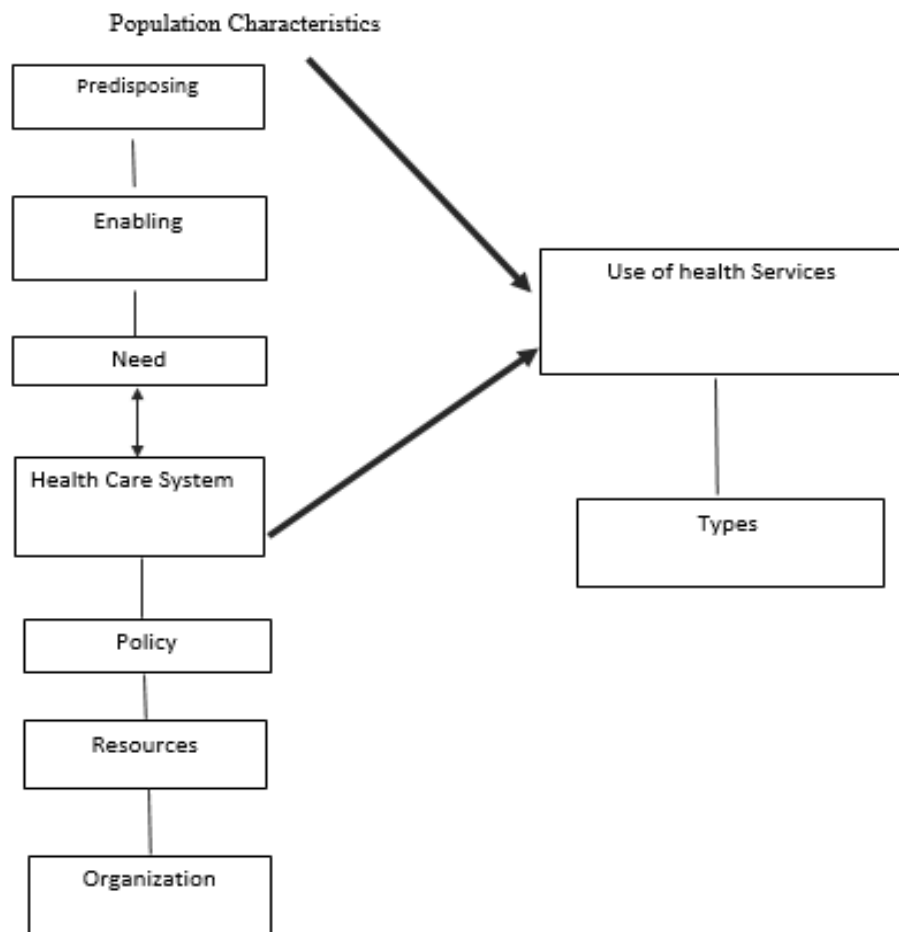
Previously, the major aim of this behavioral model was to increase the utilization of health care services, however, indeed this model points out the various factors or conditions that can facilitate or impede the use of health services and the associations between these factors and the utilization of health care services. So, in my studies, I would like to explore the factors which can be associated with the contraceptive utilization among youth migrants and the conditions which can favor or diminish the contraceptive use in order to have an insight into the use of contraception among Myanmar youth migrants living in Samut sakhon Province, Thailand.

Figure 2. 1 Anderson Initial Behavioral Model (1960s)



Source: Anderson RM. Revisiting the behavioral model and access to medical care: Does it matter? *Journal of health and social behavior* (1995)

Figure 2. 2Anderson Model Phase 2(1970)



Source: Anderson RM. Revisiting the behavioral model and access to medical care: Does it matter? *Journal of health and social behavior* (1995)

2.6 Factors affecting utilization of contraception

Demographic and socio-structural characteristics play an important role in determining contraceptive utilization. The use of health service utilization varies depending on different demographic and socio-structural characteristics and in order to provide appropriate health care services, it is better to understand the demographic and socio-structural characteristics of each individual or group of people.

2.6.1 Age

Age is one of the most important factors that can influence the use of contraception. The younger the youths, the less likely to use contraception. One study in Kenya shows that 73% of youth have experiences of pre-marital sex within their age groups of 15-19 years. Among these, only 34.6% of sexually active youth used contraception during their first sexual experience and it decreases with younger age with a significant P value at 0.02 level (40). Another study among migrants in Thailand also shows consistent findings and shows that there is a strong association between age and contraception use and this association is significant at P value 0.001 level. In this study, the younger the migrant women, the lower they use contraception and the proportion of women using contraception is the highest among in age group(30-34) and the lowest in youngest age group(20-24) with 72.3%(41).

2.6.2 Gender

One study among young people in Turkey shows that there are 27 % of female and 73.2 % of male who have had pre-marital sexual intercourse. However, only 35.8% female and 55.5% of male used condom at their first sexual intercourse and it is seen that more females (44.5%) do not use condom than males (30.6%) at the first sexual intercourse and this is statistically significant at P value <0.001. In male dominant country like in Turkey, male are more sexually active than female because of social norms which seems to be acceptable for males to

have pre-marital sex than female (42). Another study among youths at community level in Uganda also shows a consistent finding representing gender is significantly associated with the use of condoms .In this study, male respondents are more likely to use condoms which is three times higher than their female counterparts (OR = 2.74, 95% CI=1.61- 4.66) and condom use was also two times which is higher in unmarried youth rather than married youths with (OR= 2.27, 95% CI= 1.11-4.65). However, only 10% of youths reported they have correct and consistent condom use in every time they had sex while 71% of youth reported they had used condoms only during the first three months of their relationships (43).

2.6.3 Religion

The study showing factors affecting modern contraceptive utilization in Northwest Ethiopia presents a significant association between religion and use of contraception and this association is significant at P value <0.001 level. Muslims contraceptive users were significantly lower than the Christians users and 209 women of Christians used currently modern contraception while only a few 18 Muslims used modern contraception in this study(44) . Another study in Malawi also shows similar findings: Muslims were the least modern contraceptive users(32.7%) followed by Catholics(45.8%) and Christians (45.3%) (45) . However, one study among Myanmar migrant youths in Thailand, it presents that there is no significant association between religion and use of contraception. More than half of the Buddhists (60%) are current contraceptive users while total 64% of other religions (Hindu, Christians, Islam) also used contraception(21).

2.6.4 Duration of stay in Thailand

One study showing the contraception use among Myanmar youth migrants in Thailand presents that duration of stay in Bangkok has as significant association with the current contraception usage among youth migrants in Thailand and this association is significant at P value 0.006 level in bi-variate analysis. Youths

who stay less than three years in Thailand used more contraception (69.2%) while youths who stay between 3-7 years(54.4%) in Thailand and more than 7 years in Thailand (42.5%)used contraception in this research and this is statistically associated at P value 0.001 level even after multi-variate analysis(21).

2.6.5 Migration status

In one study showing the contraceptive access of unregistered migrants, there were lower utilization of contraception and a higher proportion of undocumented migrants with 79% who do not use contraception. Majority (61%) of unregistered migrants were unaware of EC pills while there was higher level of awareness of EC pills in registered migrants. So there was higher prevalence of unintended pregnancies in unregistered migrants (75%) compared with that of registered migrants (21%)(46). However, one study among Myanmar migrants in Thailand shows that migration status has no significant association with contraceptive utilization and the researcher in that study said that almost 93% of Myanmar migrants were registered and only 7% was unregistered and the registration status has no effect on the contraceptive use of migrant youths in that study (21).

2.6.6 Ethnicity

One study among migrant workers in Kachanaburi Province shows that there is a significant association between ethnicity and use of contraception. Majority 80.8 % of Thai women use contraception while there were 65.4% of non-Thai migrants use contraception and Thai migrants have higher 2.2 times using contraception than the use of contraception among non-Thai migrants and this association is significant at P value<0.001 level(41). Another in depth interview study among Myanmar migrant workers in Thailand also presents that reproductive health service utilization is greatly different in different ethnicity. The health service utilization of Karen is significantly different from those of Burma and Mon and three quarters of Burma (72.6%) and Mon(74.2%) use Thai

health care services while only 27.7% of Karen use public health care services (47) .

2.6.7 Education

One study in Ghana shows that the level of education is significantly associated with the use of contraception among female young women with 68.3% of highly educated female use contraception while only 23.3% who have primary education and 8.4% who have no education use contraception. The contraceptive use among those in secondary or higher education was higher 11.53 times than that of who are in primary education and 7.39 times higher than that of who had no formal education (48). Another study of contraceptive use among rural married women in China also interprets that lower education status has significantly associated with no use of contraception and this is significant at P value 0.00 level. Women with poor level of education has no method of contraception usage while 71.3% of higher educated women use non-permanent contraception method.(49).

2.6.8 Occupation

One study among contraceptive utilization in Ethiopian youths shows that the employed youths who are sexually active are more likely to use contraception than the unemployed youths and inactive youths. Only 24.9% of unemployed youths and 17.2% of inactive youths ever used contraception in the past while 37.7% of employed youths were ever users of contraception (50). One study among migrant workers in Thailand also shows that there was an association between working status and use of contraception. This study suggests that working migrants use contraception more than migrants who do not work with 82% and 68.8% respectively and this association is significant at P value 0.001 level (41). However, in one study among in Mandalay city Myanmar, the result is different and it shows that there was no association between occupation and contraceptive utilization. Women who do not work and stay as housewives use

contraception (56.54%) and working women use contraception with 43.46%(51).

2.6.9 Marital status

According to the study among female adolescent contraceptive use in Nigeria, 73% of adolescents are never in union, 25% of them are married, 1% is living with their partners and the other is either separated or widowed. This study shows that there is a significant association between marital status and contraceptive use and only 3.6% of married adolescents used contraception, which is lower than the contraceptive use of adolescents who are never in union with 8.4%. Moreover, only 36.7% of adolescents who are living with their partners use contraception while majority 63.3 % of them do not use contraception and the association between marital status and contraception use is significant at P value 0.000 level (52). Another study among condom use among males in Myanmar also shows that there is a significant association between marital status and condom use at P value <0.001 level and the condom usage is significantly higher in males who are single rather than the males who are married. In this research, the percentage of using condom among men staying as single (single /widowed /divorced /separated) with total 50% is considerably higher than that of those who are married with 6.7% only (53).

2.6.10 Living arrangement

One study among Myanmar migrants in Thailand shows that migrant youths who are staying together with their spouse has a significant association with the current contraceptive use at P value <0.001 level. This study also shows that there are higher numbers of youths who were staying together with their spouse using contraception(69%) followed by 63.6% of youths who were staying together with their boyfriend/girlfriend and 50% of youths who were staying together with their friends were current contraceptive users(21).

2.6.11 Thai Language skill

One study among migrants in Thai border shows that language barrier is one of the major factors that discourage migrant people from using health service utilization. This study shows that migrant people who can speak Thai language receive reproductive health care services from government hospitals the most with 40% , health center with 27.4% while the migrant who do not speak Thai do not seek any treatment or use private health services more than those who can speak Thai with 2.1% and 34.4% respectively(47). However, one study among Myanmar migrants in Thailand show that there is no significant association between Thai language skill and contraception use among Myanmar migrants according to multi-variate analysis and more than half of Myanmar migrants(58.2%) can communicate to some extent and 34.3% cannot communicate at all and only 7.4% are fluent in Thai Language(54).

2.6.12 Knowledge about contraception

Knowledge about contraception is very critical factor especially for youths and there will be high chances of transmission of HIV, STIs and having unwanted pregnancies and abortions if they do not have any knowledge about contraception. According to one study in Nigeria, the knowledge level of youth about contraception is very high (87.67%) with the condom and the OC pills which are the most popular method and only 0.67% had no knowledge on any form of contraceptives. Majority of respondents (87.67%) know that contraception use is a prevention for pregnancy. However, the utilization of contraceptives among sexually active youth was low, only 15.63% of sexually active respondents regularly used any form of contraception while 25% occasionally used and 59.37% had never used any form of contraceptives(55). However, one study among female migrants in Ethiopian shows that Ethiopian migrants have low level of use of contraception with 34.5% due to low level of knowledge about use of contraception. Among ever users of contraceptive methods, 38.3% of migrants use injection method, 28.3% use EC pills to prevent unwanted pregnancies, 26.7% use condoms to prevent unwanted pregnancies and 25% use condoms to prevent STI/HIV/AIDS. According to this study,

Ethiopian migrants' contraception use were hampered by feeling of shyness, inaccessibility and mixed feelings about contraception among Ethiopian youth migrants(32).

2.6.13 Attitudes towards pre-marital sex and contraception use

In Myanmar, adolescents and their reproductive health problems are becoming alarming and sexuality among adolescents and young people becomes a sensitive issues. Although there are strong religious beliefs and cultural norms in Myanmar, there seems to have more acceptance of pre-marital sex among youth in Myanmar. According to one qualitative study among Myanmar medical students and community youths, 35.15% of male and 4.6% of female medical students have no problems in accepting the concept of pre-marital sex. Moreover, 10.1% of students including 19.8% of males and 2% of females confessed they have already engaged in pre-marital sexual relationship and 57% of male students admitted that they have close friends who have experienced pre-marital sex. For community youth ,15.9% of male and 5.9% of female have pre-marital sexual history and 23% never use condoms and only 36.6% consistently used condoms in their sexual intercourse(56). One qualitative study among unmarried migrant youths in China points out that most of the unmarried migrants accepted that pre-marital sex is common in their environment and most of them said that pre-marital sex was not a serious problem anymore and only a few of them strongly against the pre-marital sex. Most of them had never used contraception when having sex and only a few unmarried migrants said they used contraception. The main reason why contraception is not used were that using contraception is only a business for married women and they do not have courage to buy contraception at drugstores as they think it is a shameful act for them especially for unmarried young women due to negative community attitudes (57).

2.7 Enabling Factors

2.7.1 Income

The study showing the relationship between income and contraceptive use among Pakistan states that increased household income increases the likelihood of using contraception in Pakistan. There is two times higher odds of using modern contraception in middle income and higher income households when compared with lower income households and this association is significant at P value less than 0.05 level (58). One study in Myanmar also reported that adequacy of income has significant association with the utilization of contraception. In this study, women who have enough income is significantly associated with the contraceptive use at P value 0.001 level with adjusted odd ratio 2.520(59). However, the study in contraception use among Myanmar migrant women shows that there is no association between occupation and contraceptive use and the contraceptive use is not so much different between migrant housewives (83.2%) and migrant working women (76.6%)(54)

2.7.2 Parental involvement

One study in Ethiopia also states that there is an association between discussion with the parents and contraceptive utilization among young people. In this study, according to multivariate analysis, young people have 4 times higher the use of contraception when they have communication about RH topics with their parents (COR=1.46,95% CI=1.35-4.23) (60). Another study showing barriers to use contraception among adolescents in Kenya also said that parental approval also had an significant association with the contraceptive use and this association is significant at P value <0.01 level. There was only 6.2 % of young female who used contraception who did not get permission from their parents ,however, there were 17.7% of young girls who used contraception whose parents did not object to use contraception(61).

2.7.3 Partner involvement

Partner involvement in using contraception is another influential factor for increasing the use of contraception. One study showing factors influencing contraceptive use decisions among married youth in rural area of Myanmar shows that spousal communication plays an important role in increasing the use of contraception and the association between spousal communication and contraceptive use is highly significant at P value < 0.007 level (62). Another research in Rwanda also points out the fact that partners are the most important person who can support the increased use of contraception. The contraceptive use among young women is 8 times higher if they have partner support and this association is significant at p value < 0.001 level. Almost all users 98% of the respondents said they use contraception because of their partner influence while 80% of women did not use contraception due to lack of partner involvement (63).

2.8 Need Factor

2.8.1 Sexual activity status

Pre-marital sexual activities among young people have been reported to be increasing worldwide. One study showing the prevalence of pre-marital sexual practice among young Ethiopian students show that among total 181 (59.9%), 129 (42.7%) had already engaged in pre-marital sexual intercourse. The average age of pre-marital sexual intercourse is 18.4 ± 2.14 years and 85 (66.4%) had one sexual partner, while 44 (33.6%) had two or more sexual partners (64). Moreover, another study among youth in Kenya presents that among total 67.5% of young people, there were 32% of boys and 35.5% of girls who were already had pre-marital sexual intercourse. However, the use of condom on the first sexual intercourse was low with only a quarter of boys and a fifth of girls used condoms on their first sexual intercourse. This study also points out that the proportions of adolescents who used contraception during their first sexual encounter was higher among unmarried than in those who are currently married (65). A cross-sectional study among young women in Tanzania also

shows that majority 70.4% have already had history of pre-marital sexual intercourse at their young age 19-24 years. Among them, 58.5% said that they had ever used contraception and 41.5% were current contraceptive users. Moreover, this study clearly points out that previous history of ever sex has a significant association with the use of contraception at P value 0.03 level and contraceptive utilization was low in who had no history of sex in the past (66). According to one study in Ethiopia, it states that discussion about sex and contraception with peers have a positive impact on contraceptive use. Youth who frequently discuss about sex with their friends have higher probability of contraceptive use (66%) than those who do not discuss about sex (51%) (50). Besides, a study showing contraceptive utilization in Myanmar points out that good support from friends (good peer influence) has also significant association with the use of contraception and this association is significant at P value <0.001 level. Majority of 83.6% who has good peer influence used family planning while those who have fair and poor influence from their friends with 76.9% and 63.7% respectively used family planning methods (59).

2.9 Health System Factors

2.9.1 Policy, Human Resource, Finance

One study in Uganda showing the providers' perspectives on health system obstacles in contraceptive service delivery to young people states that policy restriction, limited number of qualified number of health personals are one of the most important health system's obstacles for receiving reproductive health care services for young people. In this article, providers think that young people in Uganda receive limited contraceptive health care services due to reduced number of qualified health persons (32%) and restrictions of policy with 17%. Moreover, more than a third of providers (38%) asked the consents from parents or spouse or from both when a person is less than 18 years of age and majority of health care workers 63.6% from NGOs and 29.7% of health care workers from public hospitals requested consents from young people when they come to receive contraceptive services at their NGOs or hospitals (67). One qualitative

study among migrant beer promoters in Thailand also states that cost of the health service is another major problem for them to access reproductive health care services. In this study, 71.8% of female migrants strongly agree that cost is the important factor in receiving contraceptive health care services at health institutions that they like. One third of the respondents agree that they could not go to the institutions that they preferred due to high costs of health services. Majority of migrants in this study do not have health insurance as most of them are part-time laborer and so they face the financial problem when receiving reproductive health care services the most when compared with migrants who have health insurance cards (39).

2.9.2 Availability of contraceptive information

One study in Tanzania shows that there is a significant association between sources of information and contraceptive use and this association is significant at P value <0.001 level. Majority (65.8%) of women got contraceptive information from health facilities or reproductive health clinics. This research also points out that receiving information about contraceptive methods is important and 89% of women who did not use contraception is due to not getting information about contraception (68). In addition, another study in South West Nigeria shows that there is a significant association between sources of information and contraceptive utilization among different age groups of women and this is significant at P value 0.000 level (95% CI 0.08-0.09). There are differences of sources of information among different age group of women in Nigeria and this study also represents that health facilities were the major sources of information for married women(53.3%) and schools and educational institutions were the main sources of contraceptive information for unmarried girls which is 26.9% (69).

2.9.3 Availability and accessibility to contraceptive methods

According to USAID, private sector is an important source of modern contraception for both adolescents and young people. In Asia, nearly half of adolescents and young women mainly rely on private sectors to receive

contraceptive health care services with 48% and 42% respectively while over 25 years of aged women mainly rely on public sectors with 64% and less on private sectors with 33%(70). One study in Uganda show that limited availability of different types of contraceptive methods is another obstacle for receiving reproductive health care services for young people. In this article, young people in Uganda receive limited contraceptive health care services due to limited availability of contraceptive commodities (40%) and lack of an appropriate contraceptive method mix(12%)(67). The study showing equity to health services among young people in Myanmar states that the overall low accessibility to health care services (34.5%) reduce the use of family planning services and the association between low accessibility to health care services and low utilization of family planning services is significant at P value 0.01 level. In this study , accessibility refers to geographical and financial accessibility and although geographical accessibility among young people in this study is high(79.3%) ,there is low financial accessibility(19.1%) and regard as there is overall low accessibility to health care services(71).

Moreover, one qualitative study by UNFPA on socio-cultural influences on Vietnam youth migrants show that fear of social rejection due to community's negative attitude is another major barrier for approaching contraceptive health care services for migrant youths. This study also said that there is a stronger fear of losing face and harming the reputation of family than the fear of sexual and reproductive health risks among unmarried and young migrant workers (17). Moreover, one study in Tanzania also reports that there was a significant association between cultural belief and contraceptive method use and this association is significant at P value<0.001 level. Majority 75.8% of women do not use contraception due to their traditional and cultural beliefs. In this research ,there was also an in-depth interview for 20 service providers and most of them think that wrong cultural beliefs is a hindrance for using of contraception for women in Tanzania (68).

2.10 Responsiveness Factors

One qualitative study showing facilitators and barriers to accessing health care services among migrant beer promoters show that long waiting time, opening of clinic hour and their confidentiality are very important factors for accessing health care services at public hospitals. In this study, 44.7% of migrant beer promoters said that they want to receive reproductive health care services at private clinics, as they have to wait longer duration when they go to public hospitals. Moreover, 84.4% of migrant women said that confidentiality is very important for them and they do not want to receive family planning health care services at public hospitals due to low confidentiality and privacy (39). Another qualitative study showing youth friendly health care services in Romania shows that long waiting time and choice of same gender service providers have also impacts on accessing reproductive health care services for youths. Youths in this study are afraid that there is higher chance of meeting with known people while they have to wait for a long time in clinics and most girls would like to receive reproductive health care services from female service providers as they feel it is more comfortable for them to discuss their problems with same gender service providers (72) .

Moreover, another study among youths in Mandalay said that most common reasons for not receiving family planning health care services are due to confidentiality concern among unmarried youths and due to negative attitude of health service providers. Provider attitude is one of the significant preventative factors which is associated with unmet need of family planning with AOR 0.61,95% CI 0.41-0.89 (71). Besides, another study in Uganda states that providers focused factors , service delivery factors are also the major constraints that influence the use of contraception among young people. In this article, young people in Uganda thought that health care providers are unfriendly and not welcoming as three-quarters of service providers believe that contraceptive services should not be given to young people and only a quarter accept that they should give contraceptive services to young people. Moreover, 40% of providers have negative attitude towards giving contraceptive services to young people and

14% of the providers think that it is morally unacceptable to give contraceptives to young people (67).

2.11 Modern and traditional contraceptive utilization in youths

As described in WHO family planning updated 2017 fact sheet, there are 15 types of modern contraception methods: OC pills (combined oral contraceptives (COCs) , progestogen only pills (POPs), implants, injections (combined estrogen and progestogen injectable and progestogen only injectable), combined contraceptive patch and combined contraceptive vaginal ring, IUD (copper and levonogestrol containing IUD), male condoms, female condoms, male sterilization (vasectomy), female sterilization (tubal ligation), lactational amenorrhea method (LAM), emergency contraception pill, standard days methods (SDM), basal body temperature method (BBT), two day method and symptom-thermal method. Moreover, traditional methods include two methods which are calendar method or rhythm method and withdrawal (coitus interruptus).

Globally, the contraceptive prevalence rate among girls who are currently married or in a union is 20%, which is lower than the contraceptive prevalence rate of other older age group. In developing countries, there were only about 15% of girls who are married or in a union who are using modern contraception . According to USAID 2015, girls under 25 have increased likelihood of using short-acting contraception like OC pills, condoms and injectable rather than use of long-acting methods such as IUDs and implants (70).

For married young girls, pills and injections are the most popular methods accounting for 70% of their total use of modern methods. Condoms use is the second most popular with 21% and only 5% of young married girls use IUDs in the developing world. However, there are globally 41% of unmarried sexually active girls who are using modern methods. For them, male condom is the most preferred method with 28%, followed by oral pills (6%), injectable (5%), implants and IUD together with 1% in developing countries. The proportion of young women in need but who are not using modern contraception

is higher in Asia(69%),Africa(68%) and in Latin America and Caribbean (36%).In addition, the unmet need among unmarried and sexually active girls is higher than that of their married peers with 41% and 23% respectively (5).

In one study among adolescents in Ghana, it is seen that 77% of sexually active adolescents had ever used contraceptives, but, only 22.9% used contraceptives consistently and 44.1% used sometimes. Their knowledge about male condom is the highest (85.8%), followed by the pills (31.4%), injections (25.5%) and emergency contraceptives (5.6%). Moreover, adolescents in Ghana used male condom considerably (82%) when compared with other methods of contraception, pill(11.8%),emergency contraceptive pill(1.9%) and injection(1.4%)(73).

Another study in young women's access and use of contraception in Senegal also indicates that among unmarried and sexually active young people, the condom use was the highest with 56% followed by injectable (21%) and the pills (14%). However, the method choice of contraception is different from currently married women who are using the injections with the highest percent (43%),oral pills (33%) and the use of condom is the least with only 15%(74).Moreover, one study in China show that condom use among Chinese migrant youths is lower than that of non-migrant Chinese youths. Migrant youths from rural to urban area have the higher prevalence of low use of condoms (83.1%) than urban non-migrants (63.6%).Besides, only 9.6% of rural to urban migrants has consistent contraceptive use while 29.1% of urban non-migrants and 11.3% of rural non-migrants use contraception consistently (75).

According to Myanmar Demographic and health survey 2015, modern contraceptive methods used in Myanmar are OC pills, injectable, condoms, IUCD, implants, female sterilization, male sterilization, emergency contraceptive pills, lactational amenorrhea method and traditional methods include rhythm, withdrawal and folk methods. The modern contraceptive prevalence rate in Myanmar among currently married women is 51% and traditional method prevalence rate is 1%.The use of injectable are the highest (28%), oral contraceptive pills (14%) and female sterilization (5%). However, in 2015, there was only 0.4 prevalence rate of male condom use among women

in Myanmar which was the second lowest prevalence among South East Asia countries(76).

According to the study among unmarried medical and community youth in Myanmar, 19.8% of male and 2% of female are already engaged in pre-marital sexual relationship. Although they know high risk of transmission of STIs without using condom, only 61.5% of students consistently used condoms,26.9% used condoms occasionally and 11.4% did not ever use them (77). In one study showing factors influencing decisions on contraceptive use among married youth couples in Ayeyarwady Division in Myanmar, OC pills and injections are the most popular methods among youth married couples. Majority of youth married wives and husbands have knowledge on these two methods 94.1% and 91.9% for OC pills and 77.7% and 80% for injections respectively. However, implants and emergency contraceptive pills are the least popular among these married youth couples. Injection method is used with the highest 58%,OC pills use is the second highest with 32.8% among the couples(78).However, in study showing practice of contraception among pre-marital and marital sexual relationship in Myanmar migrant youths in Bangbon District,24.7% of migrant youths has pre-marital sexual relationship while 75.3% had never practiced pre-marital sex before. Among total 135 youth migrants who are currently using contraception , OC pills are the most commonest method used with 42.4% ,condom use with the second highest with 35.3% and injections with 20.1% and major reasons for discontinuing contraception are fear of side effects(61.7%) and wanting more children(25%) among ever user of contraception

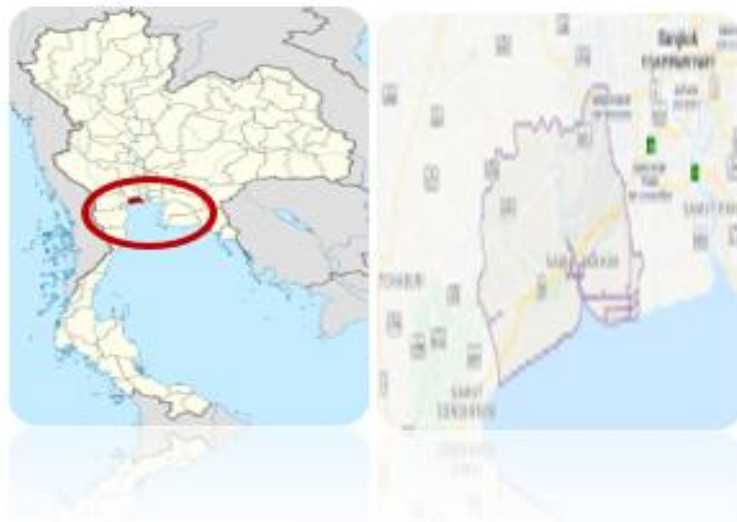
CHAPTER III : Research Methodology

3.1 Research Design

The design of this research was a quantitative cross-sectional descriptive study.

3.2 Study area

Study area was in the Samutsakhon Province, which is one of the central provinces of Thailand.



3.3 Study population

Study population was Myanmar youth migrants of between 15- 24 years of age residing in Samutsakhon Province, Thailand. There are several ethnics of Myanmar migrant workers in Samutsakhon Province such as Burma, Karen, Mon, Shan. Principle researcher chose all ethnics of Myanmar youth migrants who could speak, read and write Myanmar language well as my studied population.

3.4 Sample Size

Cochran formula was used to calculate the sample size for this study.

The contraceptive prevalence rate of Myanmar youth migrants (60%) was used, which was the result of the previous, study among Myanmar youth migrants in Thailand.

According to **Cochran** Formula;

$$n = \frac{Z^2 P (1 - P)}{(d)^2}$$

$$n = \frac{(1.96)^2 \cdot 0.6 (1 - 0.6)}{(0.05)^2}$$

$$n = 368$$

n = sample size.

P= the prevalence of contraception among Myanmar youth migrants in Bangbon District in Bangkok Province, Thailand = 60%= 0.6

$$q= 1-p =1-0.6=0.4$$

z= standard value for 95% confidence interval =1.96.

zd = error allowance=0.05 was used with 95% confidence interval.

10% for withdrawal from interview and refusal to participate =36

So, sample size is 368+36 = **404**.

3.5 Sampling Technique

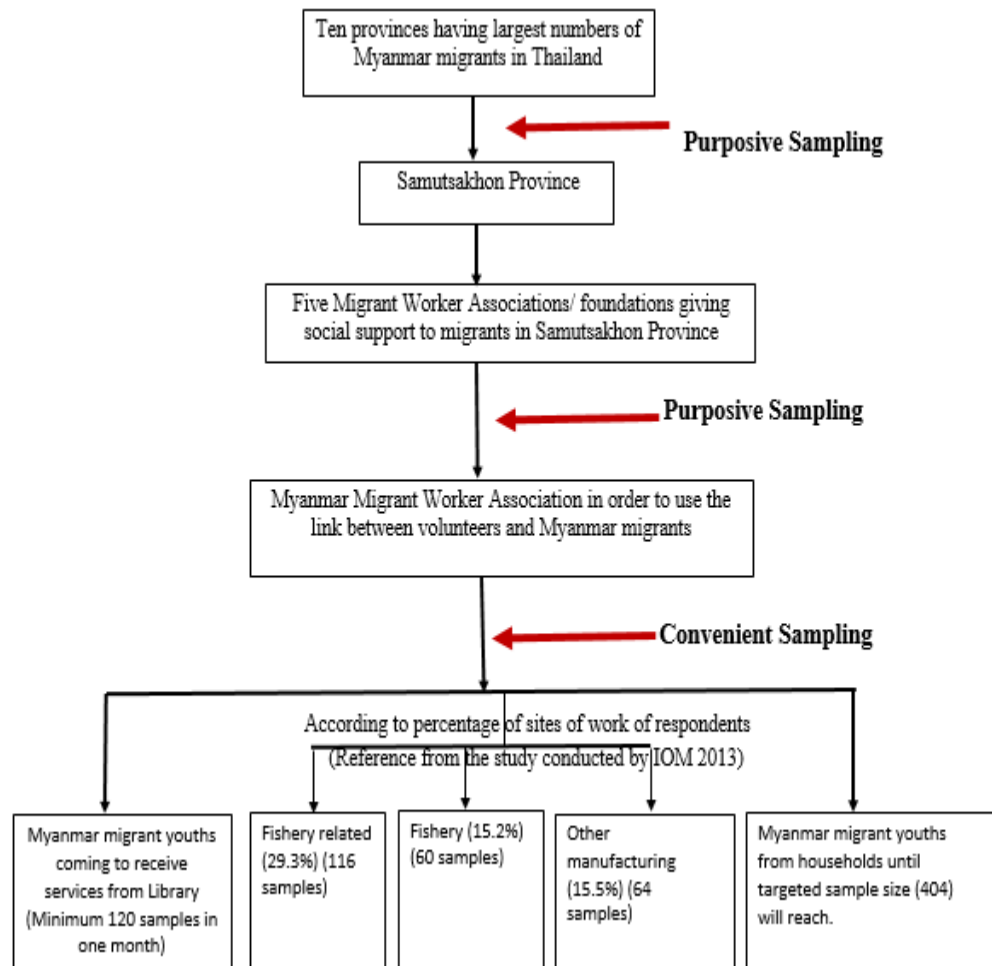
In first stage, Samutsakhon Province was selected purposively as this is one of the top ten provinces, which has the second largest Myanmar migrant community with 73,225 population according to department of employment, and Ministry of labor Thailand (2012).

In second stage, among five associations/foundations giving social support to migrant workers in Samutsakhon Province, Myanmar migrant worker association in Mahachai sub-district was chosen purposively because the researcher used the link between research assistants from that association and the youth migrants. As the association is a library and only focus on Myanmar migrant youths by giving library services and delivery service system of books to groups of Myanmar migrant people in factories, this association has an extensive network to Myanmar migrant workers.

In third stage, the convenient sampling method was used to collect the sample population because of the following reasons. The first reason is that the researcher cannot know the exact number of Myanmar migrant youths in Samutsakhon Province because my sample population is migrant in nature including both unregistered and registered status and also be hidden in nature especially for unregistered migrants. Moreover, youth population is harder to reach out than other age group as the primary reason for migrating to Thailand among Myanmar migrants is due to economic problems (74.9%) and the majority of them are working age group. Only 67.8% of Myanmar migrants in Samutsakhon Province were registered according to the study namely “Assessing potential changes in the migration pattern of Myanmar migrants and their impacts ”conducted by IOM (Country Mission in Thailand and Asia Research Centre for Migration) in 2013 (79). Another reason why the researcher used convenient sampling method is that the researcher collected the samples from five different sampling sites in order to achieve the targeted sample size 404 described as follows:

- (1) With the help of the research assistant, the researcher collected the data from Myanmar migrant youths who were coming to receive services from library. As there were estimated 30-35 migrant youths coming to library per week, the researcher got minimum 120 samples from library in one month.
- (2) For the rest of the samples, the researcher collected the data from migrant youths depending on their types of different sites of work, which are top three employment sectors in Samutsakhon Province: fishery related (29.3%) (116 samples), fishery (15.2%) (60 samples) and other manufacturing (15.5%) (64samples) of my whole targeted population. The researcher took these references from the study namely “Assessing potential changes in the migration pattern of Myanmar migrants and their impacts ”conducted by IOM(Country Mission in Thailand and Asia Research Centre for Migration) in 2013(79). According to these, the researcher collected the samples according to the percentages of 3 different sites of work and got total 360-sample population.
- (3) Finally, the researcher collected the rest of the samples from households in Samutsakhon Province by convenient sampling method until targeted sample size (404) was reached.

3.5.1 Sampling Flow Chart



3.5.2 Inclusion Criteria

1. Both male and female Myanmar youth migrants who are between 15 and 24 years of age.
2. Myanmar youth migrants who can speak Myanmar language and can read and write Myanmar language well.
3. Myanmar youth migrants who are residing more than 3 months in Samutsakhon Province, Thailand.

3.5.3 Exclusion Criteria

1. Myanmar youth migrants who want to withdraw from the project and who want to stop answering the questionnaires.
2. Myanmar youth migrants who are not willing to participate and give consents in the research.
3. Myanmar youth female migrants who are pregnant at the time of interview and who are in six weeks post-partum period.

3.6 Measurement Tools

The questionnaires was adopted from already existing questionnaire, which was already validated by experts in previous studies and from questionnaires of sample core instruments from UNFPA/WHO/world bank 2001. Because of differences in study population and study location, the questionnaires was modified and then validated again by three experts to confirm the content validity of each questionnaire. The questionnaires was validated again by Dr. Ratanna Somrongthong (Ph.D., Specialist with Adolescent and Reproductive Health), Dr. Montakarn Chuemchit (Ph.D) and Dr Myo Nyein Aung (PhD Public Health Jutendo University)(Postdoc Med Edu),a lecturer for WHO collaborating center for Medical Education, Faculty of Medicine, Chulalongkorn University. IOC score for each questionnaire was > 0.7 and the total average IOC score was 0.97, which was > 0.7 . The data was collected by self-administered questionnaires. There are total 58 numbers of questionnaires with 16 pages and the questionnaire was divided into six parts. Part 1: Predisposing factors, Part 2: Enabling factors, Part3: Need factors: Sexual

activity status, Part 4: Health system factors , Part 5: Responsiveness factors and Part 6: Current contraceptive utilization in Myanmar youth migrants in Samutsakhon Province.

Part 1 : Predisposing factors

Demographic characteristics include age, sex, and religion, duration of stay in Thailand and migration status (From Q 1-5).

Social structural factors include ethnicity, education, occupation, marital status, living arrangement, Thai language skills. (From Q 6-11).

Health belief factor (Q12-13) include knowledge of contraception and attitudes towards pre-marital sex and contraception.

-Knowledge of contraception: Firstly, ever heard of 11 types of contraception was asked and the respondents answered by themselves. The level of knowledge of contraception was determined by asking 16 questions concerning with different types of contraceptive methods including its advantages and its uses. The respondents got 1 mark for each correct answer and 0 for incorrect and uncertain answer. The score was ranged from 0 to 16 and was classified into three levels by using Benjamin Bloom's criteria.

High level of knowledge (>80%) - >13 scores

Fair level of knowledge (60%-80%) - 10-13 scores

Poor level of knowledge (<60%) - <10 scores

- Attitude towards pre-marital sex and contraception of the respondents was measured by eight questions whether the respondents agree or disagree with the statements by using Likert's scale ranging from strongly agree to strongly disagree.

Positive Statement (4)		Negative Statement (4)	
Choice	Score	Choice	Score
Strongly Agree	5	Strongly agree	1
Agree	4	Agree	2
Uncertain	3	Uncertain	3
Disagree	2	Disagree	4
Strongly disagree	1	Strongly disagree	5

All answers was summed up and calculated as mean and standard deviation. The standard point for the attitude is mean \pm standard deviation and was classified as follows:

Negative attitude score \leq mean – standard deviation

Neutral attitude mean-standard deviation < score < mean+ standard deviation

Positive attitude score \geq mean + standard deviation.

Part 2: Enabling factors (From Q 14 - 21)

Personal enabling resource: income and the question asked whether the respondents have own income or whether this income is sufficient to cover living expenses or not.

Family enabling resource: parental and partner involvement and the questions asked about the presence of discussion about any type of contraception with their parents or partners and ever use of contraception due to the influence or suggestions of their parents or partners.

Part 3: Need factor (From Q22 - 33)

Need factor includes sexual activity status and the question concerning this part were whether respondents had history of sexual intercourse or not. If respondents had sexual intercourse history, these respondents were regarded as sexually active and then the history of sex intercourse was asked such as age at first sexual intercourse, types of partner, use of contraception at first sex, history of sexual intercourse due to peer pressure and sex workers and contraceptive uses on those occasions. If respondents did not have sexual experiences, they were regarded as non-sexually active.

Part 4: Health system factors (From 34 -47)

Policy of NGOs /clinics/public hospitals: The question asked about whether the respondents knew the policies of NGOs, clinics/public hospitals that give contraceptive services depending on the registration status or not. If they were legally registered, they could get FOC contraceptive services and if they were not legally registered, they had to pay out-of-pocket-money to get contraceptive services.

Resources (Human Resource/Finance) : The respondents were asked about whether they had not received contraceptive services due to limited numbers of

qualified or skillful health care service providers and whether they had not received contraceptive services due to absence of health insurance.

Availability to contraceptive information: The respondents were asked about the availability of contraceptive information from formal or informal health education sessions and health education materials from friends or health personnel at NGOs or private or public or from family members or from working place.

Availability of contraceptive methods: The question asked about the availability of different types of contraceptive methods and from where the respondents got the methods from drug store or friends or public hospitals or private clinic or health personals from NGO.

Accessibility of contraceptive methods: The question asked about the geographical accessibility including duration of travel, economical accessibility including the affordability of respondents to pay for contraceptive services and socio-cultural accessibility including cultural norms and taboos which prevent receiving contraceptive services and time accessibility including the working hours or opening hours of the NGOs/ private and public hospitals.

Part 5 : Responsiveness factors (From Q 48 – 52)

Attitudes of health care service providers: The respondents were asked about whether the health service providers will friendly welcome you or negative judgement towards respondents' age or not being married.

Confidentiality /privacy: The question asked about the maintenance of confidentiality of respondents by health service providers during the discussion with health service providers.

Long waiting time: The question asked about whether the respondents waited for a longer time before consultation with health service providers and whether the respondents had not received contraceptive services due to long waiting time at NGO/private clinics or public hospitals.

Choice of preference of same gender service providers. The question asked about whether the respondents had choice of same gender service providers when receiving contraceptive health care services, which meant female

respondents preference of female service providers and male preference of male service providers.

Part 6: Current contraceptive utilization in Myanmar youth migrants in Samutsakhon Province (From Q 53-55)

The questions asked about the current use of contraception in Myanmar migrant youths if they were using contraception currently or not. If they were not currently using, then, the question asked the reasons why they were not using contraception currently.

3.7 Validity and Reliability Test of the questionnaire

3.7.1 Construct Validity

The researcher used conceptual framework based on Anderson health service utilization model (the combination of 1960 Model and 1970 Model) and was also validated by three experts according to variable measures in operational definitions.

3.7.2 Face validity

In order to test face validity, the researcher conducted pilot test as mentioned below in 3.7.3 in order to know the common sense of the population and in order to ensure the comprehension of each question.

3.7.3 Pilot testing

The researcher conducted pilot test (pre-test) with 10% of similar sample population who were not participating in the research and did not have contact enough to ensure non-contamination with the real participants. So, the researcher did pilot test in Bang Khun Thain district which was the southernmost district in Bangkok Province in order to test the process how to conduct the interview, to detect the comprehension of respondents, duration of questionnaires, sequences or flow of questionnaires and the sensitivity of the questionnaires..

3.7.4 Reliability

Kuder Richardson 20 and Cronbach's alpha with cut-off point 0.7 were used to test the reliability of the internal consistency of the questionnaires .The

results from KR 20 for 16 knowledge questions showed 0.71 and 0.73 for 8 attitude related questions.

3.7.5 Translation

The questionnaire was prepared in English language and this questionnaire was translated into Myanmar language by one expert who is working as a lecturer in WHO collaborating Centre for Medical education at Faculty of Medicine, Chulalongkorn University. Then, already translated Myanmar language questionnaires was translated back into English by second expert who has satisfied proficiency in both Myanmar and English language and who is expert in vocabularies and who is working as a researcher in reproductive health field at Medical Action Myanmar which is an international non-governmental organization in Myanmar. The second expert did not know the original English language questionnaires. For small discrepancies between the two experts, the researcher discussed and solved that problem together with these two experts and chose the suitable translation.

3.8 Data collection Process

Data collection was conducted by the principle researcher and three research assistants during May 2018 to June 2018 in Samutsakhon Province, Thailand. The data was collected by self-reporting method by self-administered questionnaires. The research assistants are the volunteers from Myanmar migrant worker association who had at least High school/Bachelor degree holder. In order to monitor the quality of data collection, the principle researcher did training for research assistants before the data collection. The researcher gave one day training to three research assistants in migrant worker association in Samutsakhon Province. During training, the researcher gave lectures by using questionnaires and contraceptive related books to research assistants. Moreover, the researcher also trained assistants to know the rules and regulations of data collection methods, research objectives, methodology, details about questionnaires and ethical concerns. After the training, the researcher tested the knowledge and performance of research assistants by using questionnaires. Before data collection, the researcher and research assistants explained the

participants about the anonymity, confidentiality, participant information sheet and consent form expressing the right to refuse to participate in the research and freedom to withdraw during answering questionnaires and no use of data for other purposes. The data collection was done by self-reporting by self-administered questionnaires. Answering self-administered questionnaires took 30- 40 minutes and taken in places where the respondents felt convenient and confidential to answer the questionnaires at their residence or at Myanmar migrant worker association or during lunch break time at their work if permission was obtained from authorities from factories or industries or after their working hours and on holidays. The data was collected by using convenient sampling method from five different sampling sites. Firstly, the data was collected from Myanmar migrant youths who are coming to receive library services in order to get the minimum 120-sample size in one month as there are 30-35 youths coming to library per weekends. Then, the data was collected from migrant youths according to their sites of work that are top three employment sectors in Samutsakhon Province: fishery related (29.3%) (116 samples), fishery (15.2%)(60 samples) and other manufacturing (15.5%)(64 samples) of my whole targeted population, taking references from the study namely “Accessing potential changes in the migration pattern of Myanmar migrants and their impacts ”conducted by IOM(Country Mission in Thailand and Asia Research Centre for Migration) in 2013(79). According to these, the researcher will get total 360-sample population. Finally, the researcher collected the rest of the samples from households in Samutsakhon Province by convenient sampling method until targeted sample size was reached. Respondents answered self-administered questions by themselves and after that, they had to give the questionnaires back to principle researcher or research assistants by folding it in half and by stapling it in the middle of the fold. Then, principle researcher and three research assistants checked whether the questionnaires were completely answered or not and after the completeness was checked, all the questionnaires were collected and put into opaque file. Principle researcher kept the questionnaires confidentially and will be destroyed the questionnaires after the thesis is completed.

Out of 404 participants, 32 participants did not give consents to participate in this research. Refusal rate in this study was 10% (37 participants). So, total sample population was 372 respondents.

3.9 Data Entry

The principle researcher checked and put the data every day after the data collection. Before entering the data, the questionnaires were coded and data entry was done by double entry process and data analysis was done by SPSS software version 22 program.

3.10 Data Analysis

Descriptive analysis

Descriptive analysis for independent variables was done among total sample population 372 respondents. For continuous data, minimum, maximum, mean, standard deviation, frequency and percentage were used and for categorical data, number, frequency and percentage were used.

Inferential Statistics

For bivariate analysis, Pearson's Chi square test with statistical level of P value <0.05 was used to analyze the association between all independent variables and dependent variables for contraceptive use among sexually active 258 respondents. However, Fisher's exact test with statistical level of P value <0.05 was used instead of Chi square test when the expected frequency count was less than 5 or more than 20% of cells.

For multivariate analysis, multiple logistic regression was used to analyze the associations between independent variables and dependent variable among sexually active 258 respondents.

The variables which were significant at P value <0.25 in bivariate analysis and other variables which were theoretically important and had been confounders in previous research even if their significance > 0.2 were included in this multiple logistic regression model.

3.11 Ethical Consideration

Ethical approval was obtained from the Ethical Committee for Research Involving Human Subjects Health Science Group of the Chulalongkorn University. For migrant youths who were under 18 years of age, the researcher asked consents by youths themselves as the researchers asked for waiver for parental consents from Ethical Review Committee for research Chulalongkorn University. One reasons was that it was difficult to recruit youth migrants into my research if parental permissions were required as majority of my study population was independent, mobile and did not live with their parents. Another reason was that there might be broken of confidentiality , privacy and autonomy of my study population as my study population included unmarried youth migrants and they did not want their parents or guardians to know their status such as use of contraception in pre-marital sexual intercourse. One study namely “Human participants challenges in youth tobacco cessation” research article from Institute for health research and policy from University of Illinois at Chicago used waivers of parental consents because waiving can facilitate the recruitment of youths into their study and also for the maintenance of autonomy, confidentiality and privacy of youth involved in this study (80). In addition, there is another cross-sectional descriptive study namely “Situational analysis of adolescents attempted suicide in Chaiprakarn District,Chiangmai Province in Thailand” which asked adolescents questionnaires without parental consents as the researcher said contacting parents for their informed consent is difficult due to time and budget constraint. Moreover, adolescents involved in this research were considered as mature enough to be autonomous in decision making according to Thailand Section 23 and 25 of “Civil and Commercial Code” which state that “a minor can do all acts which are strictly personal” and “a minor older than 15 years can make a will” (81).

With the help of research assistants, the principle researcher informed about the research to Myanmar migrant worker association, authorized persons from factories or industries, and got authorization to do the research. Before

answering self-administered questionnaires, the clear verbal explanation about the objectives, methods, and procedures of the research were given to participants and informed consent was taken describing that the participants have the right to participate freely, to withdraw anytime, no use of these data for other purposes for participants' confidentiality. Moreover, the researcher explained the participants about the benefits and risks of this research and answering the self-administered questionnaires was done in places where participants felt convenient and confidential prioritizing the privacy of the participants. The names of the respondents were not be noted and the answers were kept in opaque files for respondents' confidentiality and the written consents that included participants' sign were also be kept in separate opaque files for the participants' confidentiality. Then, the questionnaires were kept by the researcher and destroyed when the thesis will be completed.

3.12 Limitation

This study did not represent to all Myanmar migrant youths in Samutsakhon Province in Thailand, as the researcher used convenience-sampling method due to mobile migrant nature of population, resulting in bias in this study. As this study is a cross-sectional study and accessed the independent factors and dependent factors at the same time, this research could not determine cause and effect relationship.

3.13 Obstacles and Strategies to solve the problem

The contraceptive use among youth migrants including unmarried youths was a sensitive issue due to the social and cultural factors in Myanmar migrant population. Therefore, there might be some issues in answering the questionnaires such as development of shyness, hesitation to answer the questions and distortion of the real answer, which might affect the validity and reliability of the answers although the researchers used self-administered method. However, in order to prevent these problems, the researcher explained and discussed clearly about the objectives, expected benefits and ethical issues

to research assistants, migrant worker association and the participants before collection of data.

3.14 Expected Benefit and Application

This study examined not only the socio-demographic characteristics of Myanmar youth migrants but also provided the level of knowledge and attitude concerning with contraceptive usage among Myanmar youth migrants in Samutsakhon Province. In addition , from this study, we could learn not only the factors affecting the contraceptive utilization but also some of the barriers for not using contraception among Myanmar youth migrants, which could provide base-line information for health authorities for promoting further public health policy and giving further reproductive health care services to Myanmar youth migrants in Samutsakhon Province.



CHAPTER IV: Results

4.1 Background Information of the Study Area

This study aimed to describe predisposing factors which includes demographic factors ,social structure factors and health belief factors , enabling factors, need factors, health system factors, responsiveness factors and current contraceptive utilization and to analyze the relationship between them among Myanmar youth migrants in Samutsakhon Province, Thailand. The study population consisted of 372 Myanmar youth migrants in Samutsakhon Province, Thailand. Among 372 Myanmar youth migrants, 258 were sexually active and 114 were sexually inactive.

First part of the result focuses on descriptive analysis of all predisposing factors such as demographic factors, social structure factors ad health belief factors, enabling factors such as personal, parental and partner factors, need factor such as previous history of sexual intercourse, health system factors ,responsiveness factors and current contraceptive utilization among 372 Myanmar youth migrants.

Second part of the result then focuses on bivariate and multivariate analysis between independent variables and dependent variables which are current use and no current use of contraception among sexually active 258 Myanmar youth migrants.

Part I: Descriptive Findings

a) Predisposing Factors

4.2 Socio-demographic characteristics

4.2.1 Demographic factors: Age group, Sex, Religion, Duration of stay in Samutsakhon, Registration Status

As described in table 4.1, age was divided into 3 groups and mentioned as 15-16 years, 17-19 years and 20-24 years group and the mean age of the respondents was 21 years old. Majority 76.3% were included in the 20-24 years age group and only 1.6 percent were in 15-16 years age group. Nearly 61 % of the respondents were female and 39.2 % were male. Moreover, 89% of respondents were Buddhists while 11.1 % were other religions. Majority of respondents (91.7%) were living in Samutsakhon for less than 6 years while the minority (8.4%) were living for more than 6 years. Besides, greater proportion of respondents (93.3%) were registered and only 6.7% were unregistered.

Table 4. 1 Demographic Factors: Age group, Sex, Religion, Duration of stay in Samutsakhon Province, Registration status of the respondents

Demographic Characteristics	Frequency(n)	Percentage (%)
Age group of respondents (n=372)		
15-16 year group	6	1.6
17-19 year group	82	22.0
20-24 year group	284	76.3
Mean= 21.26		
,SD= 2.184		
Range= 15-24		
Sex(n=372)		
Male	146	39.2
Female	226	60.8
Religion(n=372)		
Buddhist	331	89.0
Muslim	8	2.2
Christian	32	8.6
Hindu	1	0.3

Duration of stay in Samutsakhon(n=372)		
< 2 years	80	21.5
2-4 years	164	44.1
4-6 years	97	26.1
6-8 years	20	5.4
>8 years	11	3.0
Registration Status(n=372)		
Unregistered	25	6.7
Registered	347	93.3

4.2.2 Social Structure Factors: Ethnicity, Education level, Occupation, Marital status, Anyone staying together in Samutsakhon and Thai language skill

According to table 4.2, over half of respondents (61.6%) were Burma, followed by Karen (20.7%) and Mon (15.9%). Nearly 54% of the respondents were in secondary school level while only 8.8 percent could read and write simple Myanmar language. Regarding occupation, 45.7 % of respondents were factory workers, 15.9% were working in construction and average 14% were working in agriculture and in domestics respectively. For marital status, nearly half of the population were legally married while 19.1% were living together although they were not legally married. Majority 63.4% of the respondents were living together with their spouse(32.8%) and parents(30.6%) respectively while only a few (5.4%) of the respondents lived with their partners. Concerning Thai language skills, a few 11% could read and speak fluently Thai language while 22% did not know Thai language at all.

Table 4. 2 Social Structure Factors: Ethnicity, Education level, Occupation, Marital status, Anyone staying together in Samutsakhon and Thai language skill of the respondents

Social Structural Characteristics	Frequency(n)	Percentage (%)
Ethnicity(n=372)		
Burma	229	61.6
Karen	77	20.7
Mon	59	15.9
Shan	4	1.1
Others	3	0.8

Education level(n=372)		
Can read and write simple language	31	8.3
Primary school level	67	18
Secondary school level	199	53.5
High school level	75	20.2
Occupation(n=372)		
Factory worker	170	45.7
Construction worker	59	15.9
Agricultural worker	52	14.0
Domestic helper	55	14.8
General/Random laborer	30	8.1
Others	6	1.6
Marital Status(n=372)		
Single	114	30.4
Legally married	181	48.9
Living together not legally married	71	19.1
Widow	2	.5
Divorced/Separated	4	1.1
Anyone staying in Samutsakhon (n=372)		
Parents	114	30.6
Spouse	122	32.8
Partners	20	5.4
Friends	105	28.2
Others	11	3.0
Thai language skill(n=372)		
Can read and speak fluently	41	11.0
Cannot read but can speak	129	34.7
Cannot speak but can understand	120	32.3
Do not know at all	82	22.0

4.3 Heard of any contraceptive Method

Out of 372 respondents, majority of respondents (82.5%) had ever heard of contraceptive methods. Only a few 17.5% of respondents answered that they never heard of contraceptive methods and their knowledge scores were regarded as 0 as they had to skip all the questions concerning with contraceptive knowledge.

Table 4. 3 Ever heard of any contraceptive Method

Ever heard of any contraceptive Method(n=372)	Frequency(n)	Percentage (%)
Yes	307	82.5
No	65	17.5

Ever heard of Specific Contraceptive Method

Table 4.4 shows the respondents' answers on heard of specific contraceptive methods. For modern contraceptive methods, oral contraceptive pills were the most popular with 98.4 % while injections and male condoms were the second most popular methods with each 95.1% respectively. However, female condom (35.8%) and emergency pills (28.3%) were the methods that ever heard the least among the respondents. For traditional methods, over half of the respondents (62.5%) had ever heard of withdrawal method while 45% had ever heard of safe period.

Table 4. 4Ever heard of specific Contraception Method with answers

Heard of contraception(n=307)	Heard	Not heard
	N (%)	N (%)
Oral Contraceptive pill	302(98.4%)	5(1.6%)
Injections	292(95.1%)	15(4.9%)
Emergency pills	87(28.3%)	220(71.7%)
Implants	115(37.5%)	192(62.5%)
IUD	115(37.5%)	192(62.5%)
Female condom	110(35.8%)	197(64.2%)
Male condom	292(95.1%)	15(4.9%)
Female sterilization	268(87.3%)	39(12.7%)
Male sterilization	161(52.4%)	146(47.6%)
Withdrawal before ejaculation	192(62.5%)	115(37.5%)
Safe period	138(45.0%)	169(55.0%)

4.4 Health belief Factor: Knowledge Concerning Contraceptive Method

Table 4.5 shows correct answers of the respondents concerning knowledge about each contraceptive method. Majority 85.3% knew that depo injection should be taken 3 monthly to prevent pregnancy. For oral

contraceptive pills, a higher proportion of respondents (97.4%) knew that OC pills should be taken everyday while only 24.2% % answered OC pills cannot prevent sexually transmitted diseases.

Majority of the respondents had little knowledge on emergency contraceptive pills. Only 24.4% answered correctly that second dose of emergency pills should be taken 12 hours after the first dose and only 7% thought that emergency pills cannot be substituted for regular contraception.

Similarly, respondents seemed to have little knowledge on implant and IUD methods. A few 33.6 % knew that implants can be used to prevent pregnancy for 3-5 years depending on types of implants and only 13.2% of the respondents answered that IUD does not interfere with sexual intercourse. Majority 86% answered correctly that both male and female condoms could prevent both pregnancy and sexually transmitted diseases including HIV/AIDs.

Furthermore, 91.5% of the respondents answered correctly about female sterilization while only 7% of the respondents answered that male sterilization cannot reduce sexual desire and cannot cause weakness to men.

For traditional contraceptive methods, 41.7% of the respondents knew that withdrawal does not work well at preventing pregnancy while only 15.9 % of the respondents answered that safe period cannot be used as an effective contraceptive method.

Only a few 7.5% correctly answered that all contraceptive methods cannot prevent both sexually transmitted and pregnancy if used properly.

Table 4. 5Health Belief Factor: Respondents' Correct Answers Concerning Knowledge about Contraceptive Methods

Statement(n=307)	Correct Answers	
	Number	Percentage
1. Depo injection should be taken once in 3 months to prevent pregnancy.	262	70.40%
2. Women who take oral contraceptive pills should take a pill every day at the same time to void becoming pregnant.	299	80.40%
3. Oral contraceptive pill can prevent sexually transmitted disease.*	90	24.20%

4. Emergency contraceptive pill can substitute for regular contraception.*	26	7.00%
5. 2nd dose of emergency contraceptive pill should be taken 12 hours after the first dose.	75	20.20%
6. Implants can be used to prevent pregnancy for 3-5 years depending on type of implant.	103	27.70%
7. IUD interferes sexual intercourse.*	49	13.20%
8. Male condoms may slip off during sexual intercourse if not used correctly.	261	70.20%
9. Male and female condoms can prevent both pregnancy and sexually transmitted diseases including HIV/AIDS.	264	71%
10. Female condom is placed inside the vagina.	161	43.30%
11. If the women do not want the children anymore, sterilization can be used.	281	75.50%
12. Male sterilization can reduce sexual desire and it can cause weakness to men.*	26	7.00%
13. Withdrawal before ejaculation does not work well at preventing pregnancy.	155	41.70%
14. Safe period can be used as an effective contraceptive method.*	59	15.90%
15. Incorrect and inconsistent use of contraception can cause unwanted pregnancy.	287	77.20%
16. All contraceptive methods can prevent both sexually transmitted infections and pregnancy if used properly.*	28	7.50%

Level of Knowledge

Among 372 respondents, majority (78.8 %) had poor level of knowledge which was defined when the score was less than 10 out of total 16 scores while only a few 0.5 % had good level of knowledge which was defined when the score was more than 13 out of total 16 scores.

Table 4. 6 Level of Knowledge Concerning Contraceptive Method

Level of Knowledge(n=372)	Frequency(n)	Percentage (%)
Poor level of knowledge (< 60%)	293	78.8
Fair level of knowledge (60-80%)	77	20.7
Good level of knowledge (>80%)	2	0.5

4.5 Health Belief Factor: Attitude towards Pre-marital sex and contraception

Table 4.7 shows that 31.4 % of the respondents revealed that pre-marital sex is acceptable for unmarried youths who promise to marry but cannot marry yet.

Around 30% of the respondents disagreed that providing information to youths about contraception can increase the rate of sexual activity. Moreover, over half of the respondents agreed that contraceptive utilization should be taught in school and discussion on using contraception is not a shameful manner among couples.

Only 16.2 % disagreed that buying or assessing contraception is a shameful manner among couples while 61.8 % agreed that they need negotiation skill to convince your partner to use condom.

A few 18.3% of the respondents disagreed that they will be looked down or stigmatized if their friends find them with condom.

Table 4. 7Health Belief Factor: Attitudes of Respondents towards Premarital Sex and Contraception

Statement(n=372)	Frequency(Percentage)				
	SA	A	UC	DA	SD
1.Pre-marital sexual relation is acceptable for those who promise to marry but can't marry yet.	22 (5.9%)	95 (25.5%)	60 (16.1%)	136 (36.6%)	59 (15.9%)
2.It is acceptable to have pre-marital sex for men but not for women.	53 (14.2%)	91 (24.5%)	94 (25.3%)	109 (29.3%)	25 (6.7%)
3.Providing information to youths about contraception can increase the rate of sexual activity.	9 (2.4%)	97 (26.1%)	154 (41.4%)	71 (19.1%)	41 (11.0%)
4.Contraceptive utilization should be taught in the school.	80 (21.5%)	152 (40.9%)	80 (21.5%)	43 (11.6%)	17 (4.6%)
5.Discussion on using contraception is not a shameful manner among couples.	70 (18.8%)	203 (54.6%)	71 (19.1%)	22 (5.9%)	6 (1.6%)
6.Buying or assessing contraception is a shameful manner for unmarried youths.	50 (13.4%)	184 (49.5%)	78 (21.0%)	33 (8.9%)	27 (7.3%)
7.You need negotiation skill to convince your partner to use condom.	80 (21.5%)	150 (40.3%)	107 (28.8%)	29 (7.8%)	6 (1.6%)
8.If you go for a shop for contraception and if your friends find you with condom, you will be looked down or stigmatized.	74 (19.9%)	131 (35.2%)	99 (26.6%)	48 (12.9%)	20 (5.4%)

Level of attitude

Regarding attitude, the mean score of attitude was 25 and standard deviation was 4. The score of the attitude was defined as negative when the score was less than or equal to 25-4(21) and as positive when it was greater than or

equal to 25+4(29). Table 4.8 shows over half of the respondents (65.1%) had neutral attitude.

Table 4. 8 Level of Attitude towards Premarital Sex and Contraception

Level of Attitude(n=372)	Frequency(n)	Percentage (%)
Negative attitude (Less than & equal to 21)	66	17.7
Neutral attitude (Between 22 to 28)	242	65.1
Positive attitude (More than & equal to 29)	64	17.2

b) Enabling Factors

4.6 Personal, Family and Partner Enabling Factors

Regarding own income, an overwhelming majority of respondents have own income (96%) and 81.7% of respondents answered that their income was sufficient for their living expenses.

Among 372 respondents, only 21.2 % of the respondents discussed about contraception with their parents and 86.1 % who discussed used contraception according to their parents' suggestions. Concerning partner factor, there were 32.8% of respondents who discussed about contraception with their partners and majority 92.6 % who discussed used contraception according to their partners' suggestions.

Table 4. 9 Enabling Factors: Own Income, Sufficiency of income, Discussion with parents, partners and Use of contraception according to their discussion

Enabling factors	Frequency(n)	Percentage (%)
Own Income(n=372)		
Yes	357	96
No	15	4.0
Income(n=372)		
Sufficient	304	81.7
Not sufficient	68	18.3

Discussion with parents (n=372)		
Yes	79	21.2
No	293	78.8
Use of contraception according to discussion with parents (n=79)		
Yes	68	86.1
No	11	13.9
Discussion about use of contraception with partners(n=372)		
Yes	122	32.8
No	250	67.2
Use of contraception according to discussion with partners (n=122)		
Yes	113	92.6
No	9	7.4

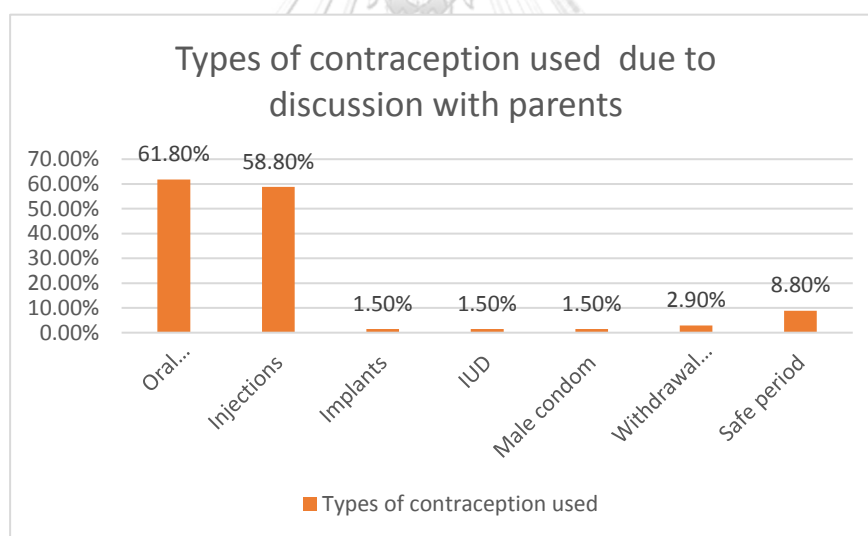


Figure4. 1Types of contraception used according to discussion with parents (n=68)

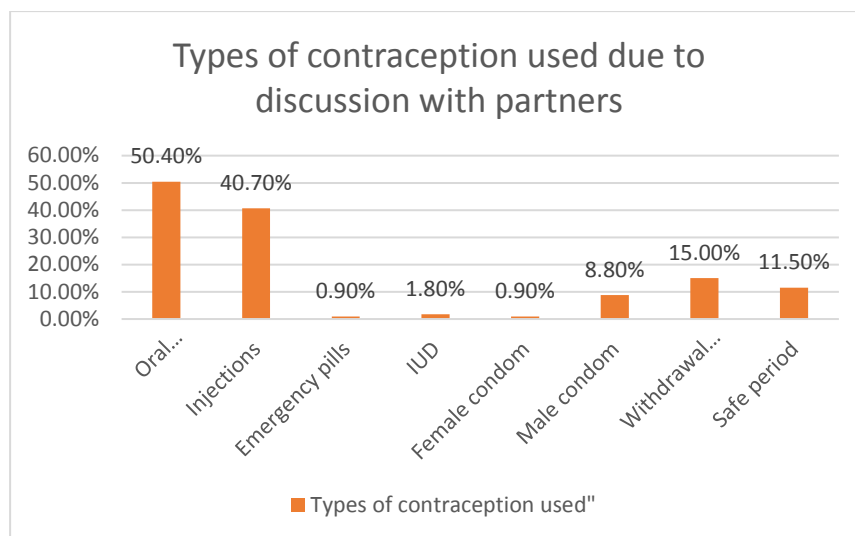


Figure4. 2Types of contraception used according to discussion with partners (n=113)

c) Need Factors

4.7 Experience on sexual intercourse and Age Group at first sexual intercourse

Among 372 respondents, 69.4% of respondents had experienced sexual intercourse. Mean age at first sexual intercourse was 19.69 years and over half of respondents (57.4%) had their first sexual relationships in their 20-24 years of age.

Table 4. 10History of sexual intercourse and Age Group at first sexual intercourse with gender

Need Factors	Frequency(n)	Percentage (%)
History of sexual intercourse(n=372)		
Yes	258	69.4
No	114	30.6
Age group at 1st sexual intercourse(n=258)		
15-16 years	5	1.9
17-19 years	105	40.7
20-24 years	148	57.4
(Mean age=19.69 years)		
Range from 15-24 years		

4.8 First Sexual Intercourse

As shown in Table 4.11, 43.4% of the respondents had first sexual relationship with their boyfriends/girlfriends, followed by with their spouse (nearly 40 %).Furthermore, 61.6 % of the respondents used contraception at their first sexual intercourse while 38.4 % did not use contraception at their first sexual intercourse.

Table 4.1 1Types of relationship at first sexual intercourse and use of contraception at first sexual intercourse

Need Factors	Frequency(n)	Percentage (%)
Types of relationships at first sexual intercourse(n=258)		
Boyfriend/Girlfriend	112	43.4
Sex Worker	6	2.4
One nightstand	38	14.7
Husband	77	29.8
Wife	25	9.7
Use of Contraception at First Sexual intercourse(n=258)		
Yes	159	61.6
No	99	38.4

4.9 Sex by Peer Pressure and Use of Contraception

Table 4.12 shows that 45.7 % of respondents had sexual intercourse due to their peer pressure and among them,81.4% used contraception when sex by peer pressure. Moreover, 80.2% got peer pressure to use contraception when sex by peer pressure according to Table 4.12.

Table 4.1 2History of sex by peer pressure and use of Contraception and getting peer pressure to use contraception when sex by peer pressure

Need Factors	Frequency	Percentage (%)
History of sexual intercourse due to peer pressure (n=258)		
Yes	118	45.7
No	140	54.3
Use of Contraception when sex by peer pressure (n=118)		
Yes	96	81.4
No	22	18.6
Use of contraception due to peer pressure (n=96)		
Yes	77	80.2
No	19	19.8

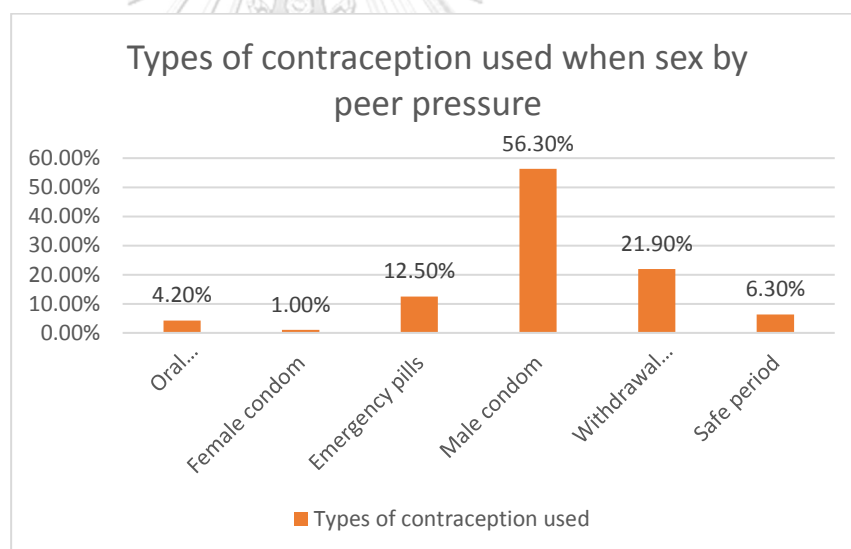


Figure4. 3Types of contraception used when sex by peer pressure (n=96)

4.10 Sex with Commercial Partner and Use of Contraception

Among sexually active 258 respondents, 31.8% of respondents had sexual intercourse with commercial sex partners and 53.1% used contraception when sex by commercial sex partners: 62.8% used male condoms and 37.2% used withdrawal method.

Table 4.1 3 History of sexual intercourse with sex worker and use of contraception

Need Factors	Frequency	Percentage (%)
History of sexual intercourse with sex workers (n= 258)		
Yes	82	31.8
No	170	65.9
No response	6	2.3
Use of Contraception when sex by commercial sex partner(n= 82)		
Yes	43	53.1
No	38	46.9



Figure4. 4Types of contraception used when sex with sex workers (n=43)

d) Health System Factors

4.11 Policy, Health Workforce and Finance of Public Hospitals, Private Clinics and NGOs

Regarding policies of public hospitals, NGOs and private clinics, 57.8 % of the respondents knew the policies of hospital and clinics while 42.2% did not know. Furthermore, 43% of respondents did not receive contraceptive services due to limited number of skillful health service providers. Majority 90.3

% of respondents had health insurance in this study while only a few 9.7% did not have health insurance.

Table 4.1 4 Health system Factors: Policies of public hospitals, NGOs and private clinics, Health workforce and Health Insurance

Health System Factors	Frequency	Percentage (%)
Policies(n=258)		
Know	149	57.8
Don't know	109	42.2
Not receiving contraceptive services due to limited number of skillful health service providers(n=258)		
Yes	111	43
No	147	57
Health insurance(n=258)		
Yes	233	90.3
No	25	9.7

4.12 Health System Factors: Health Education Session and Health Education Materials about Contraception

Table 4.15 describes that over half of respondents received both health education session (53.1%) and health education materials (57%) about contraceptive methods.

Table 4.1 5 Health System Factors: Receiving health education sessions and health education materials about contraception

Health System Factors	Frequency	Percentage (%)
Received HE session about contraceptive methods(n=258)		
Yes	137	53.1
No	121	46.9

Received HE materials
about contraceptive
methods(n=258)

Yes	147	57
No	111	43

4.12.1 Health System Factors: Types and Sources of Health Education Session

According to Fig 4.5 and 4.6, 70.1% of respondents got health education sessions from health talks which was the highest followed by videos(48.2%) and individual discussion with health professionals (32.8%) respectively. Major source of health education session was from health personals (73%) while the respondents got health education session from their friends, working place and family members with 43.1%, 35.8% and 30.7% respectively.

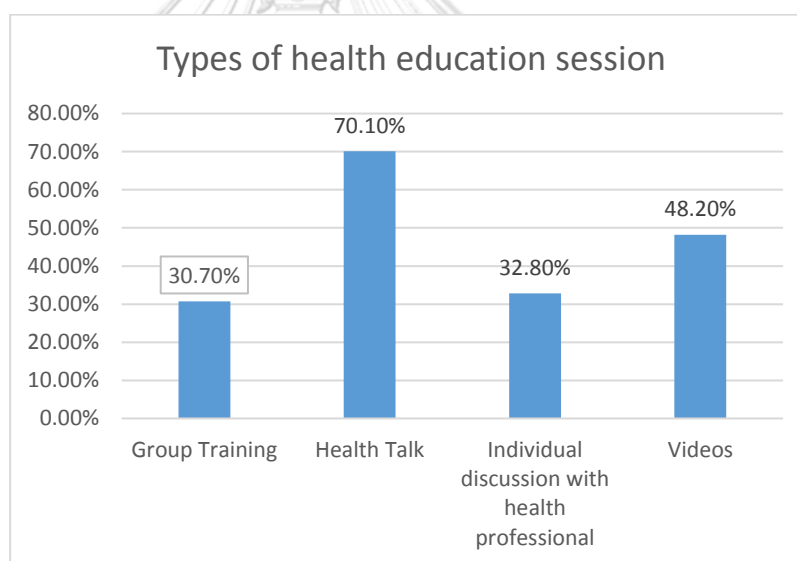


Figure4. 5 Types of Health Education Session (n=137)

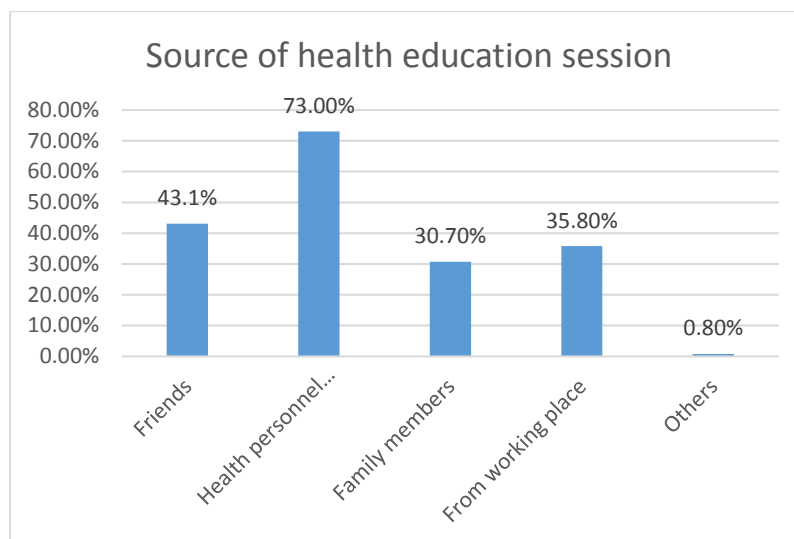


Figure4. 6 Source of Health Education Session (n=137)

4.12.2 Health System Factor: Source of Health Education Materials

Fig 4.7 also reveals that the highest and the second highest source of health education materials were from health personals from NGOs or private or public clinics or hospitals and from friends with 63.3% and 53.1% respectively. Respondents also got health education materials from working place and family members.

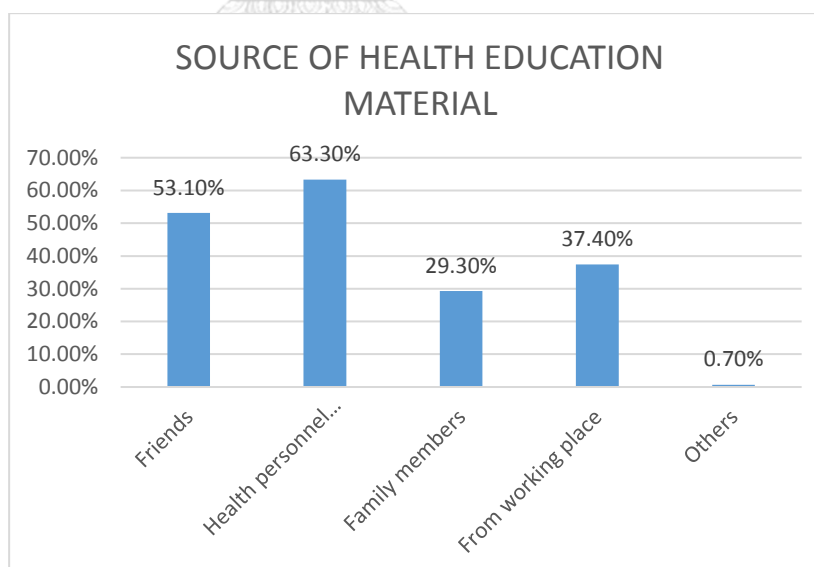


Figure4. 7 Source of Health Education Material (n=153)

4.13 Health System Factor: Easy Availability and Sources of Contraception when needed

Table 4.16 also shows availability of contraception in need and sources where respondents received contraception in need. Over half of the respondents (75.2%) answered they had an easy availability of contraceptive methods in need. Main source of contraception in need was drug store (68.6%) while 41.8 % and 32.5 % of the respondents received contraception from private clinics and public clinics respectively.

Table 4.1 6 Health System Factor: Easy availability of contraception in need and source of contraception

Health System Factors	Frequency(n)	Percentage (%)
Easy availability of contraception when needed (n=258)		
Yes	194	75.2
No	64	24.8
Source of contraception in need(n=194)		
Drug Store	132	68.8
Public Clinic	63	32.5
Private Clinic	56	41.8
Friend	8	2.2
Health personals from NGO	2	0.5

4.14 Health System Factors: Time Taken, Affordability, Community Culture, Taboos and Working/Opening hours of NGOs, Public or Private Hospitals or Clinics.

As described in Table 4.17, nearly half of the respondents answered the nearest source of contraception was less than 30 minutes while only 8.9 % said they went to nearest source of contraception for about 1- 2hours. Moreover, majority 62% said they were affordable to price of contraception. Concerning community taboos and culture, there were only 7.4 % of respondents who did not receive contraception due to influences of community taboos and culture

.Besides, majority 75.2% said that working hours of the public hospitals, private clinics or NGOs were not convenient for them while only 24.8% answered they were convenient about opening or working hours of clinics, NGOs or hospitals.

Table 4.1 7Health System Factors: Time taken to the nearest source of contraception, Affordability to the price of contraception, Community taboos or norms, Working hours of Public or Private Hospitals or clinics or NGOs

Health System Factors	Frequency(n)	Percentage (%)
Time taken to the nearest source of contraception(n=258)		
Less than 30 minutes	127	49.2
30 minutes to 1 hour	69	26.7
1-2 hours	23	8.9
Over 2 hours	39	15.1
Affordable to the price of contraception(n=258)		
Yes	160	62
No	98	38
Not receiving contraception due to community taboos or norms(n=258)		
Yes	19	7.4
No	239	92.6
Convenient working hours(n=258)		
Yes	64	24.8
No	194	75.2

4.15 Responsiveness Factors: Friendly welcoming, Judgmental Attitude, Confidentiality, Waiting time and Choice of Same Gender Service Provider

According to table 4.18, majority 64.7% of the respondents said they were not friendly welcomed by service providers when they go to public or private clinic to receive contraception.

Moreover, over half of respondents believed that service providers would judge on their age or not being married if they go to NGO or public or private clinics to receive contraception.

With concern of confidentiality, only 25.2 % believed they had confidential discussion with health service providers when they go to receive contraceptive services. Moreover, majority 86% of respondents answered that they had to wait a long time before receiving contraceptive services and only 14 % said they did not.

Only 15.1 % of respondents believed that they discussed with same gender service providers when going to NGOs, public or private hospitals or clinics.

Table 4.1 8 Responsiveness Factors: Friendly welcoming, Judgmental Attitude, Confidentiality in service providers, Waiting a long time and Same Gender Service Providers

Responsiveness Factors	Frequency(n)	Percentage (%)
Friendly welcoming by service providers(n=258)		
Yes	91	35.3
No	167	64.7
Judgmental Attitude of Service providers (n=258)		
Yes	168	65.1
No	90	34.9
Confidentially discussion with service providers(n=258)		
Yes	65	25.2
No	193	74.8
Waiting a long time(n=258)		
Yes	222	86
No	36	14

Same gender service providers(n=258)		
Yes	39	15.1
No	219	84.9

4.16 Current Use of Contraception among Sexually Active Youths

Out of sexually active 258 respondents, there were 59.7% of the respondents who were currently using contraception while 40.3% were not currently using. As described in Table 4.22 and Myanmar youth migrants used modern contraception (83%) higher than traditional methods (21.5%). Among modern methods of contraception used, oral contraceptive pill was the major method used (40.9%) currently among Myanmar youth migrants followed by injections (25%) and male condom (18.8%). Emergency pill and IUD were the least popular contraceptive methods used currently among youths. In traditional methods, there was higher percentage of usage in withdrawal (16.9%) than in safe period (4.5%).

Table 4.1 9 Current use of contraception among Myanmar migrant youths

Current use of contraception	Frequency(n)	Percentage (%)
Current use of contraception(n=258)		
Yes	154	59.7
No	104	40.3
Total modern methods used	128	83
Total traditional methods used	33	21.5
Types of contraception currently used among youths		
OC pills	63	40.9
Injections	39	25
Emergency Contraceptive pills	2	1.3
IUD	2	1.3
Male condom	29	18.8
Withdrawal	26	16.9
Safe period	7	4.5

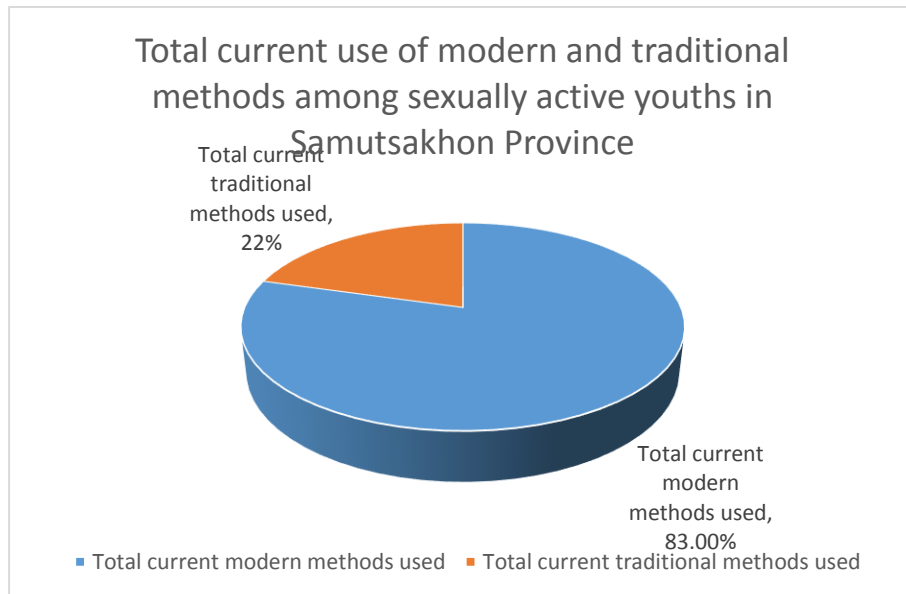


Figure4. 8 Total current use of modern and traditional methods (n=154)

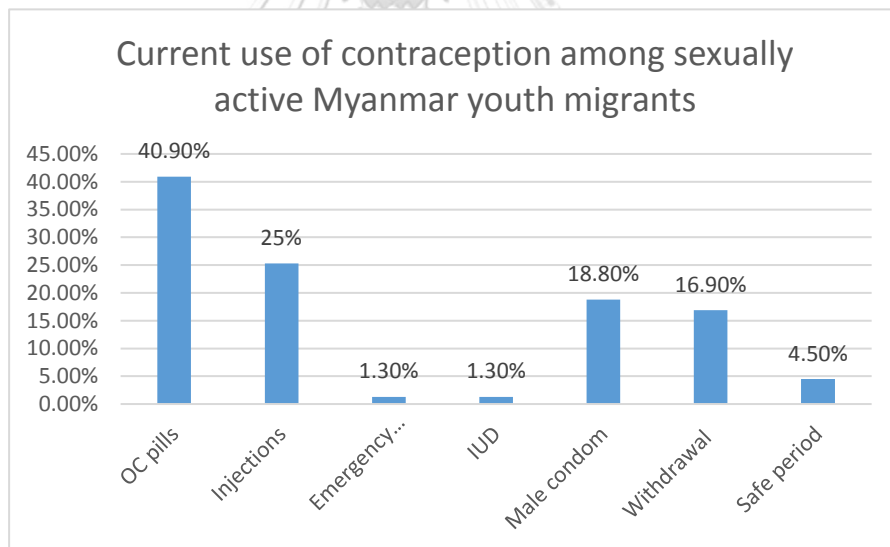


Figure4. 9 Current use of types of contraception among Myanmar migrant youths (n=154)

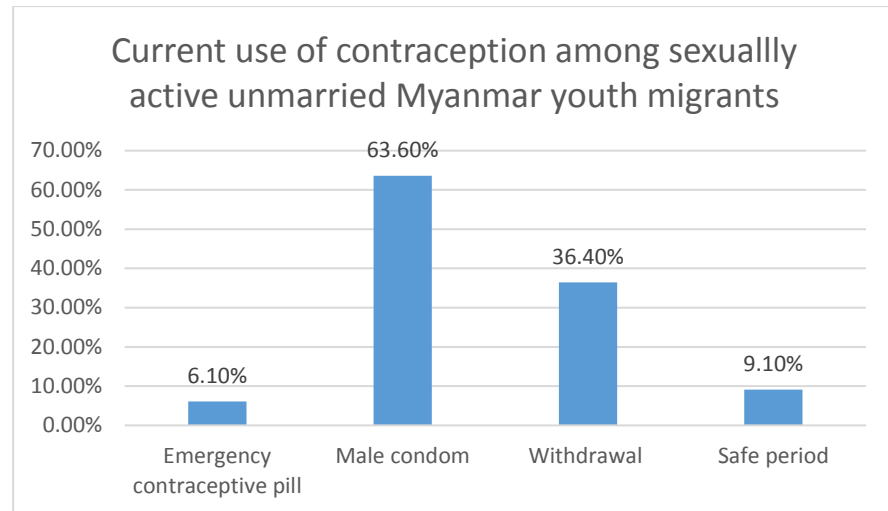


Figure4. 10 Current use of types of contraception among unmarried Myanmar youth migrants (n=71)

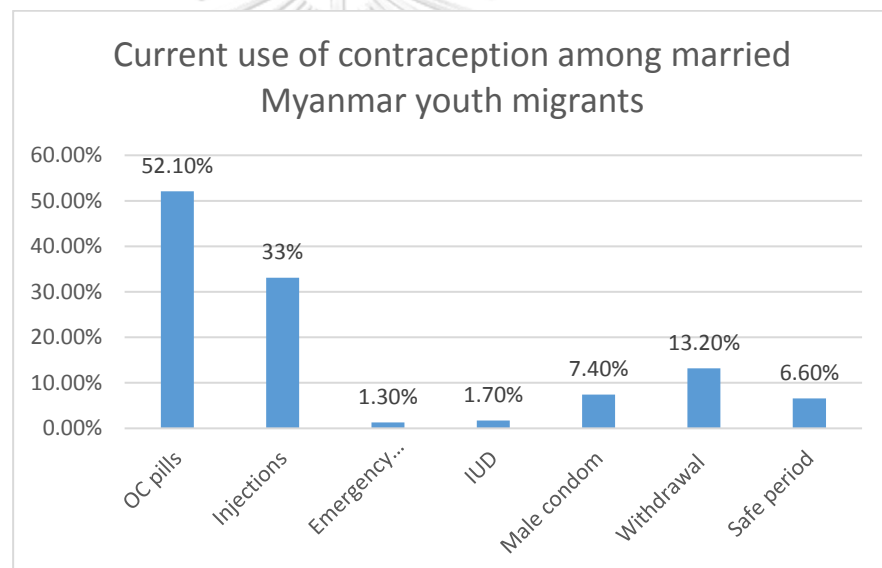


Figure4. 11 Current use of types of contraception among married Myanmar youth migrants (n=181)

4.17 Reasons for not using contraception currently

As shown in Fig 4.12, being afraid of side effects was the most popular reason (30%) why the respondents were not using contraception currently and 20% of the respondents did not use contraception currently because they wanted to have more children and 15% did not use as their partners were far away from them.

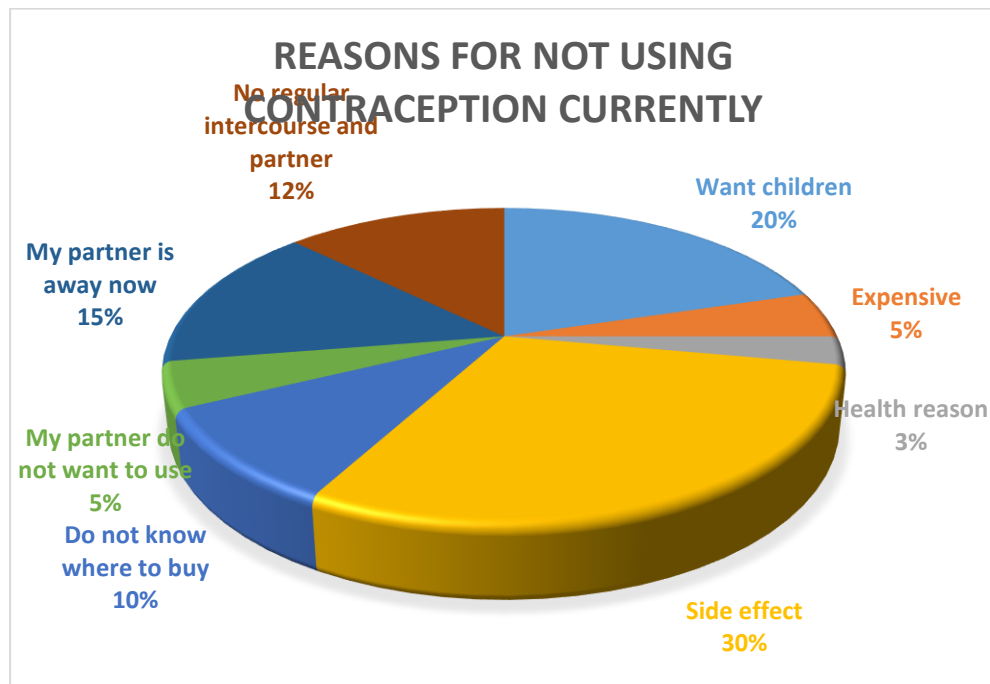


Figure 4.12 Reasons for not using any contraceptive method currently among Myanmar migrant youths (n=258)

Part II: Inferential Statistics

Bivariate Analysis

Chi square test was used to analyze the association between all independent variables and dependent variable: current use of contraception and no current use of contraception among 258 sexually active Myanmar youth migrants in Samutsakhon Province. For some cells with the frequency less than 5, Fisher exact test was used.

I. Association between predisposing factors and current use or no use of contraception among sexually active respondents

I A. Association between socio-demographic factors and current use or no use of contraception among sexually active respondents

There were significant associations between 4 variables in socio-demographic factors and current use or no current use of contraception. The result shows that education had significant association with current use and this was significant at p value 0.000 level. Similarly, marital status and anyone staying together had significant associations with current use of contraception and these associations were significant at 0.002 and 0.005 levels respectively. Moreover, occupation also had significant association with current use of contraception.

Table 4.20 Bivariate analysis of socio-demographic factors and current use or no current use of contraception

Socio-demographic Factors	Current use of contraception		P value
	Yes	No	
Age group (n=258)			
17-19 year	28(66.7%)	14(33.3%)	0.314
20-24 year	90(41.7%)	90(41.7%)	
Sex (n=258)			
Male	62 (54.9%)	51(45.1%)	0.163
Female	92(63.4%)	53(36.6%)	

Religion(n=258)			
Buddhist	133(58.8%)	93(41.2%)	#.784
Muslim	5(62.5%)	3(37.5%)	
Christian	16(66.7%)	8(33.3%)	
Duration of stay in Samutsakhon (n=258)			
4-23 months	32(61.5%)	20(38.5%)	#.617
24-47 months	71(62.8%)	42(37.2%)	
48-71 months	38(58.5%)	27 (41.5%)	
72-95 months	8(47.1%)	9(52.9%)	
96-144 months	5(45.5%)	6(54.5%)	
Registration Status (n=258)			
Unregistered	12(50%)	12(50%)	0.303
Registered	142(60.7%)	92(39.3%)	
Ethnicity(n=258)			
Burma	101(61.6%)	63(38.4%)	#.782
Karen	27 (56.3%)	21(43.8%)	
Mon	22(56.4%)	17(43.6%)	
Shan	3(75%)	1(25%)	
Others	1(33.3%)	2(66.7%)	
Education(n=258)			
Can read and write	10 (45.5%)	12(54.5%)	0.000**
Primary school	20(64.5%)	11(35.5%)	
Secondary school	68(48.2%)	73(51.8%)	
High school level	56(87.5%)	8(12.5%)	
Occupation(n=258)			
Factory worker	74(58.3%)	53(41.7%)	#0.041*
Construction	21(65.6%)	11(34.4%)	
Agricultural	30(76.9%)	9(23.1%)	
Domestic helper	20(57.1%)	15(42.9%)	
General laborer	7(36.8%)	12(63.2%)	
Others	2(33.3%)	4(66.7%)	
Marital status (n=258)			
Single	4(57.1%)	3(42.9%)	#0.000**
Legally married	117(66.1%)	60(33.9%)	
Living together	33(48.5%)	35(51.5%)	
Widow	0%	2(100%)	
Divorced	0%	2(100%)	

Anyone staying in Samutsakhon (n=258)			
Parents	33(62.3%)	20(37.7%)	#0.005*
Spouse	84(69.4%)	37(30.6%)	
Partners	8(40%)	12(60%)	
Friends	27(47.4%)	30(52.6%)	
Others	2(28.6%)	5(71.4%)	
Thai language skills(n=258)			
Can read and speak	14(56%)	11(44%)	0.222
Cannot read	50(54.9%)	41(45.1%)	
Cannot speak	56(69.1%)	25(30.9%)	
Do not know at all	34(55.7%)	27(44.3%)	

Fisher's Exact test, * p value < 0.05, ** p value < 0.00

I B. Association between health belief factors and current use or no current use of contraception among sexually active Myanmar youth migrants

As described in Table 4.21, there is significant association between ever heard of contraception and current use of contraception and this was significant at p value 0.000 level. Regarding level of knowledge, a significant association was found between this and current use of contraception at p value 0.000 level.

Table 4.2 1 Bivariate analysis of health belief factors and current use or no current use of contraception

Health Belief Factors	Current use of contraception		P value
	Yes	No	
Ever heard of contraceptive Method (n=258)			
Yes	150(62.8%)	89(37.2%)	#0.000**
No	4(21.1%)	15(78.9%)	
Level of knowledge (n=258)			
Poor (< 10 score)	94(51.9%)	87 (48.1%)	#0.000**
Fair (10-13 score)	59(78.7%)	16(21.3%)	
Good (>13 score)	1(50%)	1(50%)	
Level of attitude(n=258)			
Poor(< and = to 21)	26(57.8%)	19(42.2%)	0.919
Fair (22-28)	103(60.6%)	67(39.4%)	
Good(> and = to 29)	25(58.1%)	18(41.9%)	

Fisher's Exact test, * p value < 0.05, ** p value < 0.00

II. Association between enabling factors and current use or no current use of contraception among sexually active Myanmar youth migrants

According to Table 4.22, significant associations were found between two enabling factors and current use or no current use of contraception. Discussion about use of contraception with their partners had significant association with current use and this was significant at p value 0.006 level. Similarly, a significant association was also present between use of contraception according to partners' suggestions and current use and this association was significant at p value 0.033 level.

Table 4.2 Bivariate analysis of enabling factors and current use or no current use of contraception among sexually active Myanmar youth migrants (n=258)

Enabling Factors	Current use of contraception		P value
	Yes	No	
Own Income(n=258)			
Yes	150(60.5%)	98(39.5%)	#.208
No	4(40%)	6(60%)	
Income(n=258)			
Sufficient	128(62.1%)	78(37.9%)	0.111
Not sufficient	26 (50%)	26 (50%)	
Discussion with parents (n=258)			
Yes	46(58.2%)	33(41.8%)	0.75
No	108(60.3%)	71(39.7%)	
Use of contraception according to discussion with parents (n=258)			
Yes	40(58.8%)	28(41.2%)	#1.000
No	6(54.5%)	5(45.5%)	

Discussion with Partners (n=258)			
Yes	83(68.6%)	38(31.4%)	0.006*
No	71(51.8%)	66(48.2%)	
Use of contraception according to discussion with partners (n=258)			
Yes	82(70.7%)	34(29.3%)	
No	1(20%)	4(80%)	#0.033*

Fisher's Exact test, * p value < 0.05, ** p value < 0.00

III . Association between need factors and current or no current use of contraception among sexually active Myanmar youth migrants

The results shown in Table 4.23 describes four significant associations between need factors and current use or no current use of contraception. Use of contraception at their first sexual intercourse had significant association with current use of contraception. Moreover, there were significant associations between history of sexual intercourse due to peer pressure, use of contraception when sex by peer pressure and use of contraception due to peer pressure and current use of contraception and these associations are significant at p values 0.015, 0.000 and 0.001 levels respectively.

Table 4.2 3 Bivariate analysis of need factors and current use or no current use of contraception among sexually active Myanmar youth migrants

Need Factors	Current use of contraception		P value
	Yes	No	
Age group at 1st sexual Intercourse (n=258)			
15-16 years	3(60%)	2(40%)	#.277
17-19 years	69(65.7%)	36(34.3%)	
20-24 years	82(55.4%)	66 (44.6%)	

Use of Contraception at 1st sexual intercourse (n=258)	Yes	106(66.7%)	53(33.3%)	0.004*
	No	48(48.5%)	51(51.5%)	
History of SI due to peer pressure (n=258)	Yes	80(67.8%)	38(32.2%)	0.015*
	No	74(52.9%)	66(47.1%)	
Use of Contraception when sex by peer pressure(n=258)	Yes	79(74.5%)	27(25.5%)	#0.000**
	No	1(8.3%)	11(91.7%)	
Use of contraception due to peer pressure (n=258)	Yes	64(83.1%)	13(16.9%)	0.000**
	No	8(42.1%)	11(57.9%)	
History of SI with sex workers(n=258)	Yes	44(53.7%)	38(46.3%)	#.894
	No	15(53.6%)	13(46.4%)	
	No response	4 (66.7%)	2(33.3%)	
Use of contraception when sex by sex worker (n=258)	Yes	24(55.8%)	19(44.2%)	0.774
	No	20(52.6%)	18(47.4%)	

Fisher's Exact test, * p value< 0.05, ** p value<0.00

IV. Association between health system factors and current use or no current use of contraception among sexually active Myanmar youth migrants (n=258)

Table 4.24 shows that there were significant associations between availability of health education session, health education materials, easy availability of contraception in need and current use of contraception at p

values 0.036, 0.004 and 0.000 levels respectively. Moreover, there were also significant associations between time taken to nearest source, affordability and current use of contraception and these associations were significant at p values 0.001 levels each respectively. This table also describes significant association between convenient working or opening hours and current use of contraception.

Table 4.2 4 Bivariate analysis of health system factors and current use or no current use of contraception among sexually active Myanmar youth migrants

Health System Factors	Current use of contraception		P value
	Yes	No	
Health insurance (n=258)			
Yes	142(60.7%)	92(39.3%)	0.31
No	12(50%)	12(50%)	
Received HE session (n=258)			
Yes	90(65.7%)	47(34.3%)	0.036*
No	64(52.9%)	57(4%)	
Received HE materials (n=258)			
Yes	99(67.3%)	48(32.7%)	0.004*
No	55(49.5%)	56(50.5%)	
Easy availability when needed(n=258)			
Yes	128(66%)	66(34%)	0.000**
No	26(40.6%)	38(59.4%)	
Time taken to the nearest source of contraception (n=258)			
< 30 minutes	84(66.1%)	43(33.9%)	0.001*
30 mins to 1hr	45(65.2%)	24(34.8%)	
1-2 hours	13(56.5%)	10(43.5%)	
Over 2 hours	12(30.8%)	27(69.2%)	
Affordable to the price of contraception(n=258)			
Yes	108(67.5%)	52(32.5%)	0.001*
No	46(46.9%)	52(53.1%)	

Convenient working or opening hours(n=258)			
Yes	57(89.1%)	7(10.9%)	0.000**
No	97(50%)	97(50%)	

Fisher's Exact test, * p value< 0.05, ** p value<0.00

V. Association between responsiveness factors and current use or no current use of contraception among sexually active Myanmar youth migrants (n=258)

According to table 4.25, significant association was present between only one responsiveness factor and current use or no use of contraception. The association between waiting a long time and current use of contraception was significant at P value 0.000 level.

Table 4.2 5 Bivariate analysis of responsiveness factors and current use or no current use of contraception among sexually active Myanmar youth migrants

Responsiveness Factors	Current use of contraception		P value
	Yes	No	
Friendly welcoming by service providers (n=258)			
Yes	55(60.4%)	36(39.6%)	0.856
No	99(59.3%)	68(40.7%)	
Judgmental Attitude of Service providers (n=258)			
Yes	101(60.1%)	67(39.9%)	0.848
No	53(58.9%)	37(41.1%)	
Confidentially discussion with service providers (n=258)			
Yes	43(66.2%)	22(33.8%)	0.219
No	111(57.5%)	82(42.5%)	
Waiting a long time(n=258)			
Yes	122(55%)	100(45%)	#0.000**
No	32(88.9%)	4(11.1%)	

Discussion with same gender service providers(n=258)			
Yes	28(71.8%)	11(28.2%)	0.094
No	126(57.5%)	93(42.5%)	

Fisher's Exact test, * p value< 0.05, ** p value<0.00

Multi-variable Logistic Regression Analysis

Binary logistic regression was used to analyze the relationships between independent variables whose p values are less than 0.25 in bivariate analysis, some variables which are theoretically important in previous studies (even >0.2 in bivariate analysis) and dependent variable with dichotomous outcomes among sexually active 258 respondents. Theoretically important variables that were put into logistic regression analysis were age group of respondents, registration status, duration of stay in Samutsakhon, attitudes of respondents, discussion and use of contraception according to discussion with parents, health insurance, friendly welcoming and attitudes of health service providers. Twenty three variables whose p value was less than 0.25 were put into logistic regression analysis to find the association with current use of contraception. After running the first step of logistic regression, 21 variables which p value was greater than 0.05 were excluded from the analysis to get the final model which includes 11 variables as described below.

I.Binary Logistic regression analysis of predisposing factors and current use of contraception (n=258)

Among 12 independent variables in predisposing factors, education, marital status, heard of contraceptive methods and level of knowledge maintained their significance at first step of regression model and, so, they were contained in the final model. The results show that respondents with high school level were using contraception currently 8 times higher than those who only can read and write simple Myanmar language. Respondents who had ever heard of contraception were more likely to use 5 times higher than those who had never heard of contraception. Moreover, respondents with fair level of knowledge

were 3 times more likely to use contraception currently than those with poor level of knowledge.

Table 4.2 6 Binary Logistic regression analysis of predisposing factors and current use of contraception

Predisposing Factors	B	S.E	Sig	Current use of contraception	
				OR	95% CI
Education level(n=258)			0.000**		
Primary school	0.008	.521	.988	1.008	0.363-2.796
Secondary school	.353	.463	.446	1.424	0.574-3.530
High school level	2.073	.572	.000	7.950	2.591-24.393
Can read and write simple language				Ref	Ref
Marital Status (n=258)			.033*		
Living together	-.843	.286	.003	.431	0.246-0.754
Widow	-21.904	28420.722	.999	.000	0.000-0.754
Divorced	-21.904	20096.485	.999	.000	0.000- 0.754
Legally married				Ref	Ref
Ever heard of any contraception (n=258)			0.008*		
Yes	1.545	0.585		4.687	1.491-14.74
Never heard				Ref	Ref
Level of knowledge (n=258)			.001*		
Fair (10-13)	1.228	.319	.000	3.413	1.827-6.374
Good(>13)	-.077	1.422	.957	.926	0.057-15.025
Poor (< 10)				Ref	Ref

*P value<0.05, ** p value<0.01

II. Binary Logistic regression analysis of enabling factors and current use of contraception (n=258)

Among five enabling factors, only one variable became significant as a result of first step of regression model. The variable that maintained their significance at the first step were contained in the final model as shown in Table 4.27. Respondents who discussed with their partners were 2 times more likely to use contraception currently than those who did not discuss with their partners.

Table 4.27 Binary Logistic regression analysis of enabling factors and current use of contraception

Enabling Factor				Current use of contraception	
	B	S.E	Sig	OR	95% CI
Discussion with partner (n=258)			0.006*		
Yes	0.708	0.26		2.03	1.22-3.38
No				Ref	Ref

*P value<0.05, ** p value<0.01

III. Binary Logistic regression analysis of need factors and current use of contraception (n=258)

As described in Table 4.28, only one need factor was still significant as a result of first step of logistic regression and contained in the final model. Use of contraception due to peer pressure have positive associations with current use of contraception and respondents who used contraception due to peer pressure were also 7 times more likely to use current contraception than those who did not use contraception due to peer pressure.

Table 4.2 8 Binary Logistic regression analysis of need factors and current use of contraception

Need Factor	B	S.E	Sig	Current use of contraception	
				OR	95% CI
Use of contraception due to peer pressure (n=258)			0.001*		
Yes	1.912	0.555		6.769	2.279-20.104
No use				Ref	Ref

*P value<0.05, ** p value<0.01

IV.Binary Logistic regression analysis of health system factors and current use of contraception (n=258)

Out of 7 variables concerning with health system factors,3 variables were excluded in the final model as their p values were greater than 0.05.The rest 4 variables were still involved in final model as their p value were less than 0.05 in the first step of regression model. Respondents who received health education session and health education materials were about 2 times more likely to use current contraception than those who did not. Similarly, respondents who had easy availability of contraception in need were 3 times more likely to use current contraception than who did not have easy availability of contraception. However, time taken to nearest source of contraception and affordability to price of contraception lost their significance in multi-variate analysis. Working/opening hours of NGOs, public or private hospitals and clinics still had negative significant associations with current use of contraception and respondents who were inconvenient to working or opening hours of clinics or NGOs were 0.123 times less likely to use current contraception than those who said working hours were convenient for them.

Table 4.2 9 Binary Logistic regression analysis of health system factors and current use of contraception

Health System Factors	B	S.E	Sig	Current use of contraception	
				OR	95 % CI
Received HE session(n=258)			0.037*		
Yes	0.534	0.256		1.705	1.033- 2.817
No				Ref	Ref
Received HE materials(n=258)			0.004*		
Yes	0.742	0.259		2.1	1.265 -3.487
No				Ref	Ref
Easy availability when needed(n=258)			0.000**		
Yes	1.042	0.296		2.834	1.586-5.065
No				Ref	Ref
Convenient opening hours(n=258)			0.000**		
No	-2.097	.425		0.123	0.053-0.283
Yes				Ref	Ref

*P value<0.05, ** p value<0.01

V.Binary Logistic regression analysis of responsiveness factors and current use of contraception (n=258)

Among five variables related to responsiveness factors, 4 variables were excluded from the final model and the only one variable was still included in final model as its p value was greater than 0.05 in the first step of regression model. As described in Table 4.30, respondents who did not wait a long time before receiving contraceptive services were about 7 times more likely to use contraception currently than those who had to wait for a long time before receiving contraceptive services.

Table 4.30 Binary Logistic regression analysis of responsiveness factors and current use of contraception

Variables	B	S.E	Sig	Current use of contraception	
				OR	95% CI
Waiting a long time (n=258)			.001*		
No	1.881	.547		6.557	2.244-19.166
Yes				Ref	Ref

*P value<0.05, ** p value<0.01

CHAPTER V: Discussion, Conclusion and Recommendation

5.1 Discussion on pre-disposing factors

5.1.1 Socio-demographic characteristics

The contraceptive utilization rate among Myanmar youth migrants in this study was 59.7% in which married youths accounted for 66.9% and unmarried youths accounted for 46.5%. The rate of contraceptive utilization rate in this study was slightly lower when comparable to the rates of contraceptive utilization among reproductive aged Myanmar migrant women in Phang-nga Province (80.1%)(54) and in Kachanaburi Province (78.2%)(41). However, when it was comparable to the rate of contraceptive utilization among youths in BangBon district, and the former was quite nearly similar to the latter which was 60%(21). In addition, there were higher proportions of respondents who used current modern contraception (83%) than those who used traditional methods (21.5%). However, the rate of traditional method use was considered higher in this study. This might be because Myanmar youths were culturally influenced to use traditional methods according to their parents or older generations' sayings and as majority think traditional methods have less side effects than modern contraception.

In this study, most commonly used contraceptive method among sexually active youth migrants were OC pills (40.3%), injections (26%), male condom (19.5%) and withdrawal method (18.2%). For unmarried youths, male condom (63.6%) was the most popular method followed by withdrawal (36.4%) and safe period (9.1%). However, for married youths, highest percentage of use was found in OC pills (52.1%) followed by injections (33.1%), withdrawal (13.2%) and male condoms (7.4%). The result for both married and unmarried use of current contraception was similar to the result of previous study among Myanmar youth migrants in Bang Bon district and in that study, OC pills were the most commonly used contraceptive type(49.2%), injections(25.4%) and male condom(20.3%)(21). The contraceptive use pattern of married youths and

married reproductive aged women were quite similar and supportive finding was found in the study among Myanmar migrant women in Phang-Nga Province. In that study, oral pills (39.7%) and injections (46.4%) were the most popular methods followed by traditional methods (7.1%) and male condom (1.7%). Moreover, one study among Nepalese youths gave out the similar results in the current contraceptive usage for unmarried youths and condom was the most popular method used currently by unmarried Nepalese youths (39.4%) followed by traditional methods: withdrawal and safe periods (20.8%)(82).

On looking back on the reasons why respondents were not using current contraception, being afraid of side effects (30%) was the major reason, wanting children (20%), being away from spouse (15%), and no regular intercourse and partner (12%). These findings were consistent with the findings among Myanmar youth migrants in Bang Bon District in which being afraid of side effects and wanting more children were the major reasons for .not using contraception with 61.7% and 25% respectively. According to UNFPA 2013, fear of side effects and experiences of side effects are the most common reasons for not using contraception among young adolescents girls as they did not have detailed knowledge about each contraceptive method and many young adolescents got family and community pressure to become pregnant soon after the marriage in some cultures(83).

Among 372 Myanmar youth migrants who were in the age range from 15-24 years, majority (76.3%) were in 20-24, age group and only .6% were in 15-16 years age group. The mean age of respondents was 21.26 years. In this study, age group has no association with current use of contraception. This finding is similar to the finding that was done among Myanmar youth migrants in Ban Bong district, Bangkok, however, in other studies among Myanmar migrant workers, there were statistically significant association between age and use of contraception. These differences were due to differences in age group in studied populations and marital status: reproductive age group versus youth age group and married and unmarried migrants. Concerning gender of the

respondents, there was no significant difference between male and female. This might be because not so much different in the percentages of both males and females who were currently using contraception in this study and the most common reason for both of them was to work and to support money for their families in mother country or for their own survival. Both of them would like to use contraception to prevent pregnancies that could have negative effects on their working lives and earning money.

In this study, marital status also affects the current use of contraception and youths who were living together but were not legally married were less likely to use contraception than legally married youths and this association was significant at 0.03 level. This might be that unmarried youths had less chance of receiving contraceptive health information and services than married youth migrants, resulting in the former ones having high unmet need of contraception than the latter ones. This finding was consistent with the study done in Chinese migrants where the contraceptive use was more in married Chinese youths (37). This finding was also consistent with the findings in report done by Guttmacher Institute which showed that higher proportion of young married women(77%) than never-married sexually active women (42%) were using contraception because young married women were thought to be more sexually active in that report(84).

With respects to education, respondents with higher level of education were found to be used current contraception more than those with lower level of education and this association was found to be significant in this study at 0.001 level in mulit-variate analysis. In a general sense, respondents who were more educated were expected to use contraception as they had more knowledge about contraception and desired for fewer children. This finding was consistent with the findings from the study among Myanmar migrants in Phang-Nga province (54) and also with the study showing contraceptive utilization among female adolescents in Ghana(48).

In this study, no significant associations were found between income, occupation and current use of contraception. Majority 96% have their own income in Myanmar youth migrants and only 4% did not have own income. This might be because the prices of contraception were not too expensive and reasonable for migrant youths and there were free distribution of condoms in some areas. Moreover, there were different types of occupation of respondents in this study: factory worker (45.7%), construction worker (15.9%), agricultural worker (14%) and domestic helper (14.8%). Over half of the respondents working in various types of work were using current contraception and, so, no more significant association was found between occupation and current use of contraception in multi-variate analysis in spite of having significant associations in bi-variate analysis. Similar findings between income, occupation and current use of contraception were also found in studies among Myanmar migrant workers in Tak Province(85) and in Phang-Nga Province(54).

Ethnicity had no significant effects on current use of contraception. Among ethnicity, Burma constitutes the highest proportion (61.6%) followed by Karen (20.7%) and Mon (15.9%). This finding was contrary to the study among migrant workers in Kachanaburi Province which showed that there was a significant association between ethnicity and use of contraception, however, this was the contraceptive use between Thai and non-Thai migrants and this is significant at P value<0.001 level(41). Similarly, there was no association between religion and use of contraception and overwhelming majority of respondents in this study were Buddhist (89%). No association between religion and current use might be because other religions were also using current contraception: Christian (66.7%) and Muslim (62.5%) which were not so much different from the contraceptive use of Buddhists (58.8%).

Regarding anyone staying together in Samutsakhon Province with respondents, majority were staying together with their spouse (32.8%) and parents (30.6%), friends (28.2%) and only a few were staying together with their partners (5.4%). A significant association was found between anyone staying together and current use of contraception in bivariate analysis at 0.005 level and however, in multi-variate analysis, its significance was lost. In this study,

respondents staying with spouse(69.4%) used contraception higher than those staying together with parents(62.3%) and with partners(40%). This finding was similar to findings among Myanmar youth migrants in Ban Bong District ,however, this association was significant in previous study in both bivariate and multi-variate analysis(21). In that study, youths staying with family did not use contraception at all, however, there were 62.3% of youths staying together with their parents used current contraception in this study.

Regarding duration of stay in Thailand, results in this study showed that higher proportion of Myanmar migrant youths staying within 2 years (61.5%), within 2- 4 years (62.8%) used current contraception more than those staying between 4-7 years (58.5%) in Samutsakhon Province , however, it was not statistically significant with current use of contraception in this study. The study among Myanmar migrant youths in Bang Bon District also showed that youths who stayed for < 3 years used more contraception(69.2%) than those who stayed for 3- 7 years (54.4%) and more than 7 years(42.5%) .However, duration of stay in previous study was statistically significant with P value 0.006 among current contraceptive users(21). This difference might be because there were not so much differences in the proportions of youths staying less than 2 years, between 2-4 years and between 4-7 years who used current contraception in this study.

Migration status in this study had no effect on use of contraception. However, most of the previous studies showed that migration/registration status had a significant impact on utilization of health care services. In this study, majority (93.3%) of Myanmar youth migrants were registered which could not highlight the real picture of the migration status of population in Samutsakhon Province since there might be respondents who were afraid to tell their true registration status for the sake of their security in this study. Besides, Thai language skill also did not have any significant association with current use of contraception. In this study, it could be seen that nearly similar percentage of respondents who can read and speak Thai language fluently (56%) and who did not know at all Thai language(55.7%) used current contraception which showed less necessity of communication and language skills for purchasing

contraception as majority of youths bought contraception from drug store in this study. Besides, similar findings between migration status, Thai language skills and contraceptive use were also presented in studies among Myanmar migrants in Bang Bon district(21) and also in Phang-Nga province, Thailand(54).

5.1.2 Ever heard of any contraceptive Method and Level of Knowledge and Attitude

In this study, majority of respondents had ever heard of contraception (82.5%) and only a few 17.5% never heard of contraceptive methods. Ever heard of contraception and knowledge about contraception had significant associations with the current use of contraception in bivariate analysis at p values 0.000 each respectively and also significant in multi-variate analysis at p value 0.008 and 0.001 respectively. Respondents with fair level of knowledge were 2 times more likely to use current contraception than those with poor level of knowledge. These findings were consistent with the findings done in cross-sectional study among rural adolescents in east Gojjam zone, Ethiopia (60) .Moreover, supportive finding was also found in another studies among Myanmar youth migrants in Bang Bon district(21) and among Myanmar reproductive aged women in Mandalay Division(51). Attitude towards contraception in this study did not have any association with the current use and this was similar to the results of the studies among Myanmar migrants in Tak Province (85) and in Myanmar migrants in Phang-Nga Province(54).

5.2 Enabling Factors

Out of 372 respondents, there were lower proportion of youths who discussed about contraception with their parents and majority (86.1%) who discussed with their parents used contraception currently. However, there is no association between these factors and the finding was different from the previous study among Ethiopian adolescents(60) and adolescents in Kenya which showed significant associations between parental discussion, parental approval and use of contraception. According to one study in Myanmar about parental discussion among adolescents, there was 63% of adolescents who communicated at least once in last 6 months with their parents on reproductive health and only 15% of adolescents felt comfortable talking with parents about

reproductive health(86). In Myanmar culture , there had been a long existing religious belief and taboo that it is unsuitable for parents to discuss with their adolescent children about reproductive health and young people usually discussed their reproductive health with their peers rather than parents. In this research, youths who did not discuss with their parents (60.3%) also used current contraception as much as those who discuss with their parents (58.2%). This might be the reason why there was no significant associations between parental involvement and current use of contraception.

Concerning partner involvement, there were 32.8% of youths who discussed with their partners about contraception and majority 92.6% used contraception according to the suggestions and discussion with their partners and these factors showed significant associations with current use of contraception in this study in bivariate analysis. However, only discussion with partners had maintained its significance with current use of contraception in multi-variate analysis at p value 0.006 level. Similar findings were found in the study among sexually active Nepalese youths in which there was an significant association between discussion with partners and use of current contraception (82).Moreover, a study among youths in rural area of Myanmar also showed spousal communication had an significant association with the contraceptive use(62).

5.3Need factors

Prevalence of pre-marital sexual practice among Myanmar youth migrants in this study was 19.1% in which male involvement was 69% and female involvement 31%. The rate in this study was a little bit lower than the prevalence of pre-marital sex among Myanmar out of school youths (22.5%) in which 45% and 21% of married boys and girls and 20% and 2.5% of unmarried boys and girls were involved(87) . The difference might be that there might be some cases in this study in which some respondents did not want to tell their pre-marital sexual activity status even though they answered with self-administered questionnaires. Moreover, another studies among young people in Turkey and Kenya showed higher pre-marital sexual activity rates with 50.3%

(27.4% females and 73.2% males)(42) and 73% (32% of males and 35% of females)(40) respectively. Therefore, it can be clearly seen that pre-marital sexual activity rates can be different in different population, environment and different cultures. The mean age of respondents at first sex was 19.69 years in both genders. This figure was similar to the mean age of respondents at first sex in the study among Myanmar migrant youths in Bang Bon district, which was 19.75 years. In this study, no significant association was found between age of respondents at first sex and current contraceptive use and consistent findings were also found in studies among Myanmar migrant youths in Bang Bon district(21) and among Nepalese youths in Kathmandu Valley(82).

Contraceptive use at first sex in this study was 61.6% in which 31.4% of males and 68.6 % of females used. Although over half of respondents in this study were using contraception at their first sexual intercourse, it was still lower than the contraceptive use among teenagers in united states:85% of males and 78% of females used contraception in their first sexual intercourse(84). For unmarried sexually active respondents, condom was the most common form of contraception (51.6%) followed by withdrawal (41.9%) in their first sexual intercourse. This finding was also found in other studies among unmarried students in Turkey(42) and youths in Nepal(82) in which condom was the most popular method (50.1%) and (47.7%) respectively used at their first sexual intercourse.

Peer involvement is one of the important factors, which can support the usage of contraception especially in young people who are more easily influenced by their friends. In this study, history of sexual intercourse due to peer pressure, use of contraception and usage due to peer pressure were significantly associated with the current use of contraception in bivariate analysis. However, only usage of contraception due to peer pressure still had a significant association with current use in multi-variate analysis at p value 0.001 level .Supportive findings were also found in previous study in which motivation and support from peers had a significant association with the current use of contraception among married Myanmar youths (62). Besides, another study showing contraceptive utilization in Myanmar pointed out that good peer

influence had also significant association with the use of contraception that was significant at P value 0.001 level(59).

5.4 Health System Factors

Availability of contraceptive information and availability of contraceptive methods play an important role in determining the health status of the migrant people .Ever receiving health education session and health education materials among Myanmar youth migrants had significant positive associations with the current use of contraception with p values 0.037 and 0.004 respectively in multi-variate analysis in this study. In addition, significant association was found between easy availability of contraceptive methods and current use. This meant that respondents receiving health education session, health education materials and easy availability of contraceptive methods were more likely to use current contraception. Previous study among women in Tanzania also revealed that availability of contraceptive information was significantly associated with the contraceptive usage at p value < 0.001 level and non-availability of contraceptive methods was a hindrance to contraceptive use and this was significant at p value < 0.001 level (68). Consistent findings with respects to all these above factors were also found among Myanmar youth migrants in Bang Bon District(88). In this research, majority (68.6%) received contraception from drug store (68.6%), private clinic (41.8%) and public clinic (32.5%) respectively and receiving contraceptive services from government clinics or hospitals was the least. This result was also similar with the result among adolescents in Ghana in which majority (62.1%) received contraception from pharmacy/drug stores while only a few 3.6% of males and 4.9% of females got contraception from health facilities(73). When comparable the sources of contraception from private and public , similar finding was also found in USAID report which showed the main source of contraception for married young girls worldwide was private rather than public when compared with more than 25 age group(89).

Accessibility of contraceptive methods is also essential in using current contraception. In this study, it was described in terms of geographical,

economical, socio-cultural and time accessibility. Geographical accessibility such as time taken to get the nearest source of contraception and economical accessibility such as affordability had significant associations with current use in bivariate analysis ,however, their significance were lost in multi-variate analysis in this study. Consistent findings were also found in the study among Myanmar migrant women in Phang-Nga in which there were no significant associations between accessibility of contraceptive methods and use of contraception in multi-variate analysis (54). Besides , study result in Myanmar youth migrants in Bang Bon district showed that affordability of the price of contraception did not have a significant association with the current use of contraception (21).This might be because the price of contraception were now cheaply available and there were some free distribution of condoms by some NGOs in Samutsakhon area.

Regarding socio-cultural accessibility, only a few 7.4 % said they did not receive contraception due to community or cultural norms or taboos and among them, female youth migrants were more influenced by the community cultures not to use contraception than male migrants. For the aspects of policy and human resource, over half of the population (57.8%) in this study knew about policies of NGOs , public or private clinics or hospitals which meant receiving contraceptive health care services free of charge if respondents were registered and respondents had to pay out of pocket money if they were not registered. When it came to human resource, over half of population said there were no receiving contraceptive health care services due to limited number of trained health care personals. With concern of health insurance , according to one study namely financing health care for migrants in Thailand, registered migrants could have a chance to access health care services free of charge at public or government hospitals while unregistered migrants had to pay out of pocket money if they want to receive health care services at government hospitals (16) . Most of the studies also revealed that having health insurance had a great influence on using public health care services for migrants, however, in this study, no significant association was found between health insurance and current contraceptive use. The reason might be that 60.7% of the respondents

who had health insurance in this study were currently using contraception and there were also 50% of respondents who did not have health insurance were using current contraception from drug stores or private clinics where respondents did not have to show their registration status. Concerning with opening or working hours of NGOs or clinics or hospitals, it still maintained its significance in multi-variate analysis in this study and similar findings were found in the study among adolescents in Kenya in which majority of adolescents (91.5%) who thought opening hours were not convenient did not use contraception and working or opening hours of NGOs, public or private clinics or hospitals had significant positive association with the use of contraception (90).

5.5 Responsiveness Factors

Youth friendly health care service provision became popular and played an essential role in influencing the young people's access to sexual and reproductive health care services nowadays. There were many studies and reports that showed that having youth oriented friendly health care services increased the access and uptake of reproductive health care services among young people in different cultures and countries. Among 5 responsiveness factors, only one factor: waiting time had significant association with the current use of contraception in this research in both bivariate and multi-variate analysis. No significant associations were found between other responsiveness factors such as friendly welcoming by health service providers, attitudes of health service providers, maintenance of confidentiality, preference of same gender service providers and current use of contraception in this study. Similar aspects of findings were found in the following studies.

The report among young people in delivering sexual and reproductive health care services in Kenya and Zimbabwe pointed out that among facility-based service delivery, waiting time was the second most important drivers for young people to use reproductive health care services in NGOs, clinics or hospitals. (91). Moreover, similar findings were also found in the survey study among Cambodia, Laos, Thailand and Vietnam migrants (beer promoters)

although it did not present the associations between responsiveness actors and service utilization. That survey also revealed that migrants were much more concerned about waiting time rather than friendly welcoming and attitudes of the providers. Similarly, more than half of Cambodia and Laos migrants in NGOs and a third of Thai migrants in hospitals had waiting time problems and they said they had to wait more than 2 hours before receiving health care services. However, with aspects of friendly welcoming and attitudes of providers, almost all migrants visiting to total 7 different NGOs or health centers or hospitals in Cambodia, Laos, Thailand and Vietnam agreed that they had been friendly welcomed by the health service providers who also had non-judgmental attitudes (92). Although choice of same gender service providers is one of the important factors, which influences the uptake of young people's access to reproductive health care services, it had no significant association with the current use of contraception in this study. Similar result can be also found in the study among Myanmar youth migrants in Bang Bon district at p value 0.339 level(21).

5.6 Conclusion

Although there were studies about contraceptive utilization for married reproductive aged migrant women in Thailand, there were few studies specifically intended for the use of contraception among Myanmar youth migrants. Therefore, this study can be a base-line information concerning with the use of contraception among Myanmar youth migrants in Samutsakhon Province and this can be useful to public health policy makers in strengthening the public health policy about reproductive health care services to Myanmar youth migrants.

The result of this study showed the contraceptive utilization rate among Myanmar youth migrants was 59.7% which seemed lower when compared with other migrant studies. Moreover, the contraceptive utilization rate for unmarried sexually active youths was lower (46.5%) than that of married youths (66.9%) in this study. This study also pointed out that higher proportion of Myanmar youth migrants used modern method of contraception

(83%) as well as 21.5% of youths used traditional methods that were ineffective. Moreover, youths who were married were more likely to use current contraception than unmarried sexually active youth migrants and these can be big concerns for sexually active youths especially unmarried youths because lower contraceptive use and ineffective methods use can lead to higher risks of transmission of HIV and other STI diseases and unwanted pregnancies, resulting in increased in the numbers of unsafe abortions. Therefore, unmarried youth migrants should be given first priorities in giving reproductive health education, information and reproductive health care services than married group.

In this study, 11 variables still maintained their significance at < 0.05 level after controlling other variables in multi-variate analysis. They are educational level, marital status, ever heard of contraception, knowledge level, discussion about contraception with partners, use of contraception due to peer pressure, received health education session, materials and availability of contraception in need, convenient working hours and waiting time. Results of the study showed that higher educated youths and youths with fair level of knowledge about contraception were more likely to use current contraception than youths with low level of education and poor level of knowledge in this study. The associations between these two variables and current use were also significant at p values 0.000 and 0.001 levels respectively. Low contraceptive utilization rate and the poor level of knowledge about contraception were found in this study which means giving more health education and knowledge about different types of contraception is necessary to Myanmar youth migrants in Samutsakhon Province.

Regarding health information availability in terms of health education sessions and health education materials, significant associations were found between these two factors and current use of contraception at p values 0.037 and 0.004 levels respectively. It can be seen that married youths got health education sessions (57.5%) and materials (63%) more than unmarried youths with 42.3% and 50.7% respectively in this study. This might be the reason why contraceptive utilization rate of unmarried youths was lower than that of married

youths. Moreover, availability of contraception in need also had significant association with current use of contraception at p value 0.000 level and unmarried sexually active youth migrants received less contraception in need (43.7%) than married youth migrants (87.3%). This might be another reason for low contraceptive use rate in unmarried ones and this might be that they did not know sources of contraception, which is a consequence of low level of health service information about contraception. Even they knew the sources, they had difficulty in accessing to contraceptive sources due to being afraid of socially stigmatized or discriminated by family, community and health care workers especially if youths were unmarried females.

In addition, majority of youths in this study got contraception mainly from drug stores followed by private and public hospitals or clinics. This might be because majority of youths in this study were factory workers and they had to work all day long and, so, they found it easier and convenient to purchase contraception from nearby drug stores, as they did not have much time to go and receive contraception from hospitals or clinics. Other reasons might be that they had to face inconvenient opening hours of NGOs, hospitals or clinics, wait for a long time before seeing with health service providers. All these factors had significant associations with current contraceptive use in this study and these were significant at p values 0.000 and 0.001 levels respectively. Despite the cost of contraception, majority of youths could afford the price of contraception as the price of contraception were quite cheap and most common forms of contraception used were OC pills and condoms among Myanmar migrant youths in Samutsakhon Province.

5.7 Strengths and Limitations

Strengths

- This study was community-based study that mainly focuses on youths including contraceptive utilization of unmarried and married youths with their characteristics and associated factors in Samutsakhon Province, Thailand.

- In this study, self-administered questionnaires were used to get the correct and sincere answers especially concerning with their sexual experiences so that participants did not feel shy to disclose their sexual activity status.

Limitations

- Since this study is a cross-sectional study and assessed the independent factors and dependent factor at the same time, the research could not determine cause and effect relationship.
- This study could not represent to all Myanmar youth migrants in Samutsakhon Province as the researcher used convenient sampling method to collect the samples.
- There were 258 sexually active youths in this study and therefore, analysis for current use of contraception was based only on 258 sample size, not on total 372 population, which can give different results on different population.

5.8 Recommendation

- Since majority of youths in this study had poor level of knowledge, providing comprehensive sexual and reproductive health knowledge is very essential to youth migrants and it is better to start giving sexual and reproductive health education in migrant schools. Moreover, majority (62.4%) of youth migrants in this study accepted that sexual and reproductive health education should be involved as school health education.
- There were higher traditional method use of contraception in this study (21.5%) and therefore, health education should include detailed information of each type of contraceptive method such as their advantages, consequences and side effects and health information should be intended not only for youths but also for elderly people in order to change the attitudes about side effects of modern contraceptive use. Then, contraceptive utilization rate of unmarried youths was also lower than that of married ones in this study. Moreover, knowledge about

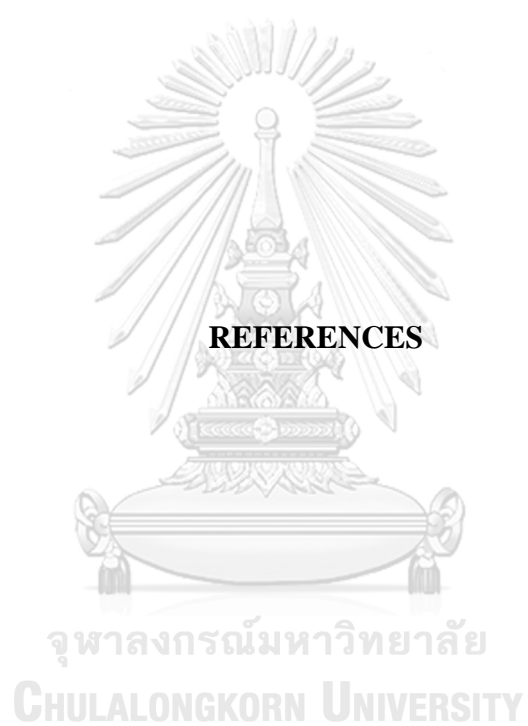
emergency contraceptive pills, female condom and long acting methods such as IUD and implants were poor among youth migrants. So, reproductive health education should be mainly targeted at unmarried youths and should also cover the topics such as prevention of HIV, STIs, unwanted pregnancies and unsafe abortions which were common among unmarried sexually active youths, which could have negative impacts on the lives of young people.

- Limited choice of modern contraceptive method can be seen in this study. The use of emergency pills, female condom and long acting methods such as IUD and implants were very rare among Myanmar youth migrants in Samutsakhon. Hence, availability of different types of contraceptive methods should be extended and provided by co-operating with government sectors and NGOs in Samutsakhon Province. In addition, the number of health care workers who were already received special training about IUD and implants should be increased in NGOs, clinics or hospitals in order to meet the needs of young migrants who want to use long-term contraceptive methods.
- The result in the study also pointed out that opening or working hours of NGOs, clinics or hospitals and waiting time before receiving health care service are important structural factors that can increase the access to contraception in youth migrants. Therefore, evening opening or working NGOs or clinics should be established and increasing health workforce who were skillful in NGOs, clinics or hospitals might be solutions to solve the problems of respondents who were inconvenient to opening hours and long waiting time. Moreover, establishing only youth-oriented clinics or buildings is another way of reducing long waiting time when receiving reproductive health care services for youths.
- Moreover, health care workers or staffs in NGOs, clinics or hospitals should be trained so that they have competencies to deliver youth friendly health care services which is defined by WHO as accessible, acceptable, equitable, appropriate and effective (22). Finally yet importantly, youth friendly health care services such as treating youth clients with respects and privacy, non-judgmental attitude, and choice of same gender service providers should also be

provided to both unmarried and married youths in NGOs, public or private clinics or hospitals.

- For suggestions of future research, qualitative research would be helpful to health policy makers in exploring the detail information about youth natures regarding sexual and reproductive health, health system factors and responsiveness factors .Moreover, for non-sexually active youth migrants, their intensions to use contraception in the future should be asked in next quantitative research so that the researcher can know the future utilization of contraception among youths and if not, the reasons behind this which can be reduced by providing health education and information.





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APPENDIX

Appendix A: Self-administered questionnaire

Factors affecting contraceptive utilization in Myanmar youth migrants in Samutsakhon Province, Thailand.

Participant Code. No ()

Instruction; Please tick in the () and also write down in the blank space where provided as needed.

Part 1.Predisposing Factors

A. Demographic Characteristics

1. How old are you? (Completed years)

----- Years

2. Sex

() 1.Male

() 2.Female

3. What is your Religion?

() 1. Buddhist

() 2. Muslim

() 3. Christian

() 4. Hindu

() 5. Others (specify)

4. What is your duration of month of stay in Thailand?

-----Months-----Years

5. What is your migration status?

() 1.Registered

() 2.Unregistered

(B) Socio-structural characteristics

6. What is your ethnicity?

() 1. Burma

() 2.Karen

() 3. Mon

4. Shan
 5. Others (specify) -----

7. What is your education level?

1. Can read and write simple Myanmar language
 2. Primary school level
 3. Secondary school level
 4. High School level
 5. University or higher level

8. What is your occupation?

1. Factory worker
 2. Construction worker
 3. Agricultural worker
 4. Domestic helper
 5. General/Random laborer
 6. Others (specify).....

9. What is your marital Status?

1. Single
 2. Legally married
 3. Living together but not legally married
 4. Widow
 5. Divorced/Separated
 6. Others (specify) -----

10. Is there anyone who stays together with you in Samutsakhon?

If yes, please specify.

If no, skip to Q 11.

1. Parents
 2. Spouse
 3. Partners
 4. Friends
 5. Others (specify) -----

11. Thai Language Skill

1. Can read and speak fluently
 2. Cannot read but can speak fluently
 3. Cannot speak fluently but can understand
 4. Do not know at all.

(C) Health Beliefs

12. Knowledge of contraception

12.1 Have u you ever heard of any contraceptive methods? 1. Yes 2. No, go to Q 13**12.2** Which kind of contraceptive methods have you ever heard? It can be answer more than one.

Types of contraception	Self-reported	
	Yes	No
1) Injectable		
2) Oral pills		
3) Emergency pills		
4) Implants		
5) IUD		
6) Male condom		
7) Female condom		
8) Female sterilization		
9) Male sterilization		
10) Withdrawal before ejaculation		
11) Safe period		

12.3 Knowledge upon contraception (T=True, F=False, NS=Not sure)

		T	F	NS
1)	Depo injection should be taken once in 3 months to prevent pregnancy.			
2)	Women who take oral contraceptive pills should take a pill every day at the same time to void becoming pregnant.			
3)	Oral contraceptive pill can prevent sexually transmitted disease.			
4)	Emergency contraceptive pill can substitute for regular contraception.			
5)	2 nd dose of emergency contraceptive pill should be taken 12 hours after the first dose.			
6)	Implants can be used to prevent pregnancy for 3-5 years depending on type of implant.			
7)	IUD interferes sexual intercourse.			
8)	Male condoms may slip off during sexual intercourse if not used correctly.			
9)	Male and female condoms can prevent both pregnancy and sexually transmitted diseases including HIV/AIDS.			
10)	Female condom is placed inside the vagina.			
11)	If the women do not want the children anymore, sterilization can be used.			
12)	Male sterilization can reduce sexual desire and it can cause weakness to men.			

13)	Withdrawal before ejaculation does not work well at preventing pregnancy.			
14)	Safe period can be used as an effective contraceptive method.			
15)	Incorrect and inconsistent use of contraception can cause unwanted pregnancy.			
16)	All contraceptive methods can prevent both sexually transmitted infections and pregnancy if used properly.			

13. Attitude towards pre-marital sex and contraception.

(SA= Strongly Agree, A= Agree, UC= Uncertain, D=Disagree, SD=Strongly Disagree)

		SA	A	UC	D	SD
1.	Pre-marital sexual relation is acceptable for those who promise to marry but can't marry yet.					
2.	It is acceptable to have pre-marital sex for men but not for women.					
3.	Providing information to youths about contraception can increase the rate of sexual activity.					
4.	Contraceptive utilization should be taught in the school.					

5.	Discussion on using contraception is not a shameful manner among couples.					
6.	Buying or assessing contraception is a shameful manner for unmarried youths.					
7.	You need negotiation skill to convince your partner to use condom.					
8.	If u go for a shop for contraception and if your friends find u with condom, u will be looked down or stigmatized.					

Part 2.Enabling Factors

14. Do u have your own income?

() 1.Yes

() 2. No

15. Is your income sufficient to cover your living expense?

() 1. Sufficient

() 2. Not sufficient

16. Have you ever discussed about any type of contraception with your parents?

() 1.Yes

() 2.No (skip to Q 19)

17. If yes, have you ever used any type of contraception due to discussion with your parents or according to their suggestions?

() 1.Yes

() 2.No (skip to Q 19)

18. If yes, which of the following contraceptive methods did you use?

- | | |
|---|--|
| <input type="checkbox"/> 1. Oral pills | <input type="checkbox"/> 6. Female condom |
| <input type="checkbox"/> 2. Injections | <input type="checkbox"/> 7. Male condom |
| <input type="checkbox"/> 3. IUD | <input type="checkbox"/> 8. Withdrawal |
| <input type="checkbox"/> 4. Implant | <input type="checkbox"/> 9. Safe Period |
| <input type="checkbox"/> 5. Emergency Contraceptive pills sterilization | <input type="checkbox"/> 10. Male/Female sterilization |

19. Have you ever discussed about any type of contraception with your partners?

1. Yes
 2. No (skip to Q 22)

20. If yes, have you ever used any type of contraception due to discussion with your partners or according to your partners' suggestions?

1. Yes
 2. No (skip to Q 22)

21. If yes, which of the following contraceptive methods did you use?

- | | |
|---|--|
| <input type="checkbox"/> 1. Oral pills | <input type="checkbox"/> 6. Female condom |
| <input type="checkbox"/> 2. Injections | <input type="checkbox"/> 7. Male condom |
| <input type="checkbox"/> 3. IUD | <input type="checkbox"/> 8. Withdrawal |
| <input type="checkbox"/> 4. Implant | <input type="checkbox"/> 9. Safe Period |
| <input type="checkbox"/> 5. Emergency Contraceptive pills sterilization | <input type="checkbox"/> 10. Male/Female sterilization |

Part 3 .Need Factors: Sexual Activity Status

(Sexual intercourse means penetration sexual intercourse: penile-vaginal intercourse)

22. Did you ever have sexual intercourse (penile-vaginal intercourse)?

1. Yes
 2. No

23. If yes, how old were you at the first time when you had your first intercourse?

----- Years

24. How would you describe your relationship to that person whom you had first sexual intercourse?

1. Boyfriend/Girlfriend
 2. sex worker

3. One nightstand (A person, neither boyfriend/girlfriend nor commercial sex partner, who sex for casual sex.)
4. Others (specify) -----

25. For that first occasion, did you use any types of contraception?

1. Yes
2. No (if no, go to Q. 27)

26. If yes, which of the following contraceptive methods did you practice?
(Either you or your partner)

- | | |
|---|--|
| <input type="checkbox"/> 1. Oral pills | <input type="checkbox"/> 6. Female condom |
| <input type="checkbox"/> 2. Injections | <input type="checkbox"/> 7. Male condom |
| <input type="checkbox"/> 3. IUD | <input type="checkbox"/> 8. Withdrawal |
| <input type="checkbox"/> 4. Implant | <input type="checkbox"/> 9. Safe Period |
| <input type="checkbox"/> 5. Emergency Contraceptive pills sterilization | <input type="checkbox"/> 10. Male/Female sterilization |

27. Have you experienced sexual intercourse (penile-vaginal intercourse) under pressure by your peers?

1. Yes
2. No (if no, go to Q 31 for male respondents and go to Q34 for female respondents).

28. Did you use any type of contraceptive for that occasion?

1. Yes
2. No (if no, go to Q 31)

29. Have you ever used contraception due to discussion with your peers or peer suggestion/pressure for that occasion?

1. Yes
2. No (if no, go to Q 31)

30. If yes, which of the following contraceptive methods did you practice?

- | | |
|---|--|
| <input type="checkbox"/> 1. Oral pills | <input type="checkbox"/> 6. Female condom |
| <input type="checkbox"/> 2. Injections | <input type="checkbox"/> 7. Male condom |
| <input type="checkbox"/> 3. IUD | <input type="checkbox"/> 8. Withdrawal |
| <input type="checkbox"/> 4. Implant | <input type="checkbox"/> 9. Safe Period |
| <input type="checkbox"/> 5. Emergency Contraceptive pills sterilization | <input type="checkbox"/> 10. Male/Female sterilization |

31. Have you had sexual intercourse with commercial sex-partner but not for your

1st sexual intercourse? (For male respondents only)

1. Yes
 2. No (If no, go to Q 34)

32. Did you use any type of contraceptive for that occasion?

1. Yes
 2. No (if no, go to Q 34)

33. If yes, which of the following contraceptive methods did you practice?

- | | |
|---|---|
| <input type="checkbox"/> 1. Oral pills | <input type="checkbox"/> 6. Female condom |
| <input type="checkbox"/> 2. Injections | <input type="checkbox"/> 7. Male condom |
| <input type="checkbox"/> 3. IUD | <input type="checkbox"/> 8. Withdrawal |
| <input type="checkbox"/> 4. Implant | <input type="checkbox"/> 9. Safe Period |
| <input type="checkbox"/> 5. Emergency Contraceptive pills sterilization | <input type="checkbox"/> 10. Male/Female |

Part 4. Health System Factors

A. Policy

34. Do you know the policies of public hospitals, private clinics and NGOs that give contraceptive services when you are in need? (For example, if you are legally registered, you can get services free of charge or you have to pay out-of-pocket money if you are not legally registered.)

1. Yes
 2. No

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B. Manpower and Finance

35. Have you ever received contraceptive services due to limited numbers of qualified or skillful health care service providers who give contraceptive services in NGOs, private clinics or public hospitals?

1. Yes
 2. No

36. Do you have health insurance given out by Thai government?

1. Yes
 2. No

C. Availability of contraceptive information

37. Have you received any health education session about contraception?

1. Yes
 2. No (if no, go to Q. 41)

38. What types of health education session have u received?)(Tick all responses)

- 1.Group Training
 2.Health Talk
 3.Individual discussion with health professional
 4.Videos
 5.Others-----

39. Where or from whom did you receive?

- 1.Friends
 2.Health Personnel (NGO/Private/Public)
 3.Family members
 4.From working place.
 5.Others (specify) - -----

40. Have you received any health education materials such as pamphlet or booklet about contraception?

1. Yes
 2.No (If no, go to Q43)

41. Where or from who did you receive? (Tick all responses)

- 1.Friends
 2.Health Personnel (NGO, Private, Public)
 3.Family members
 4.From working place
 5.Others (specify) -----

D. Availability of contraceptive methods

42. Can you get any types of contraception easily if you are in need?

- 1.Yes
 2.No (If no, go to Q 45)

43. If yes, from where you would get contraception?

- 1.Drug Store
 2.Public Clinic
 3.Private Clinic

- 4.Friend
- 5.Health personals from NGO
- 6. Others (specify) -----

E. Accessibility of contraceptive methods

44. How long would it take from your home to the nearest source of contraception?

- 1. less than 30 minutes
- 2. 30 minutes to 1 hour
- 3. 1-2 hours
- 4. Over 2 hours

45. Is the price of contraception affordable for you?

- 1.Yes
- 2.No

46. Have you ever accessed to contraceptive services due to deterrents from community cultural norms and taboos?

- 1.Yes
- 2. No

47. Are the working or opening hours of NGO or Public or Private Clinic convenient for you?

- 1.Yes
- 2. No

Part 5: Responsiveness Factors

48.If you go to NGO or Public or Private clinic to receive contraception, do you think that the service provider will friendly welcome to you to provide contraceptive service?

- 1.Yes
- 2.No

49. If you go to NGO or Public or Private Clinic to receive contraception, do you think that the service provider will judge you on your age or not being married?

- 1.Yes
- 2.No

50.If you go to NGO or Public or Private Clinic to receive contraception, do you think that you can confidentially discuss with service provider?

() 1.Yes

() 2.No

51 . If you go to NGO or Public or Private Clinic to receive contraception, do you usually wait for a long time before receiving health care services?

() 1.Yes

() 2.No

52. If you go to NGO or Public or Private Clinic to receive contraception, do you think that you can discuss with same gender service provider?

() 1.Yes

() 2.No

Part 6: Modern and traditional contraceptive utilization in Myanmar youth migrants (For those who are using contraception at the recent time (either the respondents or his or her partner)

53. Are you or your partner using any types of contraception currently?

() 1.Yes

() 2.No (skip to Q 58)

54. If yes, which types of contraceptive methods are you or your partner using now?

1. Oral pills

2. Injections

3. IUD

4. Implant

5. Emergency Contraceptive pills

6.Female condom

7.Male condom

8.Withdrawal

9.Safe Period

10.Male/Female sterilization

(For those who are not using currently both modern and traditional methods(either the respondents or his/her partner)

55. If you or your partner are not using contraception currently, why makes you or your partner not to use contraception?

- 1.Want more children
- 2.Expensive
- 3.Health reason
- 4.Side effect
- 5.Service unavailable
- 6.Culture and religion
- 7.Others (specify) -----

Thank you so much for your time given.



Appendix B: Time Schedule

Project Procedure	OCT 17	NOV 17	DEC 17	JAN 18	FEB 18	MAR 18	APR 18	MAY 18	JUN 18	JUL 18
1.Literature Review										
2.Writing thesis proposal										
3.Submission for thesis proposal										
4.Proposal exam										
5.Ethical consideration from Chulalongkorn University										
6.Pretest questionnaire										
7.Field preparation and data collection										
8.Data Analysis										
9.Thesis article writing										
10.Final thesis exam										
11.Submission of article for publication										
12.Submission of thesis and article										

Appendix C : Budget

List Cost	Unit number	Price (in Thai Baht) (per/unit)	Total Budget
1.Questionnaire (Photocopy) + Consent sheet	844	8 THB	6,752 THB
2.Correct answer (Photocopy)	404	8 THB	3232 THB
3.Transportation and lodging related to project			
4. Stationary items		5000 THB	5000 THB
5. Printing and binding of the thesis paper		1516 THB	1516 THB
6.Hiring Volunteer cost		6000 THB	6000 THB
7.Miscellaneous(including food and snacks)	3	3500 THB	10500 THB
		3000 THB	3000 THB
Total			36,000 THB

VITA

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Brief Profile

I am a Medical Doctor holding M.B.,B.S Degree graduated from University Of Medicine(1) Yangon,Myanmar. I am a registered doctor with SAMA 33740 from Myanmar Medical Council. I had two and a half years of extensive clinical experiences in public and private hospitals and 3 years experiences in Non-governmental organizations related to HIV/TB/STI projects of Medical Action Myanmar Organization and Top Centre (Population Service International Organization).

EDUCATIONAL QUALIFICATIONS

1. M.B.,B.S (FEB 2012) University of Medicine 1(Yangon, Myanmar)
2. Certificate in public health, family medicine and research from Myanmar medical Association (2012)
- 3.Certificate of continuing Professional Development Forum of General Practitioners' Society(2012)
- 4.Certificate on family planning from Marie Stopes International Myanmar(2014)
- 5.Certificate in HIV/AIDS Medical Education Workshop(2016)
- 6.Certificate of completion of Isoniazid Prevention Therapy Training(2016)
- 7.Certificate in completion of project management from Strategy First Institute(2016)
- 8.Diploma in project management (Institute of Commercial Management)(2016)



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