FACTORS INFLUENCING SEX BEHAVIOURS AMONG YOUTH MYANMAR MIGRANT WORKERS IN SAMUT SAKHON THAILAND

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A Thesis Submitted in Partial Fulfillment of the Requirements
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ปัจจัยที่มีอิทธิพลต่อพฤติกรรมทางเพศของคนงานวัยรุ่นชาวเมียนมาในจังหวัดสมุทรสาคร ประเทศไทย

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เหียน พเย อ่อง : ปัจจัยที่มีอิทธิพลต่อพฤติกรรมทางเพศของคนงานวัยรุ่นชาวเมียนมาในจังหวัดสมุทรสาคร ประเทศไทย (FACTORS INFLUENCING SEX BEHAVIOURS AMONG YOUTH MYANMAR MIGRANT WORKERS IN SAMUT SAKHON THAILAND) อ .ที่ปรึกษาวิทยานิพนธ์หลัก: นพ. อเลซซิโอ พันซ่า, 152 หน้า.

วัตถุประสงค์ของการศึกษาคือการระบุปัจจัยที่มีอิทธิพลต่อพฤติกรรมการมีเพศสัมพันธ์ในหมู่เยาวชน (18-24 ปี) ของแรงงานชาวพม่าในจังหวัดสมุทรสาคร ประเทศไทย การศึกษานี้เป็นการศึกษาภาคตัดขวางและการสุ่มตัวอย่างแบบเฉพาะเจาะจง การสุ่มตัวอย่างตามสะดวกและการสุ่มตัวอย่างห่วงโซ่การอ้างอิง เพื่อเลือกเยาวชนชาวพม่าจำนวน 362 คน ดำเนินการเก็บรวบรวมข้อมูลโดยใช้แบบสอบถามและการสัมภาษณ์จากผู้ให้ข้อมูลโดยตรง สถิติที่ใช้บรรยายข้อมูลใช้สถิติเชิงพรรณนา การวิเคราะห์ตัวแปรตัวเดียวและหลายตัวแปร (logistic regression)

ผลการศึกษาพบว่าตัวแปรตามเปิดเผยว่าเคยมีเพศสัมพันธ์ในแรงงานข้ามชาติเป็น 56.6% และ การงดเว้นการมีเพศสัมพันธ์เป็น 43.4% การมีเพศสัมพันธ์ครั้งแรก 3.6% เริ่มมีเพศสัมพันธ์ในช่วงวัย 15 ถึง 18 ปีและผู้ตอบแบบสอบถามที่มีคู่นอนหลายคนเป็น 13.6% นอกจากคนที่เคยมีเพศสัมพันธ์และป้องกันการมีเพศสัมพันธ์ในแรงงานชาวพม่าเป็น 14.4% โดยใช้ถุงยางอนามัยอย่างสม่ำเสมอทุกครั้งที่มีเพศสัมพันธ์ และการมีเพศสัมพันธ์ที่ไม่ป้องกันเป็น 85.85% ในการวิเคราะห์สรุปผลการศึกษาพบว่าสถานภาพสมรสมีความเชื่อมโยงเป็นอย่างยิ่งกับคนที่เคยมีเพศสัมพันธ์คู่นอนหลายและมีการป้องกัน (p-value <0.001) นอกจากนี้การดื่มเครื่องดื่มแอลกอฮอล์ยังมีความเชื่อมโยงเป็นอย่างยิ่งการกับการมีเพศสัมพันธ์และคู่นอนหลายคน (p-value <0.001) ความรู้ระดับปานกลางเกี่ยวกันโรคติดต่อทางเพศสัมพันธ์และเอชไอวีหรือเอดส์มีความเชื่อมโยงกับที่การเคยมีเพศสัมพันธ์ (P-value 0.017) ดังนั้นการศึกษาครั้งนี้สามารถสรุปได้ว่า การให้ความรู้เกี่ยวกับโรคติดต่อทางเพศสัมพันธ์ เอชไอวีหรือเอดส์และการป้องกันการมีเพศสัมพันธ์หลายคู่นอนเป็นตัวลดช่องว่างของความรู้ในเยาวชนแรงงานชาวพม่า

สาขาวิชา สาธารณสุขศาสตร์ ลายมือชื่อนิสิต .....

ปีการศึกษา 2558 ลายมือชื่อ อ.ที่ปรึกษาหลัก .....

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KEYWORDS: YOUTH / MYANMAR MIGRANT WORKERS / THAILAND / SEX BEHAVIOURS

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The objective of the study is to identify the factors influencing sex behaviors among the youth (18-24 years) Myanmar migrant workers in Samut Sakhon, Thailand. This research study was a cross-sectional survey and purposive sampling, convenient sampling and chain referral sampling (snowball sampling technique) were used to select the 362 youth Myanmar migrant worker participants. Data were collected by using constructed questionnaires with face to face interview and analyzed by descriptive, univariate and multivariate analysis (logistic regression) model is used at significant level of 0.05.

The main result of dependent variable revealed that ever have sexual intercourse in migrant workers was 56.6% and abstinences was 43.4%. For early age of first sex, 3.6% have early sex exposure on 15 to 18 years and the respondents with multiple sexual partners were 13.6%. Out of ever have sexual intercourse, protective sex in migrant workers was 14.4% by using condom always for every sexual intercourse and non-protective sex was 85.85%. In inferential analysis, the results showed that married person in marital status was strongly association with ever have sexual intercourse, multiple sex partner and protective sex ($p<0.001$). Moreover, alcohol drinking was also strongly association with ever have sex and multiple sex partner ($p< 0.001$). Middle level of knowledge on STI, HIV/AIDS was association with ever have of sex (p 0.017). Therefore this study can be conclude that offer more health education to migrant workers to correct knowledge gaps and misconceptions on STI, HIV/AIDS, early age of sexual intercourse, multiple sex and condom use.

Field of Study: Public Health Student's Signature .....

Academic Year: 2015 Advisor's Signature .....

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STI	- Sexually Transmitted Infection
HIV	- Human Immunodeficiency virus
AIDS	- Acquired Immunodeficiency Syndrome
NGO	- Non Government Organization
INGO	- International Non-Government Organization
IOM	- International Organization of Migration
IOL	- International Organization of Labor
WHO	- World Health Organization
UNAIDS	- The joint United Nations Programme of HIV/AIDS
UN-Youth	- The joint United Nations Program me of Youth
MOH	- Ministry of Health
MOPH	- Ministry of Public Health
HBV	- Hepatitis B Virus
HCV	- Hepatitis C Virus

CHAPTER I

INTRODUCTION

1.1 Sex Behaviors and STI, HIV/AIDS

Sexual behavior is commonly defined as behavior that increases one's risk of contracting sexually transmitted infections STI. They include having sex at an early age, having multiple sexual partners, having sex while under the influence of alcohol and unprotected sexual behaviors(Rahmani et al., 2014). The alcohol and unsafe sex are respective contribution to the global burden of disease. Furthermore, they amplified through the linkages that have been shown to exist between alcohol, risky sexual behavior (unprotected sexual contact) and the spread of sexually transmitted infections (STI), including HIV infection. (WHO, 2005)

Acquire Immunodeficiency Syndrome (AIDS) is caused by the virus known as the Human immunodeficiency Virus (HIV) and its disease widely, deadly and complicated disease worldwide was first recognized in United States in 1981. It can devastate community, family and whole continents. We have seen the knock decades of country's national development, widen the gap between rich and poor nations and put already-stigmatized group closer to the outside of the society. According to UNAIDS report 2009, HIV separation appears to have peaked in 1996, when 3.5 million new HIV infections occurred in the world. Globally, 33.4 million of peoples are living with HIV and almost half are women and 2 million of peoples are died of HIV related causes at 2008. In 2008the estimated number of new HIV infections was 2.7 million (UNAIDS, 2009b).

In 2014, people living with HIV population are still increasing. According to UNAIDS report 2015, there were 36.9 million people living with HIV in 2014, up from 33.4 million in 2008 and, the result of continuing new infections, people living longer with HIV, and general population growth. About 2.0 million people are estimated to be living with HIV in Latin America and the Caribbean combined, including 100,000 newly infected in 2014 and estimated 1.5 million people are living with HIV in this region, including 140,000 newly infected in Eastern Europe & Central Asia at2014. Moreover, the estimated 5.0 million people are living with HIV in Asia and the Pacific in 2014 (UNAIDS, 2015).

1.1.1Youth and STI, HIV/AIDS

World Health Organization (WHO) has defined young people as the age group of 10-24 year old, in which adolescents are (10-19) year and youth as (15-24) years (UNYouth). The definition of the terms youth, young people and adolescents vary according to each society's cultural norms, social expectations and political consideration (Dehne & Riedner, 2001). The 18% of global population are young people between the ages of approximately (15- 24) and it is nearly 1.2 billion of people. Mostly, 87% of youths are live in developing countries as well as 62% of youths are live in Asia and also 17% of youths live and Africa (UNYouth). Youths make up a quarter of the world's population and the majority is in developing countries.

In Myanmar, approximately16 million Young people (10-24 years) age group and they account for 28% of the population. The number of youth (15-24 years) increased by 0.6% in 2001-02, 0.9% in 2004-05 and by about 3.8% in 2007, indicating an increasing growth of young people(M. o. h. M. MOH, 2013).

Youth is best understood as a period of transition from the dependence of childhood to adulthood's independence. That's why, as a category, youth is more fluid than other fixed age -groups. It is a time of rapid and uneven development physically, socially, emotionally and intellectually. Youth are known to be an adventurous group and often engage in risky behavior such as smoking, drinking alcohol, using drugs and early unprotected sexual activity (Leigh, 1999).In particular, young people are affected by the serious health challenges. According to WHO report, Young people account for 15% of the disease and injury burden worldwide, and more than 1 million die each year, mainly from preventable causes(WHO, 2009).In 2004, 26 million death of young people occurred out of 1.8 billion of young people (10-24) year. Most of the deaths were accident, HIV and also pregnancy related mortality (Fiona M Gore, 2011).

In 2008, globally, the new infected AIDS cases in young people (15-24 years) age group are 2,500 per day and 920,000 per year in 2008. The people living with HIV in youth (15-24 years) are 5,000,000 peoples in the world at 2008 (UNAIDS, 2009b) .In 2011, around 40% of all new global HIV infections in people age (15-24 years) and estimated five millions of youth living with HIV and some 2,400 youth newly infected with HIV every day. Moreover, 3.6 million (78%) of youth living with HIV in sub-Saharan Africa and the second highest number of youth living with HIV/AIDS at Asia and Pacific. The estimated 550 000 young people living with HIV, and some 110 000 youth newly infected with HIV/AIDS in Asia and Pacific(UNAIDS, 2010a).

The estimates rates of HIV infection in Vietnam, international health agencies generally agree that approximately 0.4% of the general population between the ages of 15 and 49 years are HIV-positive. This would indicate upwards of 360,000 persons

living with HIV/AIDS and 53.6% are in young adults between the ages of 15 and 24(Linda M. Kaljee, 2007)

In Thailand, the estimated 500,000 people are living with HIV and the adult age 15 and up male 440,000 and female 190,000 are living with HIV at 2014 (UNAIDS, 2015). According to World Bank data, the prevalence of HIV in total population is 1.1 % in age (15- 49 years) age group and the prevalence of HIV male is 0.3% and female is 0.2% (15-24 years) age group in Thailand at 2011 to 2015(Worldbank, 2011-2015).

In Myanmar, there were around 212,000 people living with HIV and 34% is females. Nearly 11,000 people died of HIV-related illnesses, compared to approximately 15,000 in 2011 and the estimated 9,000 new infections occurred in 2014 (MOH, 2015). According to World Bank data, the prevalence of HIV in total population is 0.7% in age (15-49 years) age group and the prevalence of HIV male is 0.4% and female is 0.3% (15-24 years) old age group at 2011 to 2015. It is estimate that one-half of all HIV infections occurs among people younger than 25 years (Worldbank, 2011-2015).

1.1.2Migrant and STI, HIV/AIDS

At the start of 21 century, the International Organization for Migration estimates that one person out of every 35 worldwide or some 175 million people is international migrants (IOM). Eighty six million people migrated for reasons of work in 2003, of who some 32 million are in developing countries (ILO, 2004).Migrant populations are at a higher risk than the overall population for poor health in general and HIV infection in particular (UNAIDS, Jun,2000). Migration has played a major role in the spread of the AIDS epidemic throughout the world (A.J. Tatem1, 2008). A number of studies

have documented the vulnerability of migrant workers to HIV infection in several Asian countries(UNDP, 2008). Migrant worker group are itinerant in nature, coupled with the language barrier, hampers their ability to access or receive health information or services, further increasing their vulnerability to HIV(UNAIDS, 2008). One study from South Florida, USA showed that the high range of drug use have been occurred in migrant workers population and the drug use was widespread in this population, a significant proportion were at risk for HIV infection, and ***6%*** were HIV positive(James A. Inciardi, 1999). One study from Nepal showed that the migration is a most important risk factor for HIV/Syphilis infections. This study found that 11 of 137 men (8%) were positive for HIV infection and 30 men (22%) for syphilis. The respondents, especially the migrant-returnees from Mumbai, were engaging in risky behaviors such as pre- or extramarital sex, and sex with multiple partners, including sex workers. Therefore migrant worker's come from Mumbai have more change to get STI, HIV/AIDS(J. O. Krishna C. Poudel1, Jeevan B. Sherchand3, Masamine Jimba1, Izumi Murakami4 andSusumu Waka, 2003)

Many migrant workers are working in all areas of Thailand, particularly for labour migration from the three neighboring countries namely Myanmar, Cambodia and Lao. In 2004, 1.2 millions of migrant workers from these three countries. According to Department of Employment of the MOL, the 85% of Myanmar, 42% of Lao and 51% of Cambodia migrant workers are documented. The health risks and vulnerability, including STI, HIV/AIDS, within the migrant population is significant since they arrive in Thailand with very little knowledge, social and or family support coupled with new pressures, experiences and situations that may cloud their ability to consistently choose

healthy behaviors(UNAIDS, 2010b).

Moreover, the environment in which migrant factory workers live and work is unlikely to contribute to their vulnerability to STI, HIV/AIDS because most of them have limited amount of free time, have restricted movement outside of the factory compounds and often maintain conservative social values. This environment creates limited opportunities for migrant workers to receive adequate information and prevention campaigns on STI, HIV/AIDS. Furthermore, the major constraints to accessing health services include the following: inability to pay for the service; lack of available services in immediate needs, migrants with an undocumented status are hindered from freedom of movement and fears of being arrested by the police; language barriers to communicate with healthcare providers, especially among Cambodian and Myanmar migrants; and inconvenience to visit the health facility due to limited opening hours and/or location (UNAIDS, 2010b). One study from Thailand have suggested that migrants have more HIV infection risk compared to non-migrant and having multiple sex partners is a relatively common practice among Myanmar migrants in Thailand (H. H. K. Myint Thu, and Marc Van der Putten, 2008).

These problems are more occurring in migrant society because of they have limited or lack of health care service because their educational status, poverty, remoteness of their residence, limited knowledge and language and culture barriers and also lack of cooperation from employers. Therefore, they have more risky health outcome including sexual behavior and transmission of Sexually transmitted diseases (including HIV). Moreover, youth migrant worker have more risky sexual behavior than elder migrant worker because they are usually unmarried and they are transmission

period from dependence of childhood to adulthood's independence and they want to learn every new experience. These risky health outcomes may lead to some social problems in migrant workers society and also effect on their host country.

1.1.3Background of Myanmar Migrant Workers in Thailand:

Government policies, local officials, employers and private-sector recruitment agents have institutionalized migration to Thailand. One study from Thailand to carried out on labor migration to Thailand attempted to rank the causes of migration. It concluded that the five main reasons for persons to migrate from Myanmar were (a) low earnings in Myanmar, (b) unemployment in Myanmar, (c) family poverty, (d) experiences, such as forced labor, and (e) a lack of qualifications for employment. (Department of Employment, Ministry of Labor, 2004).

The primary reasons for migrating to Thailand included economic (74.9%), personal (13.4%) and security/safety-related (7.0%). Some 43.3 per cent of respondents migrated to Thailand with the help of family and friends, while brokers assisted 37.7 %, and 18.5 per cent went on their own. Most of the Myanmar migrant workers are lower level of education. The male migrant workers are lower levels of education than female workers (no education and primary education). There were thrice as many male as female migrants who had received informal education, from places such as monasteries. (International organization of migrant, 2013)

In 2012, the total number of 1,186,805 Myanmar migrants in Thailand is registered in different categories according to immigration criteria, as regular (legal) migrants and irregular (illegal) migrants (Chantavanich, 2012). "Myanmar Migrants to Thailand: Economic Analysis and Implications to Myanmar Development.") In

Thailand, 98,308 of Myanmar migrant workers are working in Bangkok, 511,798 are working in regions excluding Bangkok, total of 610,106 and 6267 of Myanmar migrants worked as professional in Bangkok (Department of Employment, 2012).

1.2 Research Gap

Most of the sex behavior related with STI, HIV/AIDS studies in Thailand were done in any age group and not focused on specific age group (15-24) in migrant workers(UNICEF, 2008). Context sensitive research is need because of there are some differences in age group, lifestyles, environments, knowledge and beliefs more a gap in up-dates studies than few studies in youth migrant population. Therefore, the objectives of the study are to identify the factors influencing the sex behaviors among youth Myanmar migrant workers in Thailand.

1.3 Research Questions

(1) What socio-demographic factors are influencing the sex behaviors among youth Myanmar migrant workers?

(2) What is the level of knowledge, attitude on STI, HIV/AIDS and condom use in youth Myanmar migrant workers in Samut Sakhon, Thailand?

(3) What kinds of barrier are influencing the accessing health services among youth Myanmar migrant workers?

(4) What kind of alcohol consumption and sex behaviors of youth Myanmar migrant workers?

(5) What are the sex behaviors among youth Myanmar migrant workers in Samut Sakhon, Thailand?

1.4Research Objectives

(i) Objectives of the Study:

To identify the associations and factors influencing between socio-demographic characteristics, knowledge, attitude on STI, HIV/AIDS and condom use, barriers to accessing health services, alcohol consumption and sex behaviors among the youth Myanmar migrant workers in Samut Sakhon, Thailand.

(ii) Specific Objectives:

(1) To determine socio-demographic characteristics of youth Myanmar migrant workers in Samut Sakhon, Thailand.

(2) To find out the level of knowledge, attitude on STI, HIV/AIDS and attitude on condom use among youth Myanmar migrant workers.

(3) To find out the barriers to accessing health care services among youth Myanmar migrant workers.

(4) To relate the alcohol consumption and sex behaviors of youth Myanmar Migrants workers.

(5) To identify the sex behaviors among youth Myanmar migrant workers in Samut Sakhon, Thailand.

1.5Research Hypothesis

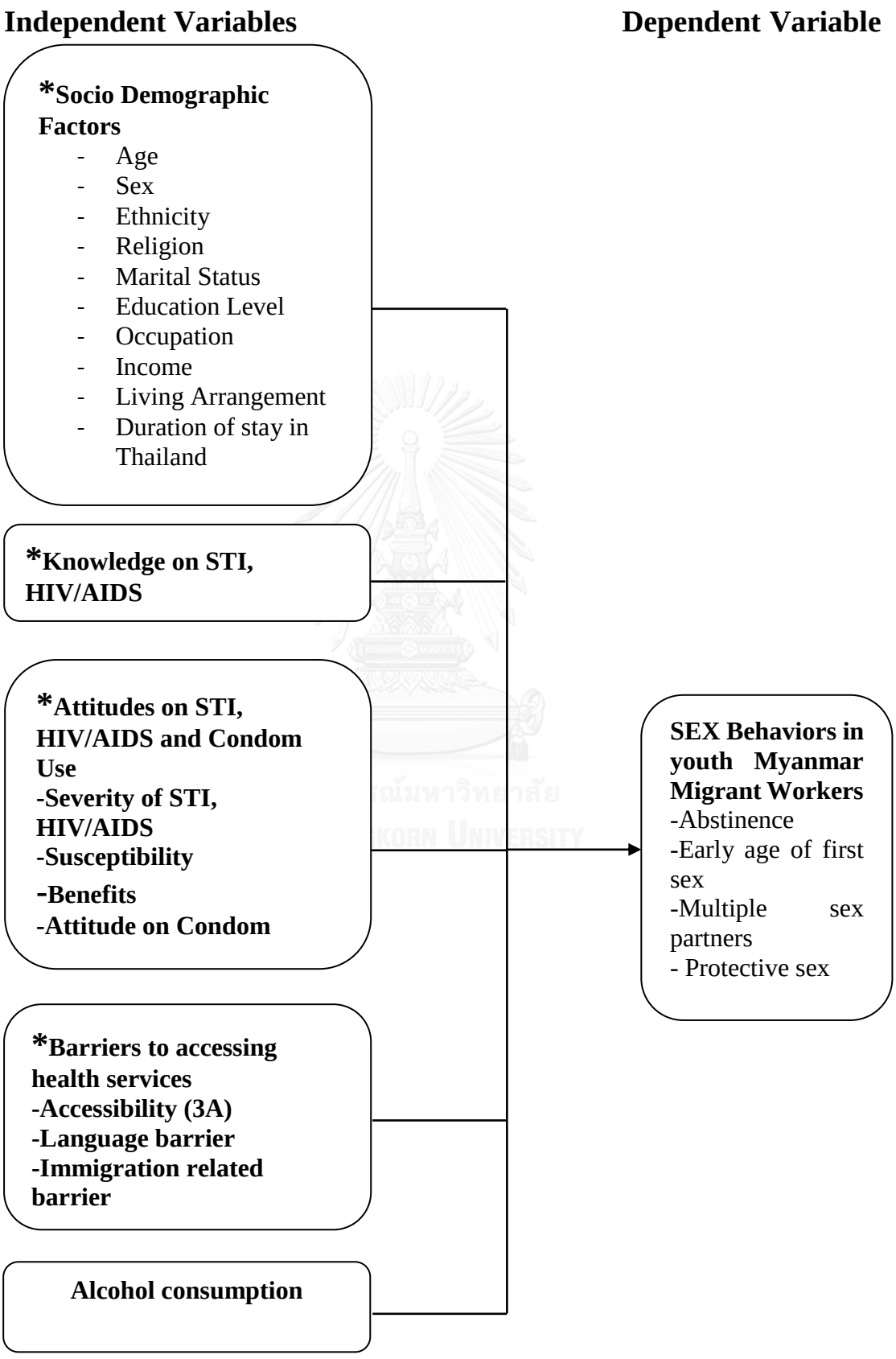
1. There is a relationship between socio demographic characteristics and sex behaviors among youth Myanmar migrant workers in Samut Sakhon, Thailand.

2. There is a relationship between level of knowledge, attitudes on STI, HIV/AIDS and also attitude on condom use and sex behaviors among youth Myanmar migrant workers in Samut Sakhon, Thailand.

3. There is a relationship between barriers to accessing health services and sex behaviors among youth Myanmar migrant workers.

4. There is a relationship between alcohol consumption and sex behaviors among youth Myanmar migrant workers in Samut Sakhon, Thailand.

1.6 Conceptual Framework



1.7 Operational Definitions

1.7.1. Social demographic factors are the economic and social conditions under which people live which determine their health. The social demographic factors of youth Myanmar migrant in this study it include age, sex, marital status, occupation, education, income, race and duration of stay in Thailand.

- **Age** – refers to the last completed birthday at the time of the interview. In this study, ages of respondents are identifying by self- reporting.
- **Sex**-refer to the gender of the respondents.
- **Ethnicity**-refers the original ethnic group. It is classified into "Shan", "Mon", "Karen", "Burma" and "Kachin".
- **Religion**- refers to the respondents' worship in respective religion. It is classified into "Buddhist, Islam, Christian and Hindu".
- **Marital status**-refer to the current marital status of the respondents. It is classified into "Single or unmarried", "married", "divorced" and "windows".
- **Education Level**-refer the self-report highest attainted level of education of the respondents and it is measured in five categories, "Illiterate, Primary education (grade 1-4), Middle education (grade 5-8), High education (grade 9-10) and University.
- **Occupation**- refers to the respondents' current occupation status. It is classified into "Construction worker, Agriculture worker, Restaurant worker/ shopkeeper, Factory worker and jobless".
- **Income**-refer to the respondents' types of income (Daily wager, salary) and current income in Baht per month at last month.
- **Living arrangement**-refer to anyone who is staying together with the

respondent and it is categorized into “spouse”, “ parents”, “ alone”, “ brother or sister” and “other relatives”.

- **Duration of stay in Thailand**-refer to the length of the respondent’s stay in term of years and months and it is separated into total length of stay in Thailand and length of stay at present residence.

STI, HIV/AIDS, in this study means, the perception of respondents about STI and HIV/AIDS.

1.7.2. Knowledge on STI, HIV/AIDS, in this study means, the understanding of the Myanmar migrants about STI, HIV/AIDS regarding the causes, mode of transmissions and preventions.

1.7.3. Attitude on STI, HIV/AIDS and Condom use, in this study means, the respondent thoughts and beliefs about the STI, HIV/AIDS and Condom use from variety of perspectives. It included three components, susceptibility, severity, and benefit on STI, HIV/AIDS. These answers are categorized into ‘Strongly Agree’, ‘Agree’, ‘Not Sure’, ‘Disagree’ and ‘Strongly Disagree’.

- Perceived susceptibility: mean that the opinions of the respondents on getting STI, HIV/AIDS.
- Perceived severity of STI, HIV/AIDS: mean that the opinions of the respondent on how severe the STI, HIV/AIDS.
- Perceived benefits**:** mean that the opinions of respondents on the benefits that would gain from prevention and treatment on STI, HIV/AIDS.

1.7.4. Barriers to accessing health services: means obstacles to accessibility (Available, Affordable and Acceptable) of STI, HIV/AIDS health care services, language comprehension and immigration.

Availability

-Obstacles to availability of STI, HIV/AIDS health care center/service provider: means that the public (or) private hospitals (or) NGO/INGO healthcare center(s) for STI, HIV/AIDS are not or hardly available in the study area. It also refers to whether the geographical locations of the services are near or far from the living areas of the respondents.

Affordability

-Obstacles to affordability to learn prevention of STI, HIV/AIDS, means that the respondent cannot or hardly afford to learn about health education for prevention of STI, HIV/AIDS related books, journals, pamphlets, website, visit to health care center and others. It also refers to the direct costs (cost of diagnosis and treatment) and indirect costs (transportation and other costs) that incur to receive the services.

Acceptability

-Obstacles to acceptability means no or low quality of the services that has been provided to the study population. For instances, the medical services (lab tests, reports, medicines etc) and non-medical services (respect, counseling, follow up etc).

- **Language barrier** to seek health care: mean that the respondents do not know or insufficiently the "Thai" language or not.

-**Immigration related barrier** to seek health care: means the 'illegal' immigration status of the respondents in Thailand.

1.7.5. Alcohol Consumption, in this study means, the respondents' drinks alcohol till being drunk, numbers of drinking per week, their sex behaviors before and after drinking alcohol and also their types of drinking.

In this study, **Sex Behaviors** means abstinence, early age of first sex, multiple sex partners and protective sex.

-**Abstinence**, in this study mean, the respondent has no history of sexual intercourse in his/her life.

-**Early age of first sex**, in this study mean, the respondent age of first sex is lower than 18 years old.

-**Sex intercourse**, in this study means that you had only anal or vaginal penetration and not include erotic stimulation of the genitals and not include oral sex. Because of, in my research sexual behaviors are concerning about is high risk of infections due to sexual behavior (anal and vaginal penetration only) and not covering all aspect of sex intercourse. The oral sex is not existing for HIV/AIDS and also much low for other STI. Moreover, erotic stimulation of genitals does not exist for both STI, HIV/AIDS. Therefore, the researcher excludes these two aspects in this study.

-**Multiple sex partners**, in this study means, the respondent doing sexual intercourse with many partners (spouse, steady partner, causal partner or sex worker) in past 3 months.

-**Protective sex** refers to the respondent's using condom and intention to condom use "always" in during sexual encounter from the beginning to end at their sexual intercourse with (spouse, steady partner, causal partner and sex worker).

-In this study, **Steady partner** is somebody, the respondent know for more than two months, have sex with regularly and feel an emotional bond with.

- In this study, **Casual partner** is somebody, the respondent have sex with only, without pay money, gifts or favors and also have sex with by paying or accepting money, gifts or favors.

-In this study, **Sex worker** is somebody has sex with respondent by paying only money.

-**Migrant worker**, in this study mean, Myanmar people moving to Thailand for working.

CHAPTER II

LITERATURE REVIEW

2.1 Youth and Migration

The 18% of global population are young people between the ages of approximately (15- 24) and it is nearly 1.2 billion of people. Mostly, 87% of youths are live in developing countries as well as 62% of youths are live in Asia and also 17% of youths live and Africa (UNYouth). Youths make up a quarter of the world's population and the majority is in developing countries.

The 2013 world youth report offers a broad understanding of the situation of youth migrants from the perspective of young migrants themselves. The report highlights some of the concerns, challenges and successes experienced by young migrants based on their own lives and told in their own voices. Young people move within their home countries as internal migrants, or beyond their borders as international migrants. According to the latest United Nations estimates, there are 232 million international migrants worldwide, representing 3.2 per cent of the world's total population of 7.2 billion. There are 35 million international migrants under the age of 20, up from 31 million in 2000, and another 40 million between the ages of 20 and 29. Together, they account for more than 30 per cent of all migrants (United Nations, 2013a).

2.2 Myanmar Migrants Youth in Thailand

According to 6th ASEAN forum of migrant labor 2014, the total number of 2.3 million of Myanmar migrants in Thailand and 1.2 million are registered in different categories according to immigration criteria, as regular (legal) migrants and 1.1 millions

of Myanmar migrants are not registered (illegal) migrants. The 30% of Myanmar migrant workers are age between 15-24 years and the majority of migrant workers are males. (ASEAN, 6th forum on migrant labour,2014).One of the researched from Thailand said that, the migrants are a young population with most persons in the 15–24 or 25–34 age groups Marital status differed by ethnicity and gender. More women were married than men (54% of women compared to 28% of men) (K. Ford & Chamrathrithirong, 2007).

Another study showed that, in terms of age group in Myanmar migrants, the youth are the biggest proportion as 38.2% is between 18-25 years, 31.3% is between 26-35 years, 25% is over 35 years and 3.4% is under 18 years, the youngest is 15 years. The top 10 ten provinces where Myanmar migrants are working: Bangkok, Samut Sakorn, Tak, Samutprakan, Ranong, PathumThani, SuratThani, Songkhla, Phuket and Chon Buri. (Chantavanich, S. and Vungsiriphisal, P., 2012 (Chantavanich, 2012). According to Department of Employment of Labour from Thailand, Myanmar migrant workers population in Samut Sakorn is one of the top ten provinces in Thailand and also youth (15-24) age group is a biggest population in Myanmar migrant workers in Thailand.

The top 10 ten provinces where Myanmar migrants are working in Thailand are Bangkok, SamutSakhon, Tak, Samutprakan, Ranong, PathumThani, SuratThani, Songkhla, Phuket and Chon Buri. (Chantavanich, S. and Vungsiriphisal, P., 2012. "Myanmar Migrants to Thailand: Economic Analysis and Implications to Myanmar Development."). Moreover, migrant populations have grate mobility and also it is a hidden population. They have always migration according to their different workplace,

accommodation and also they are scattered. So, we cannot get accurate numbers or data of migrant workers population. Therefore, we will focus on largest migrant workers community areas. According to Department of Employment of Labour from Thailand, Myanmar migrant workers population in Samut Sakhon is one of the top ten provinces in Thailand. Samut Sakhon Province is one of the largest Myanmar migrant communities in Thailand and also it had a lot of factories such as seafood factory and textile factory.

Samut Sakhon is first in Thailand for seafood processing and wholesaling. There are about 5,000 factories in the province (Archavanitkul and Wachanasara, 2009). In the town of Maha Chai where the largest concentration of seafood processing factories is found, 90% of migrant workers are employed as seafood processors and 60,321 of Myanmar migrant workers are working at fisheries and related business. (Nigoon Jitthai et al, 2013)

Figure 1Myanmar Migrant in Top 10 Provinces in Thailand

Provinces	Male	Female	Total
Bangkok	50,052	51,437	101,489
Samutsakorn	40,154	33,071	73,225
Tak	12,733	22,902	35,635
Samutprakan	16,522	11,606	28,128
Ranong	12,959	10,029	22,988
Pathum Thani	13,436	9,155	22,591
Surat Thani	13,009	8,219	21,228
Songkhla	11,832	7,474	19,306
Phuket	11,335	7,900	19,235
Chon Buri	11,144	7,281	18,425

Source: Department of Employment, Ministry of Labour (as of May, 2012)

2.3 Sex behaviors and Youth

Young people are the one of the human resource and manpower of the each country, which will bring sustainable development of future in their country. Now a day, most of the countries have many health problems in young people. Because of social changes and physical changes are due to high risk of disease and health problems. Most of the cause came from way of living and individual's behavior. In this century, world changes the way of life style and also more using technology base materials and these effects are influence to culture and way of life style. In these changes have both good things and bad things but young people have difficulty identified to the right way because of their low experiences and knowledge. So that, young people are included in "high risk" group and also they was leading to some cause of diseases and propensity towards experimentation with potential risk behaviors.

The vast majority of sexual intercourse during adolescence/youth period is unprotected (Famutimi Esther Oluwatoyin RN & PhD2, 2014). Sexual behaviors are major determinants of conception rates, sexually transmitted infections (STI) and HIV transmission, and other sexual health outcomes. Sexual risk behavior accounts for a large number of opportunities for acquiring HIV infection, and alcohol use has been shown to increase high-risk sexual behavior. UNAIDS report 2009, globally youth 15-24 years represent about 40% of all new cases of Human Immunodeficiency Virus (HIV) among persons of reproductive age (15-49 years (UNAIDS, 2009a).

The most important risk factor for the spread of HIV in several parts of Asia is unprotected heterosexual sex. Sex-trafficked women and girls face especially high risks of HIV infection. In India, a 11% of women with HIV have probably have been infected by regular partners who paid for sex (Prof Rajesh Kumar, 2006). According to WHO

report 2002, the proportion of all HIV carriers between the ages of 15 to 29 was 632.93% and the incidence of sexually transmitted diseases among age group 15-19 increased by 79.45% from 1991 to 2000 in China (Chen, 2008).

Around 60% held conservative attitudes toward casual sex relationships and multiple sex partners. Males tended to hold more liberal attitudes toward high-risk sex behaviors than female youth. Approximately 41.5% of unmarried youth reported having engaged in premarital sex, whereas less than 10% engaged in high-risk sexual behaviors. Males also reported higher amounts of premarital sex, casual sex relationships, and multiple sex partners. Females reported higher levels of sexual coercion(Yip, 2013).

In Adolescent Health, Situation and Strategy report from Thailand, Adolescent sexuality is very sensitive and confidential issue for every youths and young adults in Thailand. Most sexual activities in youth are in risk- behavior without protection. With strong cultural and religious communities, contraception and condom are limited in use (23% of sexual active youths).As total around 8 million of Thai youths 10-19 years old, every year 62,000 (70 per thousand) become parents and 60,000 are HIV infected and this become the second leading cause of death in Thai youth (20%of total death in youth)(Tripathi, 2008).

Sexual behaviors including unprotected vaginal, anal, and oral sex also increase risks for other sexually transmitted infections (STI) including HIV/AIDS (Linda M. Kaljee, 2007). One of the study form Chiang Mai, Thailand in 2005–2006 conducted that women ≥20 years of age, with ≥2 heterosexual partners in the past year and a younger age at sexual debut were significantly more likely to have a prevalent STI.

Men ≥20 years of age, with ≥2 heterosexual partners in the past year and who enrolled both sex and drug network members were significantly more likely to have a prevalent STI (Celentano, 2005-2006)

One of the review studies from Africa, the review were dated between 1990 and 2000 and addressed sexual behavior of youth between the ages of 14 and 35 years. Both published works and unpublished reports and dissertations/theses were included. The review concluded that at least 50% of young people are sexually active by the age of 16 years; the majority of school students who had ever experienced sexual intercourse reported at the most one partner in the previous year, with a persistent minority of between 1% and 5% of females and 10–25% of males having more than four partners per year; and between 50% and 60% of sexually active youth report never using condoms.(Liberty Eatona, Alan J. Flishera, & Aar_b, 2003). According to one of the study conducted form Vietnam, over 46% of sexually active respondents “rarely” or “never” used condoms. Thus, a significant portion of youths who are sexually active are not engaging in safer sex(Linda M. Kaljee, 2007).

2.4 Sex Behaviors and Migrant workers

Migration is a critical factor in high-risk sexual behavior and more important risk factors for sexually transmitted infections (J. O. Krishna C. Poudel1, Jeevan B. Sherchand3, Masamine Jimba1, Izumi Murakami4 andSusumu Waka, 2003).. The link between migration and STI/HIV/AIDS risky sexual behavior has been well documented. The data from a probability survey of China examined that the link between migration and risky sexual behavior of individual and community correlates of risky sexual behavior. The temporary migrant was associated with significantly more risky sexual behaviors(Yang & Xia, 2008).One of the study in Thailand, found that the

rate of having sex with sex workers was much higher among international migrants (19.8%) than among non-migrants (4.3%). Moreover, condom using in among international migrants was 37.1% whereas among non-migrants was 63.9% (H. Myint Thu et al.).

In1993 Kenya Demographic and Health Survey results indicate that the independent of marital and cohabitation status, awareness of AIDS, and other crucial influences on sexual behavior, male migrants between urban areas and female migrants within rural areas are much more likely than non-migrant and counterparts to engage in sexual practices conducive to HIV infection. In rural areas, migrants from urban places are more likely than non-migrants to practice high-risk sex. The large volume of circulatory movement between urban and rural areas, these results have serious implications for HIV transmission throughout Kenya (Brockerhoff, 1999).

One study on Thailand, also found that sex workers and fishermen were most likely to have unsafe sex and use drugs than other groups. Many of migrants travel without their sexual partners, but being of an age of high sexual drive, they have to seek their satisfactions and needs for companionship and sexual contract (Frank H. Galván, 2009). Another study conducted among Myanmar migrants in Samut Sakhorn province, migrant worker men who were single or apart from their wives were more likely to have multiple partners and sex with prostitutes, while women were not (H. H. K. Myint Thu, and Marc Van der Putten, 2008). A study done in young migrant worker in Nepal found that few young people considered themselves as a risk of getting HIV or STI despite high-risk behavior (Puri, 2006).

The STI situation among female sex workers in Samut Sakhon indicates that the prevalence rate of syphilis in Thai sex workers slightly increased from 0.5% in 2004 to 0.7% in 2006, but the rate in Myanmar sex workers dropped dramatically to a rate of zero in 2006 from 8.0% in 2004 (Samut Sakhon PHO, 2008). The percentage of migrant workers sex with sex worker in Samut Sakhon is 17.3%. (Nigoon Jitthai et al, 2013)

2.5 Mode of HIV transmission

HIV is found in semen, vaginal fluids, blood and breast milk. It enters the body through open cuts, sores or breaks in the skin; through mucous membranes, such as those inside the anus or vagina; or through direct injection. There are several ways HIV is transmitted:

- Analorvaginalintercoursewithoutacondomwithapartnerwhoiseitherpositiveor doesn't know their status. Oral sex is not an efficient route of HIV transmission, but HIV can be spread this way. Kissing, masturbation and "hand jobs" do not spread HIV.
- Sharing needles, syringes or other injection equipment with someone who is HIV positive or doesn't know their status.
- Babies born to HIV-positive women can be infected with the virus before or during birth, or through breast-feeding after birth.
- Health care professionals have been infected with HIV in the workplace, usually after being stuck with needles or sharp objects containing HIV-infected blood. As for HIV- positive health care providers infecting their patients, the risk is exceedingly low.

- HIV can be transmitted via donated blood or blood-clotting procedures. However, this is now very rare in countries like the U.S. where blood is screened before use.(Davidson's, 2014)

Heterosexual intercourse is the most common mode of HIV transmission in many resource-poor countries. In Africa slightly more than 80 percent of infections are acquired heterosexually, while mother-to-child transmission and transfusions of contaminated blood account for the remaining infections. In Latin America, most infections are acquired by MSM and through misuse of injected drugs, but heterosexual transmission is rising. Heterosexual contact and injection of drugs are the main modes of HIV transmission in South and South East Asia(espanol, 2012).

Changing several risk behaviors is the best way to success of preventing of the transmission of STI/HIV/AIDS. These changes occur as a result of providing education, increased condom use, reducing the number of sexual partners by those who are sexually active, shifting the practice of sharing needles by injected drug users, among others(UNAIDS2, Nov,2012).

2.6 Health Belief Model

In the study of behavior health, many researchers and health care providers including public health professionals are trying to develop the theory and concept for the predictors of the particular behavior of interest. Such as, Theory of Planned Behavior (Ajzen, 2005), Protective Motivation Theory (Rogers & Prentice-Dunn, 1997), Health Belief Model (Yep, 1993)and Self-efficacy Theory (Maddux, 1995).

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. Focusing on the attitudes and beliefs of

individuals does this. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels working in the U.S. Public Health Services. In this case of sex behaviors in migrant workers, if a person feels that sex behaviors and an undesirable health condition (e.g, being infected with STI, HIV/AIDS) can be avoided.

1. Has positive expectation by taking the recommended action (e.g, effective preventive behavior would prevent from getting STI, HIV/AIDS).
2. Believes that he/she can successfully take the recommended health actions (e.g, he/she would practice the safe sex behaviors with full confidence).

HBM has four components; perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. 'Readiness to Act' of individuals is also taken into account as a concept in HBM. Rosenstock and others added the other concept in 1988 which make HBM to fit for unhealthy behaviors such as smoking, alcohol drinking etc. In this study perceived susceptibility means the respondent opinion of chances of getting STI, HIV/AIDS. Perceived severity means the respondents` opinions of how severe the STI, HIV/AIDS. Perceived benefits refers to the respondent`s belief in the facts that if he/she would gain from prevention and treatment on STI, HIV/AIDS. Perceived barriers mean that the respondent`s opinion of the tangible and psychological costs of the STI, HIV/AIDS health care service(Yep, 1993).

2.7 Socio- demographic characteristics and Sex behaviors

One study from South Africa at 2003, young women were significantly more likely to be infected with HIV in comparison with young men (15.5 versus 4.8%).Young women with older partners were also at increased risk of HIV infection.

Among men and women, increasing partner numbers and inconsistent condom use were significantly associated with HIV infection. Males and females who reported participation in at least one love life program were less likely to be infected with HIV (AOR, 0.60; 95% CI, 0.40–0.89; AOR, 0.61; 95% CI, 0.43–0.85, respectively)(Pettifor, 2003). Another study showed that the probability for not condom use was significantly ($p<0.05$) higher when the male partner was young, among the younger age group (18-24 years) (Larmarange J, 2010).Migrant workers study from Thailand showed that, age and marital status are related to visiting sex workers. In this study, factors related to visiting sex workers included age, OR = 0.91, 95% CI 0.89–0.92, $p < 0.001$. Older men were less likely to visit sex workers. Marital status, lounger residence in Thailand, occupation and living arrangements were also related to visiting sex workers. Men who were not married were more likely to visit sex workers, OR = 11.8, 95% CI 7.69–18.08, $p < 0.001$ and condom use was high with sex workers (79% reported always use), but low with regular partners (4% ever use)(K. Ford, and Aphichat Chamrathrithirong. , 2004).

One study from Georgia at 2001 showed that the inconsistence condom use and multiple sex partners are association with STI. The incidence of sexually transmitted infections was significantly higher among females than among males (16.7% versus 9.8%) and was associated with inconsistent condom use and, for females, number of partners (NOELL, 2001)

In Sub-Saharan Africa study showed that level of education is associated with condom using in sexual intercourse. There was a significant increase in condom use in higher level of education status (Auvert, 2001). Some study form South-Africa

concluded that high incidence and some risky sexual behaviors like early sexual debut, multiple sexual partners were common in low educated women and they have a more chance to get transmission of HIV/AIDS (Hargreaves, 2007). In Thailand, migrant workers from Myanmar possess low levels of education. Persons with only primary education, as opposed to secondary education and workers with higher incomes, were more likely to engage in such risky behavior as having multiple sex partners. Therefore, they are vulnerable group for transmission of STI/HIV/AIDS and also they have lower preventive behavior in STI/HIV/AIDS (K. Ford & Chamrathrithirong, 2007).

2.8 Knowledge STI/HIV/AIDS and Sex behaviors

The greater knowledge about Sexually Transmitted Diseases was also significant in condom using(Coleman, 2007). The lack of knowledge on STI/HIV/AIDS is one of the barriers in condom use. The lack of education and information may be a barrier to individuals changing their behaviors, and specific sexual behaviors. Moreover, youth (aged 15-24 years) and women in these poor areas also report the highest number of recent sexual partners and the lowest incidence of condom use and more chance to get HIV(taryn dinkelman, 2008).

Thailand, migrants are more visiting to commercial sex worker. This study considered that the low knowledge of HIV/AIDS, having multiple sex partners, visiting risky entertainment venues, having sex without condoms and having a sexually transmitted infection as factors contributing more risks to HIV(H. H. K. Myint Thu, and Marc Van der Putten, 2008).

Knowledge, attitude and beliefs of sexual behaviors regarding HIV/AIDS are important part in controlling of HIV epidemic and setting in prevention programs.

Among them, condom use is the only reliable method of STI/HIV prevention for those who choose to be sexually active. Differences in Scio-demographic characteristics of a person cause differences in knowledge on HIV transmission of that person directly or indirectly. Among various occupational groups of migrant workers, construction workers had significantly low knowledge of HIV/AIDS (Suphāng & Čhulālongkǭnmahāwitthayālai, 2000). The results showed that there was significant knowledge level between male and female migrants factory workers, males having more knowledge than female (Mullany, 2000).

2.9 Attitude on STI, HIV/AIDS and Sex behaviors

2.9.1. Perceived susceptibility and Sex behaviors

One study of juvenile in USA, the high knowledge in STI/HIV/AIDS is significantly correlated with negative attitudes towards condom use. This study showed that high knowledge are unlikely to effects behavior change (Diane M. Morrison, 1994). Another study of prenatally HIV infected youth in Thailand, the low level of knowledge on STI, HIV/AIDS is associated with the low condom use and increase risk of STI, HIV/AIDS transmission to sexual partners (Lolekha R1, 2014).

2.9.2. Perceived severity of STI, HIV/AIDS and Sex behaviors

Another study from Vietnam showed that the total of 18 of 32 youths (56.3%) reported using a condom at last sexual encounter, and 11 of 32 respondents (34.4%) reported “always” using a condom. However, 15 of 32 youths (46.9%) reported “rarely” or “never” using a condom. A total of 14 of 32 (43.8%) of youths reported that they were “very likely” to use a condom at next sexual encounter, whereas 8 of 32 (25.0%) reported they were “very unlikely” to use a condom(Linda M. Kaljee, 2007).This is a

study highlighted that this is a wrong perception and still big problem in transmission of STI, HIV/AIDS related to sex behavior.

2.9.3. Perceived benefits and Sex behaviors

A study conducted among never-married youth aged 12-24 in three Ghanian towns showed that nearly all respondents (99%) knew of condoms, but fewer than half (48%) could identify how to use correctly in their sexual intercourse. Increasing knowledge on condom using is benefit on prevention of STI, HIV/AIDS(Glover, 2003). In another study in the same country, levels of condom using awareness among unmarried adolescents and young adults were found to be high (98·2% among males and 95·5% among females) and it is effect to reduce the transmission of sexually transmitted infections (Agyei, 2000).

2.10 Attitude on condom use and Sex behaviors

On study from Africa conducted that the high level of self-efficacy to use condoms were 2.54 times more likely ever to have used a condom (OR 5 2.54, 95% CI 5 1.66–3.90) than respondents who perceived a low level of self-efficacy to use condom(WILLIAM K. ADIH, 1999). Another study from America showed that the men who stronger conspiracy beliefs were significantly associated with more negative condom attitudes(Laura M. Bogart, 2005).

2.11Barriers to accessing health services and Sex behaviors

A study on Myanmar migrants in Thailand notes that the migrants are vulnerable or higher risks for a range of reasons: away from their family for long periods, living as illegal aliens, limited access to health care, limited knowledge on STI, HIV/AIDS and low literacy in destination or place of origin (Bearinger LH, 2007).One

study form Ghana showed that the respondent's had perceived a low level of barriers to condom use were 2.35 times more likely ever to have used a condom than those who perceived a high level of barriers to condom use (OR 5 2.35, 95% CI 5 1.66–3.38)(WILLIAM K. ADIH, 1999).

Most of migrant workers face some kind of problems to health education and health care access due to their illegal migrant status and their occupation status. The main obstacle to receiving medical care and health education access that migrants face is that they are not permitted to be away from their jobs. Most employers make no provision for sick leave; if a worker is absent the wages for the day are not paid.

Workers in town may be able to seek medical care after work hours, although that can also be difficult when working 12 hours or more a day. Domestic workers and agricultural workers generally live at their place of employment and are often not allowed to be away elsewhere. Language differences often serve as a barrier to communication between Thai health workers and migrant clients, and hospital forms are generally available only in the Thai language. In a study of domestic workers from Myanmar, Panam and others (2004) reported that such workers feared arrest and harassment from local authorities. Eighty per cent of them had poor access to health services because their employers were reluctant to allow them to leave the house and most employers required the workers to pay for their own medical care.IOM, 2004 suggested that lack of access to health and social services among migrants was one of determinant factors that increased risk for STI/HIV infections.

2.12 Alcohol Consumption and Sex behaviors

Harmful use of alcohol adversely affects the lives of the users and their families, along with widespread health and socio-economic impact and burden on communities

(Alcohol Control Policies in the South-East Asia Region, 2008).Alcohol use was also noted as a risk factor in Thailand as well as other Asian countries (M. J. Krishna C. Poudel1, Junko Okumura2, Anand B. Joshi3 andSusumu Wakai1, 2004).

A history of heavy alcohol use has been correlated with a lifetime tendency toward high-risk behaviors, including multiple sex partners, unprotected intercourse, sex with high-risk sexual partners (Archavantikul, 2000). Mostly migrant come as single young man rather than with their families. Therefore, they are away from their family as well their difficult employment situation and also their level of education effect to health problems. And also there are numerous opportunities to engage in risky sexual behavior. One study from Myanmar migrant youth workers in Thailand, the prevalence of alcohol drinking in youth Myanmar migrant workers was quite high and 24% of Myanmar youth migrant workers are drinking alcohol (N Howteerakul1, 2005).

The risky sexual behavior study among college students in USA, this study showed that the association between partner type differences and risky sex. In this study alcohol use prior to sex was strongly related to unprotected sex for encounter involving in non-steady sex partners. Alcohol use was associated with increased sexual risk for encounters with non-steady partners, but showed no association to sexual risk behavior for encounters involving steady partners. In this study 55% of encounters with non-steady partners involved alcohol use, only 22% of sexual occasions with a steady partner were preceded by alcohol use(Brown, 2007).

I founded one article focuses on the qualitative assessments that were conducted in order to profile alcohol use and sexual behavior in the communities concerned, ascertain the relationships between alcohol use and sexual behavior, and develop a

conceptual model of the relationship between alcohol use and sexual risk behavior. The participants consisted of adults aged between 25 and 44 years in a township and city site in Gauteng province. This study showed that there were high levels of alcohol consumption and unprotected sex among some members of their communities, with the latter occurring mainly among casual sexual partners. The findings also pointed to strong links between alcohol consumption and sexual risk behavior and also more chance to get HIV/AIDS(Neo K. Morojelea, A. Nkokoa, & Kgaogelo M. Moshiaa, 2005)

CHAPTER III

RESEARCH METHODOLOGY

3.1 Study Design

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

3.2 Study Area

The study area is Samut Sakhon province, where is located in the pre-urban area of Thailand.

3.3 Study Population

The cross-sectional survey was conducted among youth Myanmar migrant workers residing in Samut Sakhon province, Thailand.

a. Inclusion criteria of study sample

- Myanmar migrants who can speak Myanmar language
- Both male and female more than 18 years old but not older than 24 years old
- Myanmar migrant workers who are residing in Samut Sakhon province, Thailand.

b. Exclusion criteria of study sample

- Evidently mental defected persons
- Less than 3 months of stay in Thailand
- Not willing to participate

3.4 Study period

The study period will be from April to July, 2016.

3.5 Sample and Sample size

According to the study of knowledge, attitudes and practices on HIV/AIDS prevention among Myanmar migrants in Samut Sakhon Province, Thailand, percentage of the good knowledge level was 62% (H. H. K. Myint Thu, and Marc Van der Putten, 2008)and it will be used to calculate sample size in this study.

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

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

$$n = \frac{(1.96)^2 \, 0.62 \, (1 - 0.62)}{(0.05)^2}$$

$$= 362$$

Where,

n = sample size.

p = knowledge level derived from the study of knowledge, attitudes and practices on HIV/AIDS prevention among Myanmar migrants in Samut Sakhon Province, Thailand

d = desired level of precision

z= value from normal distribution associated with 95% confidence interval of 1.96.

Sample collected = 362

3.6 Sampling Technique

Firstly, the researcher selected Samut Sakhon province by purposively sampling because it is a one of the top ten largest Myanmar migrant workers communities in pre-

urban area of Thailand and there were few studies had been carried out in Youth age group of Myanmar migrant workers in Samut Sakhon.

Secondly, the researcher used convenient sampling method was used to collect the samples. The researcher used the link from local NGO and Myanmar migrant workers association in Samut Sakhon province. Because of local NGO and Myanmar migrant workers association volunteers had been doing some study and social support to Myanmar migrant workers in this area and therefore they know where migrants are located. Through the link of these volunteers, the researcher will reach out into community. So that, the researcher obtained participants from volunteer organizations then the interviewers asked till the sample size reach. In case of incomplete sample size the researcher used chain referral sampling (snowball sampling technique). Therefore, the researcher asked the respondents (seeds person) to introduce other potential respondents/peers who consent to take parts to the research. The "seeds person" would recruit maximum of five youth Myanmar migrant workers in order to minimize the bias. A seed person can recruit maximum five youth Myanmar migrant workers and to increases the variety in characteristics of the sampled population and reach more hidden youth Myanmar migrant workers. In case too few female respondents recruited the interview of male respondents would be terminated and only female respondents would be interview to achieve at least 20% of the sample population as female respondents. 20% is based on information from "6th ASEAN Forum on Migrant Labour, 2014". The referral chain of respondents continued till we reached the target sample of 362 completed questionnaires. Therefore, the researcher did not consider adding 5% for extra of sample size.

3.7 Measurement Tools

Researcher used the structure questionnaire which prepared in English, then translated into Myanmar language by one who was expert in English and Myanmar language related to sex behavior to ensure correspondence between English and Myanmar words. And them, back translation was done from Myanmar to English language, which was done by second expert (fluent in both English and Myanmar languages and also sex behavior), the second expert did not aware the 1st version of the English questionnaires. In the case of discrepancies between the translation of two experts and came together to agree on a common translation. My questionnaires was coded to ensure the anonymity of the study participants. The answers from the respondents were saved confidentially and only the researcher utilized that data for this research only.

The interview questionnaires consist of 5parts,

1. Socio demographic characteristics

This part of questionnaire consists with 13questions on the socio-demographic, which includes current age, sex, ethnicity, religion, marital status; occupation, income, education level and duration stay in Thailand.

2. Knowledge on STI, HIV/AIDS

This session included the knowledge about STI/HIV/AIDS of the sample populations, which include cause of STI/HIV/AIDS, mode of transmission and prevention of the information about STI/HIV/AIDS. This part consists with total 17 questions and 3 questions are open questions and other 14 questions are close. The answers for close questions was given 1 score for correct answer and zero score for

wrong answer and do not know. The score varied from 0-14 points and was classified into three levels as follows: Bloom's cut of point, 60%-80% (Yimer1, 2013).

Low level	(less than 60 %)	< 8scores
Moderate level	(60 - 80 %)	8-11 scores
High level	(more than 80 %)	> 11scores

2.1 Attitudes on STI, HIV/AIDS and Condom use

Similarly, this section also aims at the determining of the attitude about STI/HIV/AIDS and condom use of the sample populations, which included the susceptibility, severity and benefits towards the prevention of STI/HIV/AIDS by using Likert's-type scale. The answers were categorized as 'Strongly Agree', 'Agree', 'Neutral', 'Strongly Disagree' and 'Disagree'. The rating scale will be measured as follow:

Positive Statements (Questions,1-7)		Negative Statement (Question-8)	
Choice	Score	Choice	Score
Strongly Agree	5	Strongly Agree	1
Agree	4	Agree	2
Neutral	3	Neutral	3
Disagree	2	Disagree	4
Strongly Disagree	1	Strongly Disagree	5

This part was included 8 questions. The scores varied from 8 to 40 and all individual answers were summed up for total individual scores. The total individual score was used to classify the respondent into one of the three levels: (Negative, Neutral and Positive) (Yimer1, 2013).

Negative attitude (<60%) if the respondents total score is < 24
Neutral attitude (60-80%) if the respondents total score is 24-32
Positive attitude (>80%) if the respondents total score is >32

3. Barriers to accessing Health care services

This session included the accessibility of STI health care services and immigration status and language barriers to the sex behaviors of the sample population.

There were 7 questions in this section. The answers were categorized into 'agree', 'disagree' or 'uncertain'. A score '2' was given to 'agree', '1' was given to 'uncertain' and '0' was given to disagree answers. The scores varied from 0 to 14. All the individual answers was summed up for total scores. The score varied from 0- 14 points and was used for the classification of scores into three levels as mentioned below.

Low level	(less than 60 %)	< 8scores
Moderate level	(60 - 80 %)	8-11 scores
High level	(more than 80 %)	> 11scores

4. Alcohol Consumption

This part included five questions were measured the history of alcohol consumption and alcohol related sex behaviors and also the sexual activities after the drinking alcohol.

5. Sex behaviors

The questions in this section aimed at finding and measuring the behaviors of the respondents towards their sex behaviors and this part has 43 questions. Sexual behaviors includes regarding Abstinence, Early age of first sex, multiple sex partners and protective sex. The researcher measured the condom use in during sexual encounter at their last sexual intercourse and they are using condom from the beginning to end (always, almost always, half of the time, some of the time and Never). The researcher determined the condom use in beginning to end, "always" was coded for the safe sex behavior (protective sex) of Myanmar migrant workers and other four were coded as

not their safe sex behaviors.

Objective of my research is about studying variables related to risk of contracting HIV and STI infections due to sexual behaviors and not describing all kinds of sexual behavior practiced by Myanmar Migrants in Samut Sakhon. There is almost 'zero' risk of STI and HIV infection by practicing 'erotic stimulation of genitals' (i.e. masturbation) is considered 'Safer sex' by major health authorities (e.g. CDC Atlanta, STDs and HIV Fact sheet,2014), (WHO, Sexually transmitted infections Fact sheet, 2015). I adopt the term 'safer sex' used in these references because 'safe' sex is only assured by abstinence. The risk of STI and HIV infection by practicing 'oral sex' is low. Reported annual incidence of HIV oral transmission in longitudinal studies varies from 0 to 5 % according to (UCSF, Susan P. Buchbinder, MD, Risk of HIV Infection Through Receptive Oral Sex, 2003), (Baggaley RF[1], White RG, Boily MC, Systematic review of orogenital HIV-1 transmission probabilities, 2008), (UCSF**,** Page-Shafer K, Shiboski C, Risk of oral acquisition of HIV infection and oral sexual behavior among men who exclusively practice oral sex in San Francisco, CA) with other STI, the risk of oral transmission is greater risk than HIV but still low for instance. Among the two most common STI that have some risk of transmission by oral sex Syphilis has a risk of 13.7% (CDC, How risk is oral sex, 2012) and Gonorrhea 5 to 10 % (CDC, How risk is oral sex,2012). Although these two STI have been on the rise in recent years in Thailand. The most recent (Jan-April 2016) reported prevalence of Syphilis is 1.64/100,000 (National disease surveillance, Report 506) and Gonorrhea is 3.92/100,000 (National disease surveillance, Report 506, MOPH, Thailand, Bureau Epidemiology, Department of Disease Control) and therefore a small percentage of risk may translate in large number of infected cases and burden for the health system it is

not the objective of this research to investigate the burden of STI acuter through a minimal risk behaviors.

The researcher was given training to two research assistants for about my measurement tools background objectives and procedure of the study.

3.8 Reliability

The following activities were carried out to maintain the reliability.

-A 10% population of simple size was used for the pretest (pilot test) to maintain the reliability.

-The pretest was done at MBK Center, it has many Myanmar migrant workers. It is near to Chulalongkorn University.

- A Cronbach's Alpha coefficient was used to test the reliability of the questionnaires and the score of cronbach's alpha are 0.867 and 0.923 in attitude part.

The following activities were carried out to maintain the reliability.

3.9 Validity test

A set of questionnaire was checked and verified by researcher supervisors and concerned teachers.

The expert validity was confirmed and checked by three experts. **Assoc. Prof. RATANA SOMRONGTHONG**(Deputy Dean of College of Public Health Sciences) expert in sexual and reproductive health, DR ALESSIO PANZA (former director of HIV/AIDS program in European Union of Southeast Asia) and expert in adolescent and reproductive health. DR MYO NYEIN AUNG (Program manager and lecture for WHO collaborating center for Medical education, Faculty of Medicine, Chulalongkorn University) and expert in migrant health. Three experts are consult for validity review of the questionnaire content with IOC score was 0.78.

3.10 Data Collection Process

Data collection was conducted during April 2016 –May 2016 at Samut Sakhon, Thailand. The methods of data collection are as followings:

a. The data was collected by face-to-face interview with the respondents by the researcher and two research assistants who understand Myanmar language very well.

b. The research assistants are the two volunteers (one male and one female) from Local Myanmar migrant worker association, who had at least High school/bachelor degree holder.

c. The researcher was trained the interviewers one week prior to the data collection, which include how to build trust with respondents, research objectives, questionnaires and how to conduct interview and how to deal with unlikely voluntary disclosure by respondents of their HIV and STI status. In addition the female research assistants would stress to the female participants that the questionnaire is anonymous and that the interview understand their shyness and she is sympathetic and non-judgmental.

d. The researcher done the training for two research assistances 3 hours in one day and total training is two days. In this training, the researcher was used questionnaires, STI related booklets and power point presentation for rule and regulation of data collection and also face to face interview methods. After the training days, the researcher doing face to face interview practice test with two research assistants for their knowledge and skills assessment from training.

e. Before conducting the interview, the researcher and two research assistants were explained the respondents about anonymity, confidentiality, free participation, freedom to withdraw access to final report and not use of data for other purposes. There will be no name on the answered questionnaires.

f. Interview was taken at the place where the respondent is convenience such as their working place, residence during lunch break, after working hours and holidays. The interview was taken 25 minutes. The researcher was ensured confidentiality.

g. The interview was done only respondent and researchers.

- The researcher choose the interview place according to the respondents' feeling comfortable to answer the questionnaires.
- At respondents' home, the researchers were interviewed apart from family members and friends.
- Some of the respondents were interviewed at Myanmar migrant worker association office with privacy room.

h. Interview was conducted both male and female until the required sample size of 362 reach.

i. After finishing the interview, the researcher collected the questionnaire and check it briefly to ensure all of the questions have been answered.

j. After the interview, the interviewers were provided pre-printed out correct and incorrect answers for the knowledge questions and classification of positive and negative attitudes.

k. The questionnaire was putted in envelope and close in front of the respondent.

l. Data completeness was checked on a daily basis.

m. The questionnaires was kept by researcher and destroyed when the thesis completed.

3.11 Data entry and data analysis process

To analyze the data, SPSS Version 16.0 software program was used.

3.11.1 Descriptive Statistics

To find the factors influencing sex behaviors among Myanmar migrant workers, minimum, maximum, mean and standard deviation (medium for not normal distributed data), frequency and percentage when appropriate was calculated for continuous data, and percentage and frequencies were calculated for categorical data.

3.11.2 Inferential Statistics

Univariate analysis was done to measure the association between independent variables such as social demographic characteristics, knowledge on STI/HIV/AIDS, attitudes on STI/HIV/AIDS and condom use, barriers to accessing health services, alcohol consumption and sex behaviors.

Multivariate analysis (logistic regression) was done to test the highest significant factors which correlated to sex behaviors of Myanmar migrant workers. In multiple logistic regression, models were then constructed where the sex behaviors (dependent variables) of Myanmar migrant workers are tested for associations with independent variables statistically significant at 0.05 and other independent variables that have a p value of less than or equal to 0.25 for (Independent variables) in univariate analysis. All other independent variables for which p value is less than or equal to 0.25 but are reported as significant in many other studies were also included in these models.

3.12 Ethical Consideration

Ethical approval was sought and obtained from the Chulalongkorn University Ethics Review Committee for Research Involving Human Subjects Health Science Group. The principal researcher with the help of the research assistants (the volunteers, one male and one female from local Myanmar migrant workers association of Samut Sakhon and contact and inform about the research to the local authorities and get authorization to conduct the research. Before interviewing the respondents, the researcher and interviewers were given clear verbal explanation to each respondent regarding the objectives and procedures of the study. Myanmar migrant workers had a right to agree or refuse to participate in the study. The copy of informed consent was given to Myanmar migrant workers for their agreement to participation. This consent form was included confidentiality, free participation; freedom to withdraw and no use of data for other purpose. The questionnaire anonymity was used. The researcher explained to the participants the reasons, the benefits and the risks linked to this research. The researcher was assured them that the finding of this research will help them to address their needs and help to strengthen their sex behavior on Myanmar migrant workers. The researcher was done interview with respondent and researcher only and also apart from family members and friends. The questionnaires were kept by researcher and destroyed when the thesis will completed.

3.13 Obstacles and Strategies to solve the problems

The issue of sexual behaviors among youth migrant workers is tentatively sensitive topic due to the social and cultural factors. The obstacles of conducting research questionnaires may initially happen from permission from local authorizes, the shyness or hesitation to answer the questions, rejection to participate the survey, and

answering optimistically or distortion the real answer. These obstacles leaded to the validity and reliability of the outcome.

However, the strategies were solved the problem was planned according to the ethical issue and the expected benefits, which will be explained and discussed to the local authorizes, migrant's worker association, owner or manager of the factory and also migrant's leader in this area before conducting the survey. The research and the survey were introduced and explained clearly to the interviewee the objective and beneficial outcomes. The privacy and confidentiality were described as priority concern.

For female research participants, the researcher did the strictly instruct that female research assistant was conducted the interview of female participants only.

3.14 Expected Benefit

The researcher examined the social demographic characteristics, attitude and knowledge on STI, HIV/AIDS, barriers in health services, alcohol consumption and sex behaviors of Myanmar migrant workers. So, we noted their knowledge and attitudes on STI, HIV/AIDS, social demographic characteristics, and also their sex behaviors. Moreover, we also noted the barriers to prevent their health care services and also their risky behaviors. Therefore, we can get the idea, how to promote their knowledge on STI, HIV/AIDS, sex behaviors, health status and also to prevent STI, HIV/AIDS on Myanmar migrant workers. Moreover, we can also improve health status in migrant community and also to prevent sexually transmitted diseases effect on their host country.

CHAPTER IV

RESULTS

The principal investigator and two research assistants conducted the face to face interview with the questionnaire in Annex from 1st May 2016 to 31st May 2016, till the full sample size of 362 was achieved. The results are presented according to the following sections Part 1 descriptive Findings and Part 2 is inferential statistics findings: Socio- demographic characteristics, types of knowledge, attitude, barriers, alcohol consumption and sex behaviors.

Part I: Descriptive Findings

4.1 Socio-demographic characteristics

Table 1 shows the socio-demographic characteristics of respondents in Samut Sakhon, Thailand. Total male 248 (68%) and 114 (31%) female participated in this study. The mean age of the respondents was 22 years which is a range from 18 to 24 years. The age was categorized into 3 sub-groups: “18 to 20 years”, “21 to 22 years” and “23 to 24 years”. The majority of the respondents, 215 (59%) were in the age group “23 to 24 years”. The majority of the respondents in ethnicity and religion were, 270 (74%) Burma and 352 (97%) Buddhist respectively. Regarding the marital status, 199 (55%) of respondents were single and 156 (43%) were married. As for the educational status, more than half of the respondents, 206 (57%) were in the middle school level of education. A high percentage of the respondents, 310 (85%) worked as factory, others were construction, agriculture and restaurants/ shopkeeper. Income type had daily wager 314 (87%) respondents were high percentage in study population. Moreover, the mean income amount of the respondent was 8,733 THB. The income amount was

categorized into 4 sub-groups: “1,000 to 4,999 THB”, “5,000 to 9,999 THB”, “10,000 to 14,999 THB” and “15,000 to 20,000 THB”.

Table 1 Respondents by Socio-Demographic Characteristics (n=362)

Socio-demographic Factors		**Frequency (n)**	**Percentage (%)**
Sex	Male	248	68.5
	Female	114	31.5
Age Mean=22.4±1.7	18 to 20 years	69	19.1
	21 to 22 years	78	21.5
	23 to 24 years	215	59.4
Ethnicity	Shan	6	1.7
	Mon	42	11.6
	Karen	38	10.5
	Burma	270	74.6
	Other**	6	1.7
Religion	Buddhist	352	97.2
	Christian	9	2.5
	Hindu	1	0.3
Marital Status	Single	199	55.0
	Married	156	43.1
	Widow	3	0.8
	Divorce	4	1.1
Education	Illiterate	19	5.2
	Primary Education	68	18.8
	Middle School	206	56.9
	High School	62	17.1
	University or higher	7	1.9
Occupation	Construction	20	5.5
	Agriculture	12	3.3
	Restaurant/ Shopkeeper	12	3.3
	Factory	310	85.6
	Jobless	5	1.4
	Other*	3	0.8
Income Type	Daily wager	314	86.7
	Salary	38	10.5
	Other#	10	2.8

Income Amount Mean=8732.8±2255.5	1000-4999 THB	11	3.0
	5000-9999 THB	240	66.3
	10000-14999 THB	100	27.6
	15000-20000 THB	11	3.0

Other - daily income from their shop, *Other – driver, ** Other – "Kachin

Table 2 shows the living arrangement of the respondents, 128 (35%) respondents stayed with spouse and 81 (22%) stayed friend respectively. Regarding to the duration of stay, the mean duration of respondents stayed at Thailand was 53 months and also the stayed at Samut Sakhon province was 46 months. The duration of respondent stayed Thailand and Samut Sakhon province were categorized into 5 sub-groups: "6 to 23 months", "24 to 47 months", "48 to 71 months", "72 to 95 months" and "96 to 144 months".

Table 2 Migrant related characteristics (n=362)

Socio-demographic Factors		**Frequency (n)**	**Percentage (%)**
Living Arrangement	Spouse	128	35.4
	Family	62	17.1
	Relative	54	14.9
	Friend	81	22.4
	Alone	37	10.2
Duration of stay in Thailand Mean=53.2±24.2	6-23 Months	18	5.0
	24-47 Months	135	37.3
	48-71 Months	116	32.0
	72-95 Months	69	19.1
	96-144 Months	24	6.6
Duration of stay in Samut Sakhon Mean=46.1±23.2	6-23 Months	35	9.7
	24-47 Months	162	44.8
	48-71 Months	105	29.0
	72-95 Months	47	13.0
	96-144 Months	13	3.6

4.2 Knowledge concerning with STI, HIV and AIDS among study population

Table 3 shows that 84 % of respondents heard of STI, 69% of respondents non-promoted mentioned HIV/AIDS as an STI, 14% mentioned "Syphilis" and 13% mentioned "Gonorrhoea" respectively. Moreover, 3% mentioned "HBV/HCV" that can be sexually transmitted as well and also 89% of respondents heard about HIV infection.

Table 3 Frequency distribution of knowledge concerning with STI, HIV and AIDS (n=362)

Knowledge concerning with STI, HIV and AIDS	Frequency (n)	Percentage (%)
Ever heard of STI (n = 362)		
Yes	306	84.5
No	56	15.5
Types of STI ever heard (n = 306)		
-AIDS/HIV	211	69.0
-Syphilis	44	14.4
-Gonorrhoea	40	13.0
- HBV,HCV	11	3.6
Ever heard of HIV (n = 362)		
Yes	324	89.5
No	38	10.5

Table 4 shows the number of correct and incorrect knowledge on STI, it chosen by 362 respondents. Result indicated that 301 (83%) of respondent knew STI can be passed on from mother to her children. 285 (78%) of respondents did not know about STI can make women infertile and 242 (66%) of respondents thought that some STI could not affect their brain. 191(52%) of respondents thought that some STI can see outside of the genital but 250 (69%) of respondents knew STI can prevent by using condom.

Table 4 Respondent by Knowledge on STI (n=362)

Knowledge on STI	Incorrect (n, %)	Correct (n, %)
STI can be passed on from a mother to her child	61 (16.9%)	301 (83.1%)
STI can make a woman infertile	285 (78.7%)	77 (21.3%)
Some STI can affect your brain	242 (66.9%)	120 (33.1%)
You can see on the outside of the genitals if someone has an STI	191 (52.8%)	171 (47.2%)
Using a condom protects you against STI	112 (31.0%)	250 (69.0%)

Table 5 shows number of correct and incorrect knowledge upon HIV/AIDS chosen by 362 respondents. Result indicated that more than 300 (82%) of respondents knew mode of transmission of HIV/AIDS such as (AIDS is cause by HIV, Sharing needle/syringe, sexual intercourse and mother to child). But 217 (59%) of respondents thought that HIV/AIDS can be transmitted form insects or mosquito bites. 224 (62%) of respondents knew HIV/AID could not transmitted working together with HIV infected person. Moreover, 279 (77%) of people knew using condom (every time and beginning to end) to protect HIV/AIDS transmission and 234 (64%) of respondents knew HIV/AIDS can be transmitted by sex with a healthy looking person. 196 (54%) of people knew HIV/AIDS treated by ART for prolong healthy life.

Table 5 Respondent by Knowledge on HIV and AIDS (n=362)

Knowledge on HIV/AIDS	Incorrect	Correct
AIDS is cause by HIV	58 (16%)	304 (84.0%)
Sexual intercourse	59 (16.3%)	303 (83.7%)
By sharing needle/syringe	54 (14.9%)	308 (85.1%)
Mother to Child	58 (16.0%)	304 (84.0%)
From insects or mosquito bites	217 (59.9%)	145 (40.1%)
Working near people who have the HIV virus	138 (38.1%)	224 (61.9%)
Using a condom (every time and beginning to end) protects HIV	83 (22.9%)	279 (77.1%)
It is possible to get HIV by having sex with a healthy looking person	128 (35.4%)	234 (64.6%)
There is treatment for HIV infection that prolong healthy life	166 (45.9%)	196 (54.1%)

Table 6 shows the level of knowledge chosen by 362 respondents. 179 (49%) of respondents had moderate level of knowledge concerning about STI, HIV/AIDS.

Table 6 Frequency distribution of Knowledge level concerning with STI, HIV and AIDS (n=362)

Level of Knowledge	Frequency (n)	Percentage (%)
Low level of knowledge (<80%)	82	22.7
Moderate level of knowledge (60-80%)	**179**	**49.4**
High level of knowledge (<60%)	101	27.9

4.3 Attitude on STI, HIV/AIDS and Condom use

Table 7 reveals that the number and percentage distribution of attitude on STI, HIV/AIDS and condom use regarding the perceived susceptibility, severity and benefits. More than 247 (68%) and 305 (83%) of the respondents agreed that STI and HIV/AIDS were serious health problem respectively.136 (37%) of respondents' answered "unsure" about the question of everyone has equal chance to STI and 99

(27%) answered “Unsure” and 89 (24%) answered “Disagree” about the question of everyone has equal chance to get HIV/AIDS. About attitude on condom use, more than 300 (86%) of respondents agreed that using condom can prevent transmission of STI and HIV/AIDS. Moreover, 283 (77%) and 206 (56%) of respondents agreed condom is easy to use and it can get easily everywhere. But 134 (65 %) of respondents agreed that to feel embarrassed to get condom.

Table 7 Respondent level of agreements reading on STI, HIV/AIDS and Condom use statements (n=362)

Agreement level on STI, HIV/AIDS and Condom use	**Strongly Agree (n,%)**	**Agree (n,%)**	**Unsure (n,%)**	**Disagree (n,%)**	**Strongly Disagree**
STI are serious health problem	136 (37.6%)	111 (30.7%)	47 (13.0%)	34 (9.4%)	34 (9.4%)
HIV/AIDS is a serious health problem	168 (46.4%)	137 (37.8%)	26 (7.2%)	7 (1.9%)	24 (6.6%)
Everyone has equal chance to get STI	43 (11.9%)	57 (15.7%)	136 (37.6%)	88 (24.3%)	38 (10.5%)
Everyone has equal chance to get HIV/AIDS	41 (11.3%)	79 (21.8%)	99 (27.3%)	89 (24.6%)	54 (14.9%)
Believe that using condom can prevent transmission of STI, HIV/AIDS.	200 (55.2%)	114 (31.5%)	25 (6.9%)	2 (0.6%)	21 (5.8%)
It is easy to use condoms	164 (45.3%)	119 (32.9%)	52 (14.4%)	2 (0.6%)	25 (6.9%)
You can get condom easily from everywhere.	121 (33.4%)	85 (23.5%)	106 (29.3%)	22 (6.1%)	28 (7.7%)
You feel embarrassed to get Condom	131 (36.2%)	103 (28.5%)	63 (17.4%)	24 (6.6%)	41 (11.3%)

Table 8 shows that the level of attitude chosen by 362 respondents. 272 (75%) of respondents had neutral attitude on STI, HIV/AIDS and Condom use.

Table 8 Type of Attitude on STI, HIV/AIDS and Condom use (n=362)

Type of attitudes on STI, HIV/AIDS and Condom use	Frequency (n)	Percentage (%)
Negative attitude (<60%)	37	10.2
Neutral attitude (60-80%)	**272**	**75.1**
Positive attitude (>80%)	53	14.6

4.4 Barriers to accessing health care services

Table 9 shows that more than 180 (51%) of respondents agreed that they are working most of the time, so that they could not got to health care center and they could not learned health education materials. 145 (40%) of respondents disagreed that question "I cannot seek health the health care center because I have known is too far (more than 5 kilometers or about 3 miles) away from my current living place" but 143 (39%) of respondents agreed about this question. 182 (50%) of respondents were disagreed this question "If I want to buy condom, I cannot seek to buy for condom because I have no money to pay for this" and 143 (39%) of respondents disagreed but 136 (37%) of respondents agreed about this question "If I have a STI, I cannot seek health care services for STI because I have no money to doing lab tests and buying for medicines". 233(64%) of respondents agreed about language barrier question and 150 (41%) of respondents disagreed about the immigration status question but 132 (36%) agreed.

Table 9 Respondent level of agreements reading on Barriers to accessing health care services (n=362)

Agreement level on barriers to accessing Health care services	**Agree (n, %)**	**Uncertain (n, %)**	**Disagree (n, %)**
I am working most of the times; I can't go to health care center. (eg, hospital, clinic and health education program)	192 (53.0%)	76 (21.0%)	94 (26.0%)
I am working most of the times, I can't learn Health Education materials (eg, books, journal and magazines, etc)	186 (51.4%)	56 (15.5%)	120 (33.1%)
I cannot seek health the health care center because I have known is too far (more than 5 kilometers or about 3 miles) away from my current living place.	143 (39.5%)	74 (20.4%)	145 (40.1%)
If I want to buy condom, I cannot seek to buy for condom because I have no money to pay for this.	61 (16.9%)	119 (32.9%)	182 (50.3%)
If I have a STI, I cannot seek health care services for STI because I have no money to doing lab tests and buying for medicines.	136 (37.6%)	83 (22.9%)	143 (39.5%)
I can't speak Thai Language. So, I have a problem to talking about health care providers in health center.	233 (64.4%)	57 (15.7%)	72 (19.9%)
If I want to get condom, I cannot seek condom because I am afraid of being caught by the local authorities, as my immigration status is illegal.	132 (36.5%)	80 (22.1%)	150 (41.4%)

Table 10 reveals that the level of barrier chosen by 362 respondents. 166 (46%) of respondents had moderate level of barriers to accessing health care services.

Table 10 Level of Barriers to accessing health care services (n=362)

Level of Barriers to accessing Health care services	Frequency (n)	Percentage (%)
Low level (<60%)	151	41.7
Moderate level (60-80%)	**166**	**45.9**
High level (>80%)	45	12.4

4.5 Alcohol Consumption

Table 11 shows the alcohol consumption of respondents. Among 362 of respondents, 109 (30%) of respondents were drinking alcohol history and 253 (70%) were not drink. Among 109 (30%) of drinker, most of the respondents 68 (62%) were occasional drinker. Moreover, only 38 (35%) of drinkers were drink till drunk on Last 3 months on average. Furthermore, only 47 (43%) of drinker respondents did the sex after drinking alcohol and 28 (60%) of drinker respondents did not used condom during their sexual intercourse and only 4 (8%) “Always” used condom at last 3 months ago.

Table 11 Alcohol Consumption

Alcohol Consumption		Frequency (n)	Percentage (%)
Are you drinking alcohol? (n=362)	Yes	109	30.10
	No	253	69.90
Type of drinking on Last 3 months on average (n=109)	Daily drinker	11	10.09
	Occasional drinker	68	62.38
	Social drinker	30	27.52

I Drink till when I get drunk on Last 3 months on average (n=109)	Yes	38	34.86
	No	71	65.13
Total number of times (n=38)	one time	16	42.10
	Two time	5	13.15
	Three time	11	28.94
	Four time	4	10.52
	five time	2	5.26
I have drunk alcohol before sexual intercourse in the past 3 months (n=109)	Yes	47	43.11
	No	62	56.88
Do you use condom while having sex after drinking alcohol at last 3 months? (n=47)	Never	28	59.57
	Some of the times	12	25.53
	Half of the times	3	6.38
	Always	4	8.51

4.6. Sex Behaviors of study population

Table 12 reveals that number and percentage of general sex behaviors patterns among study population. Firstly, the table show 205 (56%) of respondents had history of sexual intercourse and 157 (43%) of respondents did not have history of sexual intercourse in their life (Abstinence) and all of them are “Single”. 126 (61%) of respondents had history of first sex at the age between 20-24 years old and only 13 (6%) of respondents had early age of first sex age at 15-18 years old. In this table also shows the person who has sex with first time, most of the respondents 154 (75%) had first sex with spouse. Moreover, 177 (86%) of respondents had “single partner” but 28 (13%) of respondents had multiple sex partners and 29 (14%) of the respondents “Always using condom for protective sex” and 176 (86%) were not in study population. Furthermore,

35 (17%) of respondents “Protective Sex” “Always and Almost always using condom” in study population and 170 (83%) were not.

Table 12 General sex behavior patterns among study population

Sexual Behaviors		Frequency (n)	Percentage (%)
Sexual Intercourse in life (n= 362)	Yes	205	56.60
	No*	157	43.40
sexual intercourse for the first time (n=205)	15-18 years	13	6.34
	18-20 years	66	32.19
	20-24 years	126	61.46
With WHOM have sexual intercourse at that first time (n=205)	Spouse	154	75.12
	Steady partner	20	9.75
	Causal partner	21	10.24
	Sex worker	10	4.87
Number of sexual partners (n=205)	Single	177	86.34
	Multiple	28	13.65
Protective Sex (n=205) (Always using condom)	Yes	29	14.14
	No	176	85.85
Protective Sex (n=205) (Always + Almost always using condom)	Yes	35	17.07
	No	170	83

* - All of “Abstinence” are “Single” in marital status

Table 13 shows the number and percentage of sexual intercourse pattern with spouse in study population. 162 (79%) of respondents had spouse and most of the respondents 154 (95%) were not use condom at their sexual intercourse with spouse because 98 (63%) of respondents thought that no need to use condom with spouse and also 37 (24%) of respondents mentioned “partner does not want” at sexual intercourse. But only 8 (4%) of respondents had used condom during sexual intercourse with spouse, most of the condom using respondents 5 (62%) mentioned “some of the time”.

Table 13 Frequency distribution of sexual intercourse pattern with Spouse (n=205)

Sexual Behaviors		Frequency (n)	Percentage (%)
Having spouse (n=205)	Yes	162	79.02
	No	43	20.97
Use condom during sexual intercourse with a spouse in the last three months? (n=162)	Yes	8	4.93
	No	154	95.06
Use a condom(from the beginning to the end)with a-spouse (n=8)	Always	2	25
	Half of the time	1	12.5
	Some of the time	5	62.5
Reasons for not using condom during sexual intercourse with steady partner (n=154)	Partner does not want	37	24.02
	Condom is not available	5	3.24
	Condom is expensive	4	2.59
	Feeling shy to use	10	6.49
	My feeling is no need to use condom at sexual intercourse with spouse	98	63.63

Table 14 reveals the number and percentage of sexual intercourse pattern with steady partner in study population. 29 (14%) of respondents had steady partner and the number of steady partner “one” had 21 (72%) of respondents. Moreover, maximum numbers of sexual intercourse with steady partner was 15 (51%) of respondents had more than five times on last 3 months. 18 (62%) of respondents with steady partner did not use condom during sexual intercourse because 10 (55%) of respondents answered “felling shy to use”. On the other hand, 11 (37%) had used condom during their sexual

intercourse, 7 (63%) respondents used condom “some of the time” and 4 (36%) used condom “Always and Almost always”. For intend to use condom for next time sexual intercourse with steady partner, 8 (28%), 7 (24%) and 6 (21%) of respondents mentioned “very likely”, “Fifty-Fifty” and “Not Likely” were respectively. Mostly 15 (51%) of respondents met with their steady partner at “Dormitory” and 10 (34%), 9 (31%) and 8 (28%) of respondents had sex with their partner at home, friend’s room and dormitory respectively.

Table 14 Sexual intercourse characteristics with Steady partner among sexually experienced

Sexual Behaviors		**Frequency (n)**	**Percentage (%)**
Have sex with steady partners (n=205)	Yes	29	14.14
	No	176	85.85
Number of steady partners during the last three months (n=29)	One	21	72.41
	Two	5	17.24
	Four and more	3	10.34
Number of sexual intercourse with steady partner during last 3 months (n=29)	Only one	3	10.34
	2-5 times	11	37.93
	>5 times	15	51.72
Use condom during sexual intercourse with steady partner at last three months? (n= 29)	Yes	11	37.93
	No	18	62.06
How often did you or your partner use a condom (from the beginning to the end)(n= 11)	Always	2	18.18
	Almost always	2	18.18
	Some of the time	7	63.63

Reasons for not using condom during sexual intercourse with steady partner (n=18)	Partner does not want	5	27.77
	Condom is not available	3	16.66
	Feeling shy to use	10	55.55
Intend to use a condom for the next time you have sexual intercourse with your steady partner (n = 29)	For Sure	4	13.79
	Very Likely	8	27.58
	Fifty-Fifity	7	24.13
	Not Likely	6	20.68
	Surely Not	4	13.79
Places of meeting with steady partner (n=29)	Dormitory	15	51.72
	Restaurant	6	20.68
	Other	8	27.58
Places go to have sex with steady partner (n=29)	Dormitory (short term)	8	27.58
	Hotel	2	6.89
	At home	10	34.48
	Other*	9	31.03

*Other- Friend's Room

Table 15 shows that the sexual intercourse pattern with causal partner in study population. 23 (11%) of respondents had Causal partner and the number of steady partner "one" had 10 (43%) of respondents. Moreover, most of the respondents 12 (52%) had "two to five" time sex with their causal partner at last three months ago. This type of partner had two categories, 1"Accept money, gifts or favors" and 2"Pay money, gifts or favors". Firstly, 2 (9%) of respondents had "accept money, gifts or favors" and 21 (91%) did not accept the money, gifts or favors. 1 (50%) of respondent used condom "almost always" and another 1 (50%) did not used condom at sexual intercourse with causal partner because condom is not available at that time. For intend to use condom for next time sexual intercourse with causal partner, 1 (50%) and another 1 (50%) of respondents mentioned "For sure" and "Not Likely" were respectively. Mostly 2

(100%) of respondents met with their steady partner at “Dormitory” and 1 (50%) and another 1 (50%) of respondents had sex with their partner at home and dormitory respectively.

Table 15 Sexual intercourse characteristics with Causal partner among sexually experienced (n=205) / (Accept the money, gifts or favors) (n=23)

Sexual Behaviors		**Frequency (n)**	**Percentage (%)**
Sex with causal partners (n=205)	Yes	23	11.21
	No	182	88.78
Number of sexual intercourse with causal partners during the last three months (n=23)	One	10	43.47
	Two and Three	7	30.43
	Five or more	6	26.08
Number of sexual intercourse with causal partner during last 3 months (n = 23)	Only one	7	30.43
	2-5 times	12	52.17
	>5 times	4	17.39
Accept money, gifts or favors for sex intercourse with causal partner (n=23)	Yes, gifts or favors	2	8.69
	No	21	91.30
Use condom during sexual intercourse with causal partner at last three months? (n= 2)	Yes	1	50
	No	1	50
How often did you or your partner use a condom (from the beginning to the end) (n= 1)	Almost Always	1	100
Reasons for not using condom during sexual intercourse with causal partner (n=1)	Condom is not available	1	100

Intend to use a condom for the next time you have sexual intercourse with your causal partner (n = 2)	For Sure	1	50
	Not Likely	1	50
Place of meeting paying casual sex partner (n=2)	Dormitory	2	100
Places to have sex with paying causal partner (n=2)	Dormitory	1	50
	At home	1	50

Table 16 shows the number and percentage of "pay money, gifts or favors" to causal partner's respondents. 21 (91%) of respondents had pay money, gifts or favors to causal partner and 2 (9%) did not pay. 15 (71%) of respondent used condom and another 6 (29%) of respondent was not used condom at sexual intercourse with causal partner. 8 (53%) and 6 (40%) of respondents used condom "Always" and "Some of the time" respectively. 5 (83%) of respondents thought that using condom is shy at sexual intercourse with paying causal partner. For intend to use condom next time sexual intercourse with paying causal partner, 7 (33%) and 5 (23%) of respondents mentioned "For sure and Very likely" respectively and another 5 (23%) of respondents mentioned "Surely not". Mostly 11 (52%) of respondents met with their steady partner at "Dormitory" and 7 (33%) and 6 (28%) of respondents had sex with their paying causal partner at home and dormitory respectively.

Table 16 Sexual intercourse characteristics with Causal partner among sexually experienced (Pay the money) (n=23)

Sex Behaviors		**Frequency (n)**	**Percentage (%)**
Pay money, gifts or favors for sex intercourse with causal partner (n=23)	No	2	8.69
	Yes, Money	16	69.56
	Yes, Gift or Favors	5	21.73

Use condom during sexual intercourse with causal partner at last three months? (n= 21)	Yes	15	71.42
	No	6	28.57
How often use a condom during sexual intercourse with causal partner (from the beginning to the end)(n= 15)	Always	8	53.33
	Almost always	1	6.66
	Some of the time	6	40.00
Reasons for not using condom during sexual intercourse with causal partner (n= 6)	Condom is not available	1	16.66
	Feeling shy to use	5	83.33
Intend to use a condom for the next time you have sexual intercourse with your causal partner (n=21)	For Sure	5	23.80
	Very Likely	7	33.33
	Fifty-Fifty	3	14.28
	Not Likely	1	4.76
	Surely Not	5	23.80
Places of meeting not-paying causal partner (n=21)	School	1	4.76
	Dormitory	11	52.38
	Pub	1	4.76
	Restaurant	4	19.04
	Other	4	19.04
Places to have sex with not-paying causal partner (n=21)	Dormitory	6	28.57
	short term hostel	4	19.04
	At home	7	33.33
	Other*	4	19.04

*Other- Friend's room

Table 17 reveals the number and percentage of sexual intercourse pattern with sex worker in study population. 22 (10%) of respondents with had sexual intercourse with sex worker and the number of steady partner "one" had 15 (68%) of respondents and most of the respondents 14 (64%) had only one time sex with sex worker at last

three months. Most of the respondents' sex with sex worked used condom 20 (90%) and only 2 (10%) did not used condom. 17 (85%) of respondents' had sex worker "Always" use condom during their sexual intercourse and 1 (50%) and other 1 (50%) not using condom because of they were "felling shy to use" and "Condom is not available". Moreover, most of the respondents had sex worker, they intend to use condom next time sexual intercourse, 15 (68%) of respondents mentioned "For sure". 10 (45%) and 7 (31%) of respondents met with sex worker at "Restaurants" and "Night market" respectively. Most of the respondents 18 (81%) had sex with sex worker at" short term" Hotel.

Table 17 Sexual intercourse pattern with sex worker (n=205)

Sexual Behaviors		**Frequency (n)**	**Percentage (%)**
Sex with sex worker (n=205)	Yes	22	10.73
	No	183	89.26
Number of sex worker during the last three months (n=22)	One	15	68.18
	Two and Three	4	18.18
	Four and more	3	13.63
Number of sexual intercourse with sex worker during last 3 months (n = 22)	Only one	14	63.6
	2-5 times	6	27.3
	>5 times	2	9.1
Use condom during sexual intercourse with sex worker at last three months? (n= 22)	Yes	20	90.90
	No	2	9.09
use a condom (from the beginning to the end)(n= 20)	Always	17	85.00
	Almost always	2	10.00
	Some of the time	1	5.00
If No, Why? (n= 2)	Condom is not available	1	50.00
	Feeling shy to use	1	50.00

Intend to use or make your partner intend to use a condom for the next time (n=22)	For Sure	15	68.18
	Very Likely	2	9.09
	Fifty-Fifty	3	13.63
	Surely Not	2	9.09
Places of meeting with sex worker (n=22)	Disco	4	18.18
	Restaurant	10	45.45
	Night Market	7	31.81
	Other	1	4.54
Places go to have sex with sex worker (n=22)	Dormitory (short term)	3	13.63
	Hotel	18	81.81
	Other*	1	4.54

*Other- Friend's room

Following table 18 shows the number and percentage of intend to use condom while the partner did not like. Most of the respondents 145 (70%) mentioned "Never" because of most of the mentioned respondents were married 124 (85%). 21 (10%) and 33 (16%) of respondents mentioned "Always" and "Some of the time" respectively.

Table 18 Intent to use condom while your partner does not like to use condom (n = 205)

Sexual Behaviors			**Frequency (n)**	**Percentage (%)**
intend to use condom while your partner does not like to use condom(n=205)	Always		21	10.24
	Almost Always		5	2.43
	Half of the time		1	0.48
	Some of the time		33	16.09
	Never		145	70.73
Marital status of 'never' respondents (n= 145)		Single	16	11.03
		Married	124	85.51
		Window	2	1.37
		Divorce	3	2.06

Part II: Inferential Statistics Finding

4.7 Association between socio-demographic factors, knowledge, altitude, barrier level, alcohol drinking and ever have sexual intercourse

Table 19 shows the association between socio-demographic factors knowledge, altitude, barrier level, alcohol drinking and ever have sexual intercourse.

In univariate analysis, the odd of outcome variable (ever have sexual intercourse) is significantly associate with male gender. This association disappear in multivariate analysis, after adjustment for the variables listed in the table. In univariate analysis, married respondents are strongly statistically significant associate with ever have sexual intercourse than not married respondents. This association is still strongly statistically significant in multivariate analysis, after adjustment for the variables listed in the table. Middle and higher education study population are statistically significant association with ever have sexual intercourse compare to below middle education in univariate analysis. This association is still statistically significant in multivariate analysis, after adjustment for the variables listed in the table. For alcohol consumption, the alcohol drinkers are more strongly significant association with ever have sexual intercourse than not drinkers in univariate analysis. This association is still statically significant in multivariate analysis, after adjustment for the variables listed in the table. For knowledge level, middle knowledge level is higher significantly association with ever have sexual intercourse than other level in univariate analysis. This association is still statistically significant association in multivariate analysis, after adjustment for the variables listed in the table. The other variables for socio-demographic factors (ethnicity and religion) and the level of attitude and barrier are not statistically

significant association with ever have sexual intercourse in both univariate and multivariate analysis.

Table 19 Logistic regression analysis for outcome variable (ever have sexual intercourse) using predictors – sex, ethnicity, religion, marital, education, knowledge, attitude, barrier level and alcohol drinking. (Adjusted for significant valuables at p value < 0.05 and non-significant values at p values ≤ 0.25)

Predictors (n = 205)	**Univariate analysis OR (95% CI)**	**P Value**	**Multivariate analysis Adjusted OR (95% CI)**	**p Value**
Sex Female Male	1.0 (Ref.) **1.55 (1.00 – 2.43)**	**0.046**	1.0 (Ref.) 1.70 (0.74 – 3.89)	0.210
Ethnicity Not Burma Burma	1.0 (Ref) 0.70 (0.43 – 1.13)	0.152	1.0 (Ref) 0.91 (0.40 – 2.07)	0.830
Religion Not Buddhist Buddhist	1.0 (Ref) 0.55 (0.14 – 2.16)	0.393	1.0 (Ref) 0.69 (0.10 – 4.73)	0.711
Marital Not married Married	1.0 (Ref) **109.69 (38.74 – 310.60)**	**< 0.001**	1.0 (Ref) **149.18 (49.41 - 450.34)**	**<0.001**
Education Below middle Middle and above	1.0 (Ref) **0.46 (0.27 – 0.78)**	**0.004**	1.0 (Ref) **0.32 (0.13 – 0.77)**	**0.011**
Alcohol drinking No Yes	1.0 (Ref) **2.65 (1.63 – 4.32)**	**< 0.001**	1.0 (Ref) **2.87 (1.34 – 6.11)**	**0.006**
Knowledge level Low Middle High	1.0 (Ref) **1.71 (1.01 – 2.90)** 1.42 (0.79 – 2.56)	**0.045** 0.233	1.0 (Ref) **3.18 (1.23 – 8.21)** 1.86 (0.63 – 5.46)	**0.017** 0.258

Attitude level				
Negative	1.0 (Ref)		1.0 (Ref)	
Neutral	0.74 (0.36 – 1.51)	0.421	0.71 (0.23 – 2.19)	0.554
Positive	0.92 (0.39 – 2.19)	0.864	1.02 (0.26 – 3.92)	0.971
Barrier level				
Low	1.0 (Ref)		1.0 (Ref)	
Middle	1.27 (0.81 – 1.99)	0.278	1.74 (0.84 – 3.58)	0.132
High	1.33 (0.67 – 2.61)	0.407	1.53 (0.52 – 4.51)	0.432

4.8 Association between socio-demographic factors, knowledge, altitude, barrier level, alcohol drinking and early age of first sex

Table 20 shows the association between socio-demographic factors knowledge, altitude, barrier level, alcohol drinking and early age of first sex.

In univariate analysis, the odd of outcome variable (early age of first sex), among alcohol drinkers is statistically significant association compare to not drinkers. There is association disappear in multivariate analysis, after adjustment for the variables listed in the table. Other variables (sex, ethnicity, religion, and marital, education, and knowledge, attitude and barrier level) are not statistically significant association with early age of first sex in both univariate and multivariate analysis.

Table 20 Logistic regression analysis for outcome variable (Early age of first sex) using predictors – sex, ethnicity, religion, marital, education, alcohol drinking, knowledge, attitude and barrier level. (Adjusted for significant valuables at p value < 0.05 and non-significant values at p values ≤ 0.25)

Predictors (n = 205)	**Univariate analysis OR (95% CI)**	**p value**	**Multivariate analysis Adjusted OR (95% CI)**	**p Value**
Sex				
Male	1.0 (Ref)		1.0 (Ref)	
Female	*Cannot calculated		*Cannot calculated	

Ethnicity		0.667		0.273
Not Burma	1.0 (Ref)		1.0 (Ref)	
Burma	1.33 (0.35 – 5.04)		2.59 (0.47 – 14.28)	
Religion		0.397		0.379
Not Buddhist	1.0 (Ref)		1.0 (Ref)	
Buddhist	0.38 (0.04 – 3.47)		0.26 (0.01 – 5.82)	
Marital		0.156		0.068
Not married	1.0 (Ref)		1.0 (Ref)	
Married	4.45 (0.56 – 35.13)		7.33 (0.86 – 62.22)	
Education		0.588		0.645
Below middle	1.0 (Ref)		1.0 (Ref)	
Middle and above	1.44 (0.38 – 5.43)		1.40 (0.32 – 6.02)	
Alcohol drinking		**0.027**		0.190
No	1.0 (Ref)		1.0 (Ref)	
Yes	**3.92 (1.16 – 13.20)**		2.51 (0.63 – 10.00)	
Knowledge level				
Low	1.0 (Ref)		1.0 (Ref)	
Middle	0.50 (0.13 – 1.91)	0.318	0.39 (0.08 – 1.92)	0.251
High	0.48 (0.10 – 2.30)	0.364	0.30 (0.05 – 1.77)	0.187
Attitude level				
Negative	1.0 (Ref)		1.0 (Ref)	
Neutral	0.83 (0.47 – 1.01)	0.818	1.28 (0.22 – 7.34)	0.775
Positive	*Cannot calculated		*Cannot calculated	
Barrier level				
Low	1.0 (Ref)		1.0 (Ref)	
Middle	0.80 (0.22 – 2.88)	0.741	1.20 (0.27 – 5.34)	0.805
High	1.87 (0.41 – 8.43)	0.412	2.38 (0.40 – 14.11)	0.338

*OR cannot calculate since the outcome was absent in this category.

4.9 Association between socio-demographic factors, knowledge, altitude, barrier level, alcohol drinking and multiple sex partners

Table 21 shows the association between socio-demographic factors knowledge, altitude, and barrier level, alcohol drinking and multiple sex partners.

In univariate analysis, the odd of outcome variable (multiple sex partners) is significantly associate with male gender. This association disappear in multivariate analysis, after adjustment for the variables listed in the table. In univariate analysis,

married respondents are more strongly statistically significant association with multiple sex partners than not married respondents. This association is still strongly statistically significant association in multivariate analysis, after adjustment for the variables listed in the table. For education, middle and above education are statistically significant association with multiple sex partners than below middle education in univariate analysis. This association is still statistically significant association in multivariate analysis, after adjustment for the variables listed in the table. In univariate analysis, alcohol drinker is strongly statistically significant association with multiple sex partner than non-drinker. This association is still strongly statistically significant association in multivariate analysis, after adjustment for the variables listed in the table. The other variable (ethnicity, religion and alcohol drinking) are not statistically significant association with multiple sex partner in both univariate and multivariate analysis. Moreover, the level of knowledge, attitude and barrier are not statistically significant association with multiple sex partner in both univariate and multivariate analysis.

Table 21 Logistic regression analysis for outcome variable (multiple sex partners) using predictors – sex, ethnicity, religion, marital, education, knowledge, attitude, barriers level and alcohol drinking. (Adjusted for significant valuables at p value < 0.05 and non-significant values at p values ≤ 0.25)

Predictors (n = 205)	**Univariate analysis OR (95% CI)**	**p value**	**Multivariate analysis Adjusted OR (95% CI)**	**p Value**
Sex Female Male	 1.0 (Ref.) **5.02 (1.14 – 22.10)**	**0.033**	 1.0 (Ref.) 1.25 (0.18 – 8.69)	0.816
Ethnicity Not Burma Burma	 1.0 (Ref) 1.70 (0.60 – 4.77)	0.314	 1.0 (Ref) 1.24 (0.28 – 5.37)	0.773

Religion Not Buddhist Buddhist	 1.0 (Ref) 0.87 (0.10 – 7.56)	0.902	 1.0 (Ref) 0.45 (0.02 – 7.43)	0.579
Marital Not married Married	 1.0 (Ref) **0.11 (0.04 – 0.27)**	**< 0.001**	 1.0 (Ref) **0.09 (0.02 – 0.31)**	**< 0.001**
Education Below middle Middle and above	 1.0 (Ref) **11.37 (1.50 – 86.29)**	**0.019**	 1.0 (Ref) **30.75 (2.75 – 343.15)**	**0.005**
Alcohol drinking No Yes	 1.0 (Ref) **10.22 (3.35 – 31.19)**	**< 0.001**	 1.0 (Ref) **10.23 (2.55 – 41.02)**	**0.001**
Knowledge level Low Middle High	 1.0 (Ref) 0.45 (0.16 – 1.23) 0.45 (0.14 – 1.42)	 0.121 0.174	 1.0 (Ref) 0.23 (0.05 – 1.03) 0.35 (0.07 – 1.83)	 0.056 0.218
Attitude level Negative Neutral Positive	 1.0 (Ref) 1.62 (0.35 – 7.48) 1.55 (0.25 – 9.32)	 0.535 0.629	 1.0 (Ref) 2.67 (0.36 – 19.73) 2.36 (0.22 – 25.33)	 0.335 0.447
Barrier level Low Middle High	 1.0 (Ref) 1.72 (0.69 – 4.32) 0.77 (0.15 – 3.89)	 0.242 0.754	 1.0 (Ref) 2.68 (0.76 – 9.40) 0.82 (0.10 – 6.24)	 0.123 0.850

4.10 Association between socio-demographic factors, knowledge, altitude, barrier level, alcohol drinking and protective sex

Table 22 shows the association between socio-demographic factors, knowledge, altitude, barrier level, alcohol drinking and protective sex.

In univariate analysis, the odd of outcome variable (protective sex), is statistically significant association with Buddhist religion. This association is still statistically significant association in multivariate analysis, after adjustment for the variables listed in the table. In univariate analysis, married respondents are strongly

statistically significant association with protective sex than not married respondents. This association is still strongly statistically significant association in multivariate analysis, after adjustment for the variables listed in the table. The other variables for socio-demographic factors (sex, ethnicity, education and alcohol drinking) and level of knowledge, attitude and barrier are not significant association with protective sex in both univariate and multivariate analysis.

Table 22 Logistic regression analysis for outcome variable (protective sex) using predictors – sex, ethnicity, religion, marital, education, knowledge, attitude, barrier level and alcohol drinking. (Adjusted for significant valuables at p value < 0.05 and non-significant values at p values ≤ 0.25*)*

Predictors (n = 205)	**Univariate analysis OR (95% CI)**	**p Value**	**Multivariate analysis Adjusted OR (95% CI)**	**p Value**
Sex Female Male	1.0 (Ref.) 3.28 (0.94 – 11.43)	0.062	1.0 (Ref.) 2.70 (0.57 – 12.58)	0.206
Ethnicity Not Burma Burma	1.0 (Ref) 0.88 (0.36 – 2.17)	0.790	1.0 (Ref) 0.97 (0.25 – 3.66)	0.966
Religion Not Buddhist Buddhist	1.0 (Ref) **0.09 (0.02 – 0.47)**	**0.004**	1.0 (Ref) **0.07 (0.01 – 0.77)**	**0.030**
Marital Not married Married	1.0 (Ref) **0.08 (0.03 – 0.20)**	**< 0.001**	1.0 (Ref) **0.07 (0.02 – 0.21)**	**< 0.001**
Education Below middle Middle and above	1.0 (Ref) 1.38 (0.52 – 3.66)	0.507	1.0 (Ref) 2.91 (0.70 – 12.10)	0.141
Alcohol drinking No Yes	1.0 (Ref) 2.25 (0.97 – 5.21)	0.057	1.0 (Ref) 0.79 (0.24 – 2.54)	0.696

Knowledge level				
Low	1.0 (Ref)		1.0 (Ref)	
Middle	2.33 (0.64 – 8.46)	0.198	2.49 (0.53 – 11.56)	0.243
High	1.40 (0.32 – 5.97)	0.650	1.58 (0.29 – 8.52)	0.594
Attitude level				
Negative	1.0 (Ref)		1.0 (Ref)	
Neutral	1.62 (0.35 – 7.48)	0.535	1.19 (0.21 – 6.67)	0.838
Positive	2.01 (0.35 – 11.47)	0.428	1.54 (0.21 – 11.32)	0.667
Barrier level				
Low	1.0 (Ref)		1.0 (Ref)	
Middle	1.72 (0.69 – 4.32)	0.242	2.04 (0.66 – 6.27)	0.210
High	1.21 (0.29 – 4.95)	0.791	0.68 (0.10 – 4.27)	0.686

CHAPTER V

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This study was a cross-sectional analytical survey carried out on 362 youth (18-24 years) Myanmar migrant workers residing in Samut Sakhon, Thailand. The study investigated socio-demographic characteristics, knowledge about STI, HIV/AIDS, attitude on STI, HIV/AIDS and condom use, barriers in accessing health care services and alcohol consumption and to assess any association of these independent variables with dependent variables (Abstinences, Early age of first sex, Multiple sex partners and Protective sex).

The main result of dependent variable revealed that youth migrant workers who ever had sexual intercourse were 205 (56%) and abstinent were 157 (43%). For age of first sex, 13 (6%) had early sex, from 15 to 18 years, and 192 (93%) had sex later in life. The respondents with single sexual partner were 177 (86%) and respondents with multiple sexual partners were 28 (13%). Out of 205 sexually experienced, respondents those having protective sex by using condom always were 29 (14%) and respondents with non-protective sex were 176 (85%).

Socio-Demographic Characteristics

The socio-demographic characteristics of respondents in Samut Sakhon, Thailand. Total male 248 (68%) and 114 (31%) female participated in this study. The mean age of the respondents was 22 years which is a range from 18 to 24 years. The majority of the respondents, 215 (59%) were in the age group “23 to 24 years” and in

ethnicity and religion were, 270 (74%) Burma and 352 (97%) Buddhist respectively. Regarding the marital status, 199 (55%) of respondents were single and 156 (43%) were married. More than half 206 (57%) of the respondents of educational status were in the middle school level of education. A high percentage of the respondents, 310 (85%) worked as factory, others were construction, agriculture and restaurants/ shopkeeper. Income type had daily wager 314 (87%) were high percentage in study population and the mean income amount of the respondent was 8,733 THB. Moreover, 128 (35%) respondents stayed with spouse and 81 (22%) stayed with friend respectively. In term of the duration of stay, the mean duration of respondents stayed at Thailand was 53 months whereas 46 months at Samut Sakhon province.

In 2004, Myint Thu et al performed "Knowledge, Attitude and Practices on HIV/AIDS Prevention among Myanmar Migrants in Maha Chai, Samut Sakhon Province, Thailand" with 368 respondents and revealed that 64% were 15-25 years of age, and 62% were single. About half of the respondents (47%) were in the middle school education. Most were blue-collar workers or general labours (97%) and 46% of the respondents had an income between Baht 3,000 to 4,000 per month. More than half of the respondents (55%) stayed in Thailand for one to four years. (Myint Thu, et. al., 2004) Similarly in 2008, Phyo San Win and Chapman compiled "prevalence and determinants of access to, perceptions on, and preferences for, HIV-related health education among Myanmar migrant workers in Ranong, Thailand" expressed that among all 357 subjects, (15-25 years) and low-educated workers constituted 45% and 43% respectively, and the length of stay in Ranong varied from 6 months to 34 years. (Phyo San Win and Chapman, et.al., 2008)

In this study, socio-demographic findings of type of job, income, education, marital status and duration of stay are more or less the same with the Myint Thu's study. However only a small difference was seen on the age grouping changes because this study investigated youth age between (18-24 years). In addition, ethnicity, religion, living arrangement and income type are extra information in this study. Moreover, in this study aim to focus in the youth how they percept and which factors contribute to knowing of sexually transmitted disease, therefore, age grouping is a bit younger and some cultural factors like religion and race are involved . The monthly income is obviously increase in this study compare with Myint Thu, 2004 study because Thailand government negotiated the basic daily wages after 2004 according to changing policy.

Compare to Phyo San Win and Chapman study, in 2008, the study parameters are not that different but education status was. I hope that the different study area, time and job status are the main reason to be altered.

Knowledge concerning with STI, HIV and AIDS

The 84 % of respondents heard of STI, 69% of respondents non-promoted mentioned HIV/AIDS as an STI, 14% mentioned "Syphilis" and 13% mentioned "Gonorrhoea" respectively. Moreover, 3% mentioned "HBV/HCV" that can be sexually transmitted as well and also 89% of respondents heard about HIV infection. The level of knowledge chosen by 362 respondents. 179 (49%) of respondents had moderate level of knowledge concerning about STI, HIV/AIDS. the level of knowledge chosen by 362 respondents. 179 (49%) of respondents had moderate level of knowledge concerning about STI, HIV/AIDS.

Out of 306 Myanmar migrant workers, 49.4% had moderate level of knowledge concerning about STI, HIV/AIDS. This moderate level of knowledge was mirror the

result of among Myanmar migrants in Ranong (52%) and Sangkhla Buri, Tak Province (40%) (Chantavanich, *et al.* 1999).

In a study of Knowledge, Attitude and Practices on HIV/AIDS Prevention among Myanmar Migrants in Maha Chai, Samut Sakhon Province, Thailand conducted by Myint Thu et al in 2004 mentioned that the mean for knowledge was 18.6 out of 30 with a standard deviation of 5.77. More than half of the respondents (64% male and 56% female) had misconceptions on prevention of HIV/AIDS. There was a significant association between higher levels of education (high school and university) and good knowledge (> 70% correct answers) among the respondents (p value 0.025). (Myint Thu, et. al., 2004)

In this study, samples collected only in Samut Sakon provinces areas where Myanmar immigrants' worker worked and surprisingly, level of knowledge is only found moderate level in concerning of knowledge of HIV/AIDS/STI. In addition, the level of knowledge might be changed with Myint Thu study, 2004 with the different study time, study population size and their level of education.

Attitude on STI, HIV/AIDS and Condom use

More than 247 (68%) and 305 (83%) of the respondents agreed that STI and HIV/AIDS were serious health problem respectively. About attitude on condom use, more than 300 (86%) of respondents agreed that using condom can prevent transmission of STI and HIV/AIDS. The level of attitude chosen by 362 respondents. 272 (75%) of respondents had neutral attitude on STI, HIV/AIDS and Condom use.

Consequently, In Myint Thu at el, 2004 showed that there was 43% had a less positive attitude towards HIV/AIDS and its prevention. In Myint et al, 2004, Binary logistic regression analysis of attitude of the respondents by socio-demographic

characteristics and knowledge on HIV/AIDS with non-significant variables were age, gender, marital status, education, race, religion, income, duration of stay in Thailand, there was no knowledge level concerning of HIV/AIDS above 70% whereas less than 70% was statically significant with p value 0.012. Moreover, there was also no attitude level regarding on the HIV/ AIDS above 70% and statistically significant with p value 0.033 in less than 70%.

Compare to the current study, there is more than half of the population agreed STI and HIV/AIDS were serious health problem and neutral attitude on the sexually transmitted disease and condom use. It is meant that increasing knowledge in timely in population whereas attitude is still need to improve due to some personal behavior, race and religious are major factor to contribute.

It could be explained by Behavior Theory of Health Belief Model by Rosenstock which was later expended by Becker which explained that many variables such as perceived susceptibility, severity, barriers, benefit, efficacy, threat, cue to action, and demographic and socio-psychological variables played roles to perform behavior. This finding was not easy to explain and qualitative research might need to be conducted to explore the in depth association with attitude and sexual behaviors in this study.

Barriers to accessing health care services

More than 180 (51%) of respondents agreed that they are working most of the time, so that they could not got to health care center and they could not learned health education materials. The bigger group 166 (46%) of respondents had moderate level of barriers to accessing health care services

According to migration and HIV/AIDS in Thailand: Triangulation of Biological, Behavioral and Programmatic Response Data in Selected Provinces, Nigoon Jitthai et al, 2013, the health service related to HIV/AIDS among migrant population in Samut Sakhon are extremely limited despite it being one of the most migrant-populated provinces in Thailand. The coverage of all the programmes is estimated to be below 10% when unregistered migrants in the province are included. It is difficult to expect the programmes to have a positive outcome and an impact on the epidemic if programme coverage is not enhanced. Therefore, the present of health barrier to accessing health care services could support to programme responses to HIV/AIDS among migrant population in Samut Sakhon. In this study, population and area of research and most of the barrier prevent to gain health service are the same conditions.

Alcohol Consumption

Among 362 of respondents, 109 (30%) of respondents had drinking alcohol history and 253 (70%) had not. Only 38 (35%) of drinkers were drinking till drunk on Last 3 months on average. Furthermore, only 47 (43%) of drinker respondents did the sex after drinking alcohol and 28 (60%) of drinker respondents did not used condom during their sexual intercourse and only 4 (8%) “Always” used condom at last 3 months ago.

In a study of sexual partner and condom use of migrant workers in Thailand, 2007, this survey was designed as the basis for an assessment of the Evaluation and Monitoring of the Prevention of HIV/AIDS among Migrant Workers in Thailand (PHAMIT) project outcomes at the population level among migrant workers in Thailand. Male and female migrant workers from Myanmar, Lao People’s Democratic

Republic, and Cambodia were the target populations considered for the assessment. The data were available for the 22 coastal provinces for marine fisheries and fishery-related work as well as two inland provinces (Chiang Mai and Tak) for factory work and other work-related activities. Total number of respondents are 3426.

Ford, 2007, showed that the alcohol drinking was not associated with protective sex by using condom during sexual intercourse. It could be said that the more drink of alcohol in Myanmar migrant workers, the more chance to get un-protective sex for 0.79 time (Adjusted OR). This findings was strongly agreed to study among migrants workers in Thailand which reported that drinking alcohol with sex workers were less likely to always use condoms, OR = 0.67, 95% CI 0.52-0.85, p<0.001 (Ford and Charmrathrithirong, 2007). In this study, alcohol consumption and safer sex are not association and also not the same with Ford, 2007 study. Because of different provinces, study time, study population size and ethnicity.

In a study of Characteristics and determinants of sexual behavior among adolescents of migrant workers in Shangai (China) by Shenghui Li et al , 2009 made a cross-sectional study was conducted in 10 junior high schools from April to June of 2008. A total of 2821 adolescents aged 14.06 ± 0.93 years (8.9% of migrant workers vs. 91.1% of general residents) participated in the survey. A self-administrated questionnaire was used to collect information on knowledge, attitude, and behaviors associated with increased risk for HIV/STI. While they revealed that no/occasional alcohol drinking 99.3 % in Adolescents of migrant workers, 99% in Adolescents of general residents. On the other hand, often/usually consumed alcohol in Adolescents of migrant workers was 0.7 % whereas Adolescents of general residents 1% but there was no statistically significant (p 0.12). Therefore, in this study, more than half of the study

population is made of no drinkers and the rest admitted that they are drunk comparing the above study the alcohol drinking population was much higher because they are young adolescent. And did not have had enough year of life to time to start drinking. In additions the adolescents of migrants live with their families and under the control for their parents cannot easily access alcohol at young age.

Sex Behaviors of study population

There is 205 (56%) of respondents had history of sexual intercourse and 157 (43%) of respondents did not have history of sexual intercourse in their life (Abstinence). 13 (6%) of respondents had early age of first sex age at 15-18 years old. Moreover, 177 (86%) of respondents had "single partner" but 28 (13%) of respondents had multiple sex partners in study population. Furthermore, 29 (14%) of respondents "Protective Sex" in study population and 176 (86%) were not.

One of the study of Health Risk Behavior among Thai Youth: National Survey 2013 was done by Tawima Sirirassamee, and Buppha Sirirassamee conducted 938 youth and about 56% of respondents were male, 85.0% were single, and 59.1% were students. The mean age of respondents was 18.4 years. The highest proportion of respondents came from the northeast, followed by the central, northern, and southern regions and Bangkok. Approximately 40% of respondents had ever had sexual intercourse, and 32% were currently sexually active. The prevalence of having ever had sexual intercourse and of being currently sexually active were higher among male than female respondents, higher among older than younger respondents, and lower among students than nonstudents. Among those who had ever had sexual intercourse, 36.2% had multiple sexual partners, 23% had early sexual activity and 54% used a condom. This study only focus on youth migrant in the small province in Thailand so that

multiple sex partners, early sexual activity and condom usage boomed because the reference study was done as national survey and huge population however ever had sex group in current study is dramatically increased with the reference study because there might be poor reproductive health and family planning in migrant population.

Only 23 (11%) had causal partner in this study. According to literature review, the percentage of migrant workers sex with sex worker in Samut Sakhon is 17.3%. (Nigoon Jitthai et al, 2013). In this study, the percentage of youth Myanmar migrant workers sex with sex workers is lower than other migrant study from Samut Sakhon. Because of this study doing in youth age group, so that they had less chance to do sex with sex workers than older people and also their lower income status with not much money left to spend for paid sex. Moreover, due to shortage of study period it was not easy to build trust between interviewers and respondents, so that the researcher could not get whole information from them.

Association between socio-demographic characteristics, knowledge, attitude, barrier level, alcohol drinking and ever have sexual intercourse

The odd of outcome variable (ever have sexual intercourse), the male is significantly compare to female (p 0.046). In multivariate analysis, after adjustment for the variables listed in the table, there is no more statistically significant association. In univariate analysis, married respondents are strongly statistically significant than not married respondents (p <0.001). In multivariate analysis, after adjustment for the variables listed in the table, there is also strongly statistically significant association (p <0.001). Middle and higher education study population are significantly compare to below middle education in univariate analysis (P 0.004). In multivariate analysis, after adjustment for the variables listed in the table, there is also statistically significant

association (p 0.011). For alcohol consumption, the alcohol drinkers are more strongly significant than not drinkers in univariate analysis (p < 0.001). In multivariate analysis, after adjustment for the variables listed in the table, there is also statistically significant association (p 0.006). For knowledge level, middle knowledge level is significantly higher than other level in univariate analysis (p 0.045). In multivariate analysis, after adjustment for the variables listed in the table, there is more statistically significant association (p 0.017). The other variables for socio-demographic factors (ethnicity and religion) and the level of attitude and barrier are not statistically significant both univariate and multivariate analysis.

Health Risk Behavior among Thai Youth: National Survey 2013 was done by Tawima Sirirassamee also reported that overall ever had sexual intercourse (N=938, 95% CI) was 4.19 (36.8-46.9) with 31.5 (24.3-38.7) in female and male 49.8 (42.8-56.8) and early adolescent (13-14 years) was 4.5 (-0.7to 9.8). There was no statistically significant in all area apart from gender with p 0.05.

Shenghui Li et al, 2009 also showed that ever had sex population in Adolescents of general residents was 7.2% (N =252) and 4.5% (N=2569) in Adolescents of migrant workers. There was no statistically significant p value 3.52. However, compare with this study, age is older than the above mention study and also statistically significant.

Association between socio-demographic factors, knowledge, attitude, barrier level, alcohol drinking and early age of first sex

In univariate analysis, the odd of outcome variable (early age of first sex), among alcohol drinkers is statistically significant compare to not drinkers (P 0.027). In multivariate analysis, after adjustment for the variables listed in the table, there is no more statistically significant association (P 0.190). Other variables (sex, ethnicity,

religion, and marital, education, and knowledge, attitude and barrier level) are not statistically significant both in univariate and multivariate analysis.

Shenghui Li et al, 2009 expressed that the groups of age of first sexual intercourse were 11-12 years (11.1 %), 13-14 yrs (60%) and ≥ 15 yrs (28.9 %) in Adolescents of migrant workers (N=252) and 5.8 %, 29.7 %, 64.5 % respectively in Adolescents of general residents (N=2569). There is no statistically significant p value 4.95. Both study does not showed statistically significant.

Association between socio-demographic factors, knowledge, attitude, barrier level, alcohol drinking and multiple sex partners

In univariate analysis, the odd of outcome variable (multiple sex partners), male is statistically significant compare to female (P 0.033). In multivariate analysis, after adjustment for the variables listed in the table, there is no more statistically significant association (P 0.816). In univariate analysis, married respondents are more strongly statistically significant compare to not married respondents (P <0.001). In multivariate analysis, after adjustment for the variables listed in the table, there is also strongly statistically significant association (P < 0.001). For education, middle and above education are statistically significant compare to below middle education in univariate analysis (P 0.019). In multivariate analysis, after adjustment for the variables listed in the table, there is more statistically significant association (P 0.005). In univariate analysis, alcohol drinker is strongly statistically significant compare to non-drinker (P <0.001). In multivariate analysis, after adjustment for the variables listed in the table, there is also strongly statistically significant association (P 0.001). The other variable (ethnicity, religion and alcohol drinking) are not statistically significant in both

univariate and multivariate analysis. Moreover, the level of knowledge, attitude and barrier are not statistically significant in both univariate and multivariate analysis.

Health Risk Behavior among Thai Youth: National Survey 2013 was done by Tawima Sirirassamee also reported that overall multiple sex partners (N=389, 95% CI) was 36.2 (28.7-43.7) with 6.2 (1.8-10.7) in female and male 50.7 (41.3-60.2) and early adolescent (13-14 years) was 74.9 (38.5-111.3). There was no statistically significant in all area apart from gender with p 0.05. (Sirirassamee, et al., 2013)

Association between socio-demographic factors, knowledge, attitude, barrier level, alcohol drinking and protective sex

In univariate analysis, the odd of outcome variable (protective sex), Buddhist religions are statistically significant compare to other religion (P 0.004). In multivariate analysis, after adjustment for the variables listed in the table, there is also statistically significant association (P 0.030). In univariate analysis, married respondents are strongly statistically significant than not married respondents (P <0.001). In multivariate analysis, after adjustment for the variables listed in the table, there is also strongly statistically significant association (P < 0.001). The other variables for socio-demographic factors (sex, ethnicity, education and alcohol drinking) and level of knowledge, attitude and barrier are not significant both univariate and multivariate analysis.

This association between level of knowledge and dependent factors was not agreed with the study among Myanmar youth migrants in Mahachi (Myint et al., 2004) because the researchers reported that high level of knowledge on HIV/AIDS had influenced on multiple sexual partners and using condom during non-marital sex and attained to having positive attitude.

Out of 362 respondents in this study, 75.1% had neutral attitude on STI and HIV/AIDS and condom use. 55.2% of respondents were believed that using condom can prevent transmission of STI and HIV/AIDS. Most of the respondent had positive attitude on “easy to use condom” (45.3%) and “can get condom easily from everywhere” (33.4%). But 36.2% of respondents were feeling embarrassed to get condom. The neutral attitude on STI, HIV/AIDS and condom use in present study was contrasted to findings of Myint et al., 2004 in Mahachi (Positive attitude, 43%) and Li et al., 2009 in Shangai (higher scores in attitude toward sexual behaviors, 15.05 vs, 14.01, $t = -2.32$, $p < 0.05$ for adolescents of migrant workers). According to result of moderate level on knowledge among study population in present study, this finding difference with other study but it was also need to considering of their personal, educational and perceptional background.

Moreover, the level of attitude on STI, HIV/AIDS and condom use were not associated with ever have sexual intercourse, multiple sexual partners and protective sex by using condom. It might be assumed that the attitude of individual person was not shaped on sexual behaviors.

5.2 Limitations of the study

There were some limitations which influenced the result of this study.

Firstly, the sample was selected by convenience sampling and met random sampling, therefore the results cannot be generalized to the all population of youth migrant in Samut Sakhon and of course cannot be generalized to the overall population of your Myanmar migrants in Thailand.

This study got only few months to complete the whole thesis including data collection, entry, interpretation and presentation which were very difficult to finish in time and was not able investigate many more aspect of sexual behaviors and its associated factors.

Due to shortage of times it was not easy to build trust (Whish is a time consume exercise) between interviewers and respondents who felt shy when answering at interview so that the researcher could not get the whole information from them.

This research studied in migrant workers; mostly migrant workers' have not much more time because they are working at least 8-10 hours in their respective work. Therefore, when they answering rashly and quickly to my questions and the researcher could not get whole information from them.

This research did the anonymity in questionnaire, researcher couldn’t see respondent’s ID and the researcher knew respondents’ age from self-reporting. Therefore, the researcher could not get the real age from some respondents in this study because of the age below 18 have a problem in their illegal migration and working status. It is also effect to my research and it is not too bias but few miss classification age below 17 years old and above in out of study population 362.

The 90 day (3 months) recall period, although standard for STI/HIV/AIDS clinical trials, may have challenge the participants' ability to respond accurately (Witte, 2006). Therefore, it is also the one of the limitation to get accurate sex behaviors data from participants.

The history of STI is a proximal measurement indicator for condom use and it was not been investigated in this study.

Methamphetamine use is more in very well known risk factor for protective sex (Mausbach, Brent T., et al. 2009). But it was not investigated in this study.

Questionnaires are obviously expanded and respondents might be confuse due to their shortage of time and not really emphasize some of the questions.

There was miss classification of age of first sex because age of 18 and 20 due to mistaken design of the questionnaire at the age of 18 and 20 are twice.

5.3 Strengths

To the author knowledge this is the first study among youth Myanmar Migrant in Samut Sakhon (which is the first among the top ten Thai provinces with Myanmar migrants) (Chantavanich, 2012). Other studies have been investigating all age groups. This study described on knowledge, attitude and practice of sexual behavior and sexually transmitted. In addition, at the end of the interviews, the researchers have distributed the correct information to all upon migrants in this way contributing to correct lack of knowledge and misconceptions in relation to sexual knowledge and prevention of sexual behavior related diseases.

5.4 Conclusion

In youth Myanmar migrant workers in Samout Sakhon Province, Thailand, the result of this study could be concluded that most of the Myanmar migrant workers were

abstinence for sexual intercourse especially in female. Those person who was male, married persons, middle education and alcohol drinking was significantly ever had sexual intercourse.

In the present study, it could be concluded that the socio-demographic factors are not influenced on early sexual exposure but the alcohol consumption could have affected on to expose sexual intercourse at early age.

The results of this study, the male sex, married persons and middle and above education factors were significantly associated to cause multiple sexual partners. The alcohol drinker could have more multiple sexual partners than non-alcohol drinker. It could be concluded that alcohol drinking might be a risk factors for STI, HIV/AIDS infections in Myanmar migrant workers.

In this study, only married persons were significantly using more condoms with their partners and the other variable are not associated. It could be concluded that most of the Myanmar migrant worker at Samout Sakhon had non-protective sex with their partners and not use of condom during sexual intercourse with partners would be risked to infect STI, HIV/AIDS infection in migrant workers. The alcohol drinking was not associated with protective sex by using condom during sexual intercourse. It could be said that the more drink of alcohol in Myanmar migrant workers, the more chance to get un-protective sex.

In the present study, the middle level of knowledge was obviously associated with ever have sexual intercourse. Therefore the higher knowledge on STI and HIV/AIDS did not influence on condom use to protect STI and HIV/AIDS infection.

The level of barriers to accessing health care services were not associated with ever have sexual intercourse, multiple sexual partners and protective sex by using condom.

5.5 Recommendation for programs

- Offer more health education to migrant workers by responsible organizations like NGO and government organization etc, to correct knowledge gaps and misconceptions such as STI and women infertile, STI and brain effect, Mode of transmission of HIV/AIDS (Insects and mosquito bites), feel embarrassed to get condom and condom use.
- Link between religious values with sexual behavior. In addition health education should include a life skills education component to increase self-confidence in buying and using condoms.
- Logistic support of health care such as health care centers, health care workers and medical equipment etc, NGO support like finical and social support, language support as in translator, language teaching etc, are high recommended to achieve the settlement of disease transmission in migrants population.
- To reduce the health care barrier, IOM and Ministry of Public Health Thailand should cooperate with the migrant workers society.

5.6 Recommendation for further research

- Further research should put more emphasis on adolescent (15-18 year old) migrants population for sexual behavior because, as our study also shows, sexual activity starts in the age groups.

- This study initiated the youth population in Samut Sakhon province however further study should perform different provinces where migrant population settled.
- Although this study only performed the alcohol consumption, future study should include substance abuse (Methamphetamine).
- Should be involved other migrant ethnic groups.
- Conduct qualitative research is need because to investigate many more aspect of sexual behaviors and its associated factors.
- Regarding the sexual event of the respondents, future study should range shorter recall period to be flush on respondents' recognition.
- For further study, to be the more clarity questions should be shorter and precise.
- To make more specific and clear in age classification on early age of sex in the further study.

REFERENCES

A.J. Tatem1, D. J. R., and S.I. Hay. (2008). Global Transport Networks and Infectious Disease Spread. *Adv Parasitol. Author manuscript; available in PMC 2011 July 28., Adv Parasitol. 2006 ; 62: 293–343. doi:10.1016/S0065-308X(05)62009-X.*

Agyei, W., Biritwum, RB. (2000). Sexual behaviour and contraception among unmarried adolescents and young adults in Greater Accra and Eastern regions of Ghana. *Journal of biosocial science, 32*(4), 495-512.

Ajzen, I. (2005). *Attitudes, personality, and behavior*: McGraw-Hill Education (UK).

Archavantikul, K. T., C.; and Pune, H.H. . (2000). Sexuality, Reproductive Health and Violence: Experiences of Migrants from Burma in Thailand: Institute for Population and Social Research, Mahidol University, Bangkok,. *1*(19), 117-135.

Auvert, B., Buvé, A., Ferry, B., Caraël, M., Morison, L., Lagarde, E., ... & Musonda, R. . (2001). Ecological and individual level analysis of risk factors for HIV infection in four urban populations in sub-Saharan Africa with different levels of HIV infection. . *Aids, 13*, 15-30.

Bearinger LH, S. R. (2007).

Brockerhoff, M., and Ann E. Biddlecom. (1999). Migration, sexual behavior and the risk of HIV in Kenya." International migration review (1999).

Brown, J. L. (2007). Alcohol Use, Partner Type, and Risky Sexual Behavior Among College Students: Findings from an Event-Level Study. *PMC, Addict Behav. 2007 Dec, 32*(12), 2940-2952. doi:10.1016/j.addbeh.2007.06.011

Celentano, D. D. S. S., Bangorn MA†; Sutcliffe, Catherine G. ScM. (2005-2006). Sexually Transmitted Infections and Sexual and Substance Use Correlates Among Young Adults in Chiang Mai, Thailand. *Journal of The American Sexually Transmitted Diseases Association, 35*(4), 400-405. doi:doi: 10.1097/OLQ.0b013e31815fd412

Chantavanich, S., and Premjai Vungsiriphisal. (2012). *"Myammar Migrants to Thailand: Economic Analysis and Implications to Myammar Development."* Retrieved from

Chen, P. F. (2008). HIV?AIDS Prevention among Young People in EAST and South East Asia in the Context of Reporductive and Sexual Health. *Asia-Pacific Population Journal, Vol.23,No1*(ISSN 02259-22328x).

Coleman, C. L. (2007). Determinants of perceived barriers to condom use among HIV-infected middle-aged and older African-American men. *PMC, J Adv Nurs. 2007 Nov; 60*(4), 368-376. doi:10.1111/j.1365-2648.2007.04390.x

Davidson's. (2014). *Davidson's* (Vol. 22nd Edition).

Dehne, K. L., & Riedner, G. (2001). Adolescence—a dynamic concept. *Reproductive Health Matters, 9*(17), 11-15.

Department of Employment, M. o. L. (2012). *Labout migration in Thailand*. Retrieved from

Diane M. Morrison, S. A. B., Mary R. Gillmore. (1994). Sexual risk behavior, knowledge, and condom use among adolescents in Juvenile detention. *Journal of Youth and Adloscence, 23*(2), 271-288. doi:10.1007/BF01537449

espanol, E. (2012). HIV2 Transmission and Prevention.

Famutimi Esther Oluwatoyin RN, M. N., Oyetunde Modupe O. RN,, & PhD2. (2014). Risky Sexual Behaviour among Secondary School Adolescents in Ibadan North Local Government Area, Nigeria. *IOSR Journal of Nursing and Health Science (IOSR-JNHS), e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 3,* (Issue 3 Ver. IV (May-Jun. 2014)), PP 34-44.

Fiona M Gore, P. J. N. B., George C Patton, Jane Ferguson, Véronique Joseph, Carolyn Coff ey, Susan M Sawyer, Colin D Mathers. (2011). Global burden of disease in young people aged 10–24 years:

a systematic analysis. *Lancet, 377*.

Ford, K., and Aphichat Chamrathrithirong. . (2004). "Sexual partners and condom use of migrant workers in Thailand. *AIDS and Behavior 11.6*, 905-914.

Ford, K., & Chamrathrithirong, A. (2007). Sexual partners and condom use of migrant workers in Thailand. *AIDS and Behavior, 11*(6), 905-914.

Frank H. Galván, P. D., 1 Daniel J. Ortiz, Ph.D.,1 Victor Martinez, B.S.,2 and Eric G. Bing, M.D., Ph.D. (2009). The Use of Female Commercial Sex Workers' Services by

Latino Day Laborers. *HHSS Public Access, 312*(4), 5532-5575. doi:

10.1177/0739986309343273

Glover, E., Banneman, A, et al. (2003). Sexual Health Experiences of Adolescents in

Three Ghanaian Towns. *International Family Planning Perspectives*

29(1).

Hargreaves, J. R., Bonell, C. P., Morison, L. A., Kim, J. C., Phetla, G., Porter, J. D., ... &

Pronyk, P. M. . (2007). Explaining continued high HIV prevalence in South

Africa: socioeconomic factors, HIV incidence and sexual behaviour change

among a rural cohort,2001-2004

Aids, 21, 39-48.

ILO. (2004). *International Labour Organization, Report*. Retrieved from

IOM. Migration in the world.

James A. Inciardi, P. D., 'T2 Hilary L. Surratt, M.A.,2 Hector M. Dale D. Chitwood,

Ph.D.,2and James E. Rivers, Ph.D.2. (1999). Drug Use and HIV Risks among

Migrant Workers on the DelMarVa Peninsula. *Journal homepage:*

http://www.tandfonline.com/loi/isum20, ISSN: 1082-6084 (Print) 1532-2491 (Online).

Krishna C. Poudel1, J. O., Jeevan B. Sherchand3, Masamine Jimba1, Izumi Murakami4 andSusumu Waka. (2003). Mumbai disease in far western Nepal: HIV infection and syphilis among male migrant-returnees and non-migrants. *A European Journal TMIH, 8*(10), 933-939. doi:DOI: 10.1046/j.1365-3156.2003.01110.x

Krishna C. Poudel1, M. J., Junko Okumura2, Anand B. Joshi3 andSusumu Wakai1. (2004). Migrants' risky sexual behaviours in India and at home in far western Nepal. *The european journal TMIH*.

Larmarange J. (2010). Men Who Have Sex with Men (MSM) and Factors Associated with Not Using a Condom at Last Sexual Intercourse with a Man and with a Woman in Senegal. *PLoS ONE, 5*(10). doi:10.1371/journal.pone.0013189

Laura M. Bogart. (2005). Are HIV/AIDS Conspiracy Beliefs a Barrier to HIV Prevention Among African Americans? *J Acquir Immune Defic Syndr 2005, 38*, 213-218.

Leigh, B. C. (1999). Peril, chance, adventure: concepts of risk, alcohol use and risky behavior in young adults. *Addiction, 94*(3), 371-383.

Linda M. Kaljee, P., Mackenzie Green, MHS, Rosemary Riel, MAA, Porntip Lerdboon, MPH, Le Huu Tho, MD, MPH, Le Thi Kim Thoa, MD, MPH, Truong Tan Minh, MD, PhD. (2007). Sexual Stigma, Sexual Behaviors, and Abstinence Among Vietnamese Adolescents: Implications for Risk and Protective Behaviors for HIV, Sexually Transmitted Infections, and Unwanted Pregnancy. *Journal of the Association of Nurses in AIDS Care*

Special Issue: Cultural Dynamics in HIV Prevention Among Young People, Volume 18,(ssue 2, March–April 2007,), Pages 48–59.

Lolekha R1, B.-Y. V., Leowsrisook P, Naiwatanakul T, Durier Y, Nuchanard W, Tarugsa J, Punpanich W, Pattanasin S, Chokephaibulkit K. (2014). Knowledge, attitudes, and practices regarding antiretroviral management, reproductive health, sexually transmitted infections, and sexual risk behavior among perinatally

HIV-infected youth in Thailand. *AIDS care 2015, 5*(6), 18-28.

doi:10.1080/09540121.2014.986046

Maddux, J. E. (1995). *Self-efficacy theory*: Springer.

MOH. (2015). *Global AIDS Response Progress Report Myanmar*. Retrieved from

UNAIDS, Myanmar:

MOH, M. o. h. M. (2013). *National services standard and guideline on adolescent and youth, MOH, 2013*. Retrieved from

Mullany, L. (2000). HIV/AIDS knowledge, attitudes, and practices among Burmese migrant factory workers in Tak Province, Thailand. *PublMed, AIDS Care. 15*(1), 63-70.

Myint Thu, H., w, e, Hmw, e, Ky, & u, a. M. V. d. P. Knowledge, Attitude and Practices on HIV/AIDS Prevention among Myanmar Migrants in Maha Chai, Samut Sakhon Province, Thailand

Myint Thu, H. H. K., and Marc Van der Putten. (2008). Knowledge, Attitude and Practices on HIV/AIDS Prevention among Myanmar Migrants in Maha Chai, Samut Sakhon Province, Thailand

www.journal.au.edu/au_techno/2005/jan05/vol8, *Journal of Technology 01/2005; Vol.8(No.3):131-134*.

N Howteerakul1, N. S. a. M. T. (2005). *CIGARETTE, ALCOHOL USE AND PHYSICAL ACTIVITY AMONG MYANMAR YOUTH WORKERS, SAMUT SAKHON PROVINCE, THAILAND.* Faculty of Public Health, Mahidol University, Bangkok, Thailand; 2Institute of Community Health, Magway, Myanma, www.tm.mahidol.ac.th/seameo/2005.

Neo K. Morojelea, Millicent A. Kachieng'ab, Evodia Mokokoc, Matsobane, A. Nkokoa, C. D. H. P., d, Annette M. Nkowanee,, & Kgaogelo M. Moshiaa, S. S. (2005). Alcohol use and sexual behaviour among risky drinkers and bar and shebeen patrons in Gauteng province, South Africa. *Social Science and Medicine, 62*.

NOELL, J. P. R., PAUL PhD*; OCHS, LINDA MS*; YOVANOFF, PAUL PhD†; ALTER, MIRIAM J. PhD‡; SCHMID, SCOTT PhD‡; BULLARD, JANICE BS‡ AND; BLACK, CAROLYN PhD‡. (2001). Incidence and Prevalence of Chlamydia, Herpes, and Viral Hepatitis in a Homeless Adolescent Population. *Journal of American Sexually Transmitted Diseases association, 28*(1), 4-10.

Pettifor, A. E., b; Rees, Helen Va; Kleinschmidt, Immoc; Steffenson, Annie Ed; MacPhail, Catherinea; Hlongwa-Madikizela, Lindiwea; Vermaak, Kerrye; Padian, Nancy Sf,g. (2003). Young people's sexual health in South Africa: HIV prevalence and sexual behaviors from a nationally representative household survey. *AIDS, Epidemiology and Social, 19*(14), 1525-1534.

Prof Rajesh Kumar, M. (2006). Trends in HIV-1 in young adults in south India from 2000 to 2004: a prevalence study. *The Lancet, 367*(9517), 1164-1172.

Puri, M., & Cleland, J. . (2006). Sexual behavior and perceived risk of HIV/AIDS among young migrant factory workers in Nepal. . *Journal of Adolescent Health, 38*(3), 237-246.

Rahmani, A., Merghati-Khoei, E., Moghadam-Banaem, L., Hajizadeh, E., Hamdieh, M., & Montazeri, A. (2014). Development and psychometric evaluation of the Premarital Sexual Behavior Assessment Scale for Young Women (PSAS-YW): an exploratory mixed method study.

Rogers, R. W., & Prentice-Dunn, S. (1997). Protection motivation theory.

Suphāng, Č., & Čhulālongkoṇmahāwitthayālai. (2000). *Cross-border migration and HIV/AIDS vulnerability in the Thai-Myanmar border: Sangkhlaburi and Ranong*. Bangkok, Thailand: Asian Research Center for Migration, Institute of Asian Studies, Chulalongkorn University.

taryn dinkelman, d. l. a. m. l. (2008). Linking porverty and income shock to risky sexual behaviour. *NIH public access*.

Tripathi, D. S. (2008). *Adolescent Health; Situation and Strategy*. Retrieved from

UNAIDS2. (Nov,2012). *HIV Mode of Transmission Model*. Retrieved from www.unaids.org:

UNAIDS. (2008). *Migration and HIV/AIDS in Thailand*. Retrieved from International Organization for Migrant, Bangkok, Thailand.:

UNAIDS. (2009a). *UNAIDS ANNUAL REPORT 2009*. Retrieved from

UNAIDS. (2009b). *UNAIDS annual report, uniting the world against AIDS*. Retrieved from UNAIDS:

UNAIDS. (2010a). *THE GLOBAL AIDS EPIDEMIC 2010*. Retrieved from WHO Library Cataloguing-in-Publication Data:

UNAIDS. (2010b). *Migration and HIV/AIDS in Thailand*. Retrieved from International Organization for Migration, Thailand:

UNAIDS. (2015). *How AIDS change everything*. Retrieved from UNAIDS:

UNAIDS. (Jun,2000). *MIGRANT POPULATION AND HIV/AIDS*. Retrieved from

UNDP. (2008). *HIV Vulnerabilities of Migrant Women: from Asia to the Arab States*. Retrieved from Regional HIV & Development Programme for Asia & the Paci, UNDP Regional Centre in Colombo:

UNICEF. (2008). *SITUATIONAL ANALYSIS OF YOUNG PEOPLE AT HIGH RISK OF HIV EXPOSURE IN THAILAND*. Retrieved from UNICEF Thailand:

UNYouth. UN program on youth.

WHO. (2005). *Alcohol Use and Sexual Risk Behaviour:*

A Cross-Cultural Study

in Eight Countries Retrieved from

WHO. (2009). *Global Health Risky*. Retrieved from

WILLIAM K. ADIH. (1999). Determinants of Condom Use to Prevent HIV

Infection Among Youth in Ghana. *JOURNAL OF ADOLESCENT HEALTH, 24*, 63-72.

doi:054-139X(98)00062-7

Worldbank. (2011-2015). Prevalence of HIV is the percentage of people who are

infected with HIV. Youth rates are as a percentage of the relevant age group.

Yang, X., & Xia, G. (2008). Temporary migration and STD/HIV risky sexual behavior: A

population-based analysis of gender differences in China. *Social problems,*

55(3), 322-346.

Yep, G. A. (1993). HIV Prevention among Asian-American College Students: Does the Health Belief Model Work. *Journal of American College Health, 41*(5), 199-205. doi:10.1080/07448481.1993.9936326

Yip, P. S., Zhang, H., Lam, T. H., Lam, K. F., Lee, A. M., Chan, J., & Fan, S. . (2013). Sex knowledge, attitudes, and high-risk sexual behaviors among unmarried youth in Hong Kong. *BMC public health, 13(1), 691.*

Zhou, Min, and Mingang Lin. "Community transformation and the formation of ethnic capital: Immigrant Chinese communities in the United States." Journal of Chinese overseas 1.2 (2005): 260-284.

APPENDIX

APPENDIX (A): BUDGET

List Cost	Unit number	Price (in Thai Baht) (per/unit)	Total Budget
1.Questionnaire (Photocopy) + Consent sheet	380	16 THB	6,080 THB
2.Correct answer (Photocopy)	380	3 THB	1,140 THB
3.Compensation for time loss	362	50 THB	18,100 THB
4.Transportation and lodging related to project		4,000 THB	4,000 THB
5. Stationary items		2,000 THB	2,000 THB
6. Printing and binding of the thesis paper		6,000 THB	6,000 THB
7.Hiring Volunteer cost	2	2,500 THB	5,000 THB
8. Miscellaneous		2,000 THB	2,000 THB
Total			**44,320 THB**

APPENDIX (B): WORK PLAN

Project Procedure	OCT 15	NOV 15	DEC 15	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16
1.Literature Review										
2.Writing thesis proposal										
3.Submission for thesis proposal										
4.Proposal exam										
5.Ethical consideration from Chulalongkorn University										
6.Pretest questionnaires										
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): QUESTIONNAIRES IN ENGLISH

Structured of Questionnaires

SECTION 1 SOCIODEMOGRAPHIC CHARACTERISTICS

Participant Code. No ( )

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

1. Male ( ) Female ( )

2. How old are you? ……..years

3. Please answer your year of birth?

   Year……

4. What is your race?

   (1) Shan ( ) (2) Mon ( ) (3) Karen ( ) (4) Burma ( )

   (5) Kachin ( ) (6) Others (Please Specify) ……

5. What is your Religion?

   (1) Buddhist ( ) (2) Islam ( ) (3) Christian ( ) (4) Hindu ( )

   (5) Other ……

6. What is your marital Status?

   (1) Single ( ) (2) Married ( ) (3) Widow ( ) (4) Divorce ( )

   (5) Other (Specify) ……..

7. What is your highest Education?

   (1) No education (illiterate) ( )

   (2) Primary education or basic monastery school ( )

   (3) Middle School ( )

   (4) High School ( )

(5) University or higher ( )

8. What is your occupation?

(1) Construction worker ( ) (2) Agriculture worker ( )

(3) Restaurant worker/ Shopkeeper ( ) (4) Factory worker ( )

(5) Jobless ( ) (6) Other……..

9. What is your type of income?

(1) Daily wager ( ) (2) Salary ( ) (3) Other…….

10. What is your income of the last month? ……. Baht/ month

11. Whom do you live with? (Ticks all the relevant to you)

(1) Husband/wife (spouse) ( ) (2) Family ( ) (3) Relatives ( )

(4) Friends ( ) (5) Alone ( ) (6) Other (specify) …….

12. How long have you been in Thailand? ……year……..months

13. How long are you stayed in current residence SamutSakhon area?

……. Year……

SECTION 2: KNOWLEDGE ON STI, HIV and AIDS

1.Have you ever heard of sexually transmitted infections STI?

(a) Yes ( ) (b) No ( )

Answer is (No), go to question 8.

2. Can you mention the names of the STI that you know?

Specify (a) …….

(b) …….....

(c) ……

(d) ……

Explanation: Please mark ( ) into the gap that respondent thinks the most accurate. If the answer is one score for correct answer and 0 score for wrong answer and do not know.

Knowledge	Correct	Incorrect	Do not know
Knowledge on STI			
3.STI can be passed on from a mother to her child			
4.STI can make a woman infertile			
5.Some STI can affect your brain			
6.You can see on the outside of the genitals if someone has an STI			
7. Using a condom protects you against STI			

8. Have you ever heard of HIV?

(a) Yes ( ) (b) No ( )

Answer is (No), go to section 2.1.

Explanation: Please mark into the gap that respondent thinks the most accurate.

If the answer is one score for correct answer and 0 score for wrong answer and do not know.

Knowledge	Correct	Incorrect	Do not know
Knowledge on HIV			
9. AIDS is cause by Human Immunodeficiency Virus (HIV).			

HIV can be transmitted by (questions 10 to 14)			
10. Sexual intercourse			
11. By sharing needle/syringe			
12. Mother to Child			
13. From insects or mosquito bites			
14. Working near people who have the HIV virus			
15. Using a condom (every time and beginning to end) protects you against HIV			
16. It is possible to get HIV by having sex with a healthy looking person			
17. There is treatment for HIV infection that prolong healthy life			

SECTION 2.1 ATTIDUDES ON STI, HIV/AIDS AND CONDOM USE

Please mark in the box that matches the ideas and feeling of respondent.
-Strongly agree means that respondents agree with the question significantly.
-Agree means that respondents agree with the question.
-Unsure means that respondents are not sure about the question.
-Disagree means that respondents disagree with the question.
-Strongly Disagree means that respondents disagree with the questions significantly.

Question	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1.STI are serious health problem					

2.HIV/AIDS is a serious health problem					
3. Everyone has equal chance to get STI					
4. Everyone has equal chance to get HIV/AIDS					
5. I believe that using condom can prevent transmission of STI, HIV/AIDS.					
6. It is easy to use condoms					
7. You can get condom easily from everywhere.					
8.You feel embarrassed to get Condom					

SECTION 3 BARRIERS TO ACCESSING HEALTH SERVIECES

Please mark in the box that matches the ideas and feeling of respondent.
-Agree means that respondents agree with the question.
-Un-certain means that respondents are not sure about the question.
-Disagree means that respondents disagree with the question.

Statements	Agree	Uncertain	Disagree
1. I am working most of the times; I can't go to health care center. (eg, hospital,clinic and health education program)			

2. I am working most of the times, I can't learn Health Education materials (eg,books, journal and magazines,etc)			
3. I cannot seek health the health care center because I have known is too far (more than 5 kilometers or about 3 miles) away from my current living place.			
4. If I want to buy condom, I cannot seek to buy for condom because I have no money to pay for this.			
5. If I have a STI, I cannot seek health care services for STI because I have no money to doing lab tests and buying for medicines.			
6. I can't speak Thai Language. So, I have a problem to talking about health care providers in health center.			
7. If I want to get condom, I cannot seek condom because I am afraid of being caught by the local authorities, as my immigration status is illegal.			

SECTION 4; ALCOHOL CONSUMPTION

1. Are you drinking alcohol?

(a) Yes ( ) / (b) No ( )

Answer is (yes), please answer following question?
Answer is (no), go to section 5.

2. Last 3 months on average, what was your type of drinking?

(a) Daily drinker ( ) (b) Occasional drinker ( )

(c) Social drinker ( )

3. Last 3 month on average, did you drink till when you get drunk?

(a) Yes ( ) (b) No ( )

Answer is (No), go to question 5.

4. Last 3 months on average, how many times you get drunk in a week?

Total number of times …….

5. In the past 3 months, have you drink alcohol before sexual intercourse?

(a) Yes ( ) (b) No ( )

Answer is (yes), please answer following question?
Answer is (no), go to section 5.

5.1Did you use condom while having sex after drinking alcohol at last 3 months?

5(1) Never ( ) 5(2) Some of the times ( )
5(3) Half of the times ( )
5(4) Almost all the times ( )
5(5) Always ( )

SECTION 5; SEX BEHAVIOURS

1. Did you ever had sexual intercourse in your life? (Sexual intercourse means that you had only anal or vaginal penetration and not include erotic stimulation of the genitals and not include oral sex).
(a) Yes ( ) (b) No ( )
If you say (Yes), please answer the following questions.
If you answer (No), Reviewing and thank the participation.

2. How old were you when you had sexual intercourse for the first time?

(a) Below 15 years old ( )(b) 15 – 18 years old ( )

(c) 18- 20 years old ( ) (d) 20-24 years old ( )

3. With WHOM did you have sexual intercourse at that first time?
(a) Spouse ( ) (b) Steady partner ( )
(c) Causal partner( ) (d) Sex worker ( )

4. Did you have spouse?
1. Yes ( ) 2. No ( )
Answer is (Yes), please answer following questions,
Answer is (No), go to question 8.

5. Did you use condom during sexual intercourse with your spouse at last three months?
(1) Yes ( )
(2) No ( )
Answer is (No), go to question 7.

6. During these occasions how often did you or your partner use a condom (from the beginning to the end)?
(a) Always ( ) (b) Almost always ( ) (c) Half of the time ( )
(d) Some of the time ( ) (e) Never ( )

7. If No, Why? (More choice possible)
(1) Partner does not want ( )
(2) Condom is not available ( )
(3) Condom is expensive ( )
(4) Feeling shy to use ( )
(5) My feeling is no need to use condom at sexual intercourse with spouse ( )

8. Did you have sex with steadypartner? (Steady partner is somebody you know for more than two months, have sex with regularly and feel an emotional bond with)

(1) Yes ( ) (2) No ( )

Answer is (Yes), please answer following questions.
Answer is (No), go to question 17.

9. How many steady partners did you have during the last three months?

Total numbers ……..

10. In the past three months, on average, how often did you have sexual intercourse with your steady partner?

Number of times …….

11. Did you use condom during sexual intercourse during the last three months?
(1) Yes ( )(2) No ( )

Answer is (No), go to question 13.

12. During these occasions how often did you or your partner use a condom (from the beginning to the end)?
(a) Always ( ) (b) Almost always ( ) (c) Half of the time ( )
(d) Some of the time ( ) (e) Never ( )

13. If No, Why? (More choice possible)
(1) Partner does not want ( )
(2) Condom is not available ( )
(3) Condom is expensive ( )
(4) Feeling shy to use ( )

14. The next time you have sexual intercourse with your steady partner; do you intend to use or make your partner intend to use a condom?
(a) For sure ( ) (b) Very likely ( ) (c) Fifty-fifty ( )
(d) Not likely ( ) (e) Surely not ( )
15. Where did you meet your current steady sexual partner?

School ( ) (b) Dormitory ( ) (c) Disco ( )

(d) Pub ( ) (e) Restaurant ( ) (f) (Night) market ( )

(g) (Specify) ……Other

16. Where do you go to have sex with your current steady partner? (More choices possible)

(a)Dormitory ( ) (b) (short term) Hotel ( )

(c) At home ( ) (e) (specify) ……,…….Other

17. Did you have sex with causal partner? (Casual partner is somebody you have sex with only, without pay money, gifts or favors and also have sex with by paying or accepting money, gifts or favors).

(1) Yes ( ) (2) No ( )

Answer is (Yes), please answer question following questions.
Answer is (No), go to question 34.

18. How many causal partners did you have during the last three months?

Total numbers of casual partners …….

19. In the past three months, on average, how often did you have sexual intercourse with your causal partner?

Number of times …….

20. Did you ever accept money, gifts or favors for sex intercourse?
No ( ) (b) Yes, money ( )
(c) Yes, gifts or favors (specify)_____ ( )
Answer is (No), go to question 27.
21. Did you use condom during sexual intercourse with your casual partner at last three months?
(a) Yes ( ) (b) No ( )
Answer is (No), go to question 23.

22. During these occasions how often did you or your partner use a condom (from the beginning to the end)?

(a) Always ( ) (b) Almost always ( ) (c) Half of the time ( )
(d) Some of the time ( ) (e) Never ( )

23. If No, Why?

(1) Partner does not want ( )
(2) Condom is not available ( )
(3) Condom is expensive ( )
(4) Feeling shy to use ( )

24. The next time youaccept money, gifts or favors for sexual intercourse; do you intend to use or make your partner intend to use a condom?

(a) For sure ( ) (b) Very likely ( ) (c) Fifty-fifty ( )
(d) Not likely ( ) (e) Surely not ( )

25. Where did you meet the person(s) who gave you money, gifts or favors for sex? (More choices possible)

School ( ) (b) Dormitory ( ) (c) Disco ( )

(d) Pub ( ) (e) Restaurant ( ) (f) (Night) market ( )

(g) (Specify) ……Other

26. Where did you go to have sex with these partners? (More choices possible)

(a)Dormitory ( ) (b) (short term) Hotel ( )

(c) At home ( ) (e) (specify) ……,…….Other

27. Did you ever pay money, gifts or favors for sex intercourse?

No ( ) (b) Yes, money ( )
(c) Yes, gifts or favors (specify)_____ ( )

Answer is (No), go to question 34,

28. Did you use condom during sexual intercourse with your casual partner at three months?

(a) Yes ( ) (b) No ( )

Answer is (No), go to question 30.

29. During these occasions how often did you or your partner use a condom (from the beginning to the end)?

(a) Always ( ) (b) Almost always ( ) (c) Half of the time ( )
(d) Some of the time ( ) (e) Never ( )

30. If No, Why?

(1) Partner does not want ( )
(2) Condom is not available ( )
(3) Condom is expensive ( )
(4) Feeling shy to use ( )

31. The next time youpay money, gifts or favors for sexual intercourse; do you intend to use or to make your partner intend to use a condom?

(a) For sure ( ) (b) Very likely ( ) (c) Fifty-fifty ( )
(d) Not likely ( ) (e) Surely not ( )

32. Where did you meet the person(s) who receive your money, gifts or favors for sex? (More choices possible)

School ( ) (b) Dormitory ( ) (c) Disco ( )

(d) Pub ( ) (e) Restaurant ( ) (f) (Night) market ( )

(g) (Specify) ……Other

33. Where did you go to have sex with these partners? (More choices possible)

(a)Dormitory ( ) (b) (short term) Hotel ( )

(c) At home ( ) (e) (specify) ……,…….Other

34. Did you have sex with sex worker? (Sex workers is somebody have sex with you only by paying money)

(1) Yes ( ) (2) No ( )

Answer is (Yes), please answer following questions.

Answer is (No), go to question 43.

35. How many sex workers did you have during the last three months?

Total number of sex workers ……

36. In the past three months, on average, how often did you have sexual intercourse with sex worker?

Number of times …….

37. Did you use condom during sexual intercourse with sex worker at last three months?

(a) Yes ( ) (b) No ( )

Answer is (No), go to question 39.

38. During these occasions how often did you or your partner use a condom (from the beginning to the end)?

(a) Always ( ) (b) Almost always ( ) (c) Half of the time ( )

(d) Some of the time ( ) (e) Never ( )

39. If No, Why?

(1) Partner does not want ( )

(2) Condom is not available ( )

(3) Condom is expensive ( )

(4) Feeling shy to use ( )

40. The next time you have sexual intercourse with sex worker; do you intend to use or to make your partner intend to use a condom?

(a) For sure ( ) (b) Very likely ( ) (c) Fifty-fifty ( )

(d) Not likely ( ) (e) Surely not ( )

41. Where did you foundsex workers? (More choices possible)

(a) Disco ( ) (b) Pub ( ) (c) Restaurant ( ) (d) (Night) market ( )

(e) (Specify) ……Other

42. Where do you go to have sex with sex worker? (More choices possible)

(a)Dormitory ( ) (b) (short term) Hotel ( )

(c) At home ( ) (e) (specify) ……,…….Other

43. Do you use condom while your partner does not like to use condom? (Male)

Do you make intend to use condom while your partner does not like to use condom? (Female)

(a) Always ( ) (b) Almost always ( ) (c) Half of the time ( )

(d) Some of the time ( ) (e) Never ( )

APPENDIX (D): QUESTIONNARIES FOR MYANMAR

သုေတသနေမးခြန်းလေ့ာ်မ်ား

<u>အပိုင်း(၁) လူမှုဘဝေမးြမန်းြခင်း</u>

သုေတသနတြင် ပါဝင်မည့်သူ၏ ကုတ်နံပါတ် ( )

ည့ွန်ကားခ်က်။ ။ အေြဖမ်ားအား ကြက်လပ်အတြင်း၌ အမှန်ြခစွါ။

၁။ ေယာကၤ်ား ( ) မိန်းမ ( )

၂။ သင်၏ အသက်အယ်ေလာက် ရွိြပီလဲ။ ..... ်ွစ်

၃။ သင့်ေမြးဖွားသည့်ေန႔ကို ြပည့်စံုစွာ ေြဖဆိုပါ။

ရက် ..... လ..... ်ွစ် .....

၄။ သင်သည် မည့်သည့် လူမ်ိဳြဖစ်ါသလဲ။

(က) ရွမ်း ( ) (ခ) မြန် ( ) (ဂ) ကရင် ( ) (ဃ) ဗမာ ( )

(င) ကခ်င် ( ) (စ) အြခား .....

၅။ ကိုးကြယ်သည့်ဘာသာ။

(က) ဗုဒ္ဓဘာသာ ( ) (ခ) အစ်လာမ်ာသာ ( ) (ဂ) ခရစ်ယာန်ာသာ ( )

(ဃ) ဟိႏၵဘာသာ ( ) (င) အြခား .....

၆။ သင့်မာ အိမ်ေထာင်ရှိပါသလား။

(က) အပ်ိဳလ်ူပ်ို) (ခ) အိမ်ေထာင်သည် ( ) (ဂ) မုဆိုးမ/ဖို ( )

(ဃ) ကြာရွှင်းျပကွဲျပီး ( ) (c) အျခား .....

၇။ သင့၏ အျမင့္ဆံုး တက္ေျမာက္ခဲ့ေသာ အတန္းကို ေဖာ္ျပပါ။

(က) စာမတတ္ ( ) (ခ) မူလတန္းေအာင္ (သို႔မဟုတ္) ဘုန္းေတာ္ၾကီးသင္ေက်ာင္းေအာင္ ( )

(ဂ) အလယ္တန္းေအာင္ ( ) (ဃ) အထက္တန္းေအာင္ ( ) (c) ဘြဲ.ရ ( )

၈။ အလုပ္အကိုင္အမ်ိဳးအစား

(က) ေဆာက္လုပ္ေရးလုပ္သား ( ) (ခ) စိုက္ပ်ိဳးေရးလုပ္သား ( )

(ဂ) စားေသာက္ဆိုင္/ေစ်းဆိုင္လုပ္သား ( ) (ဃ) စက္ရံုလုပ္သား ( ) (c) အလုပ္လက္မဲ့ ( )

(စ) အျခား .....

၉။ ဝင္ေငြအမ်ိဳးအစား

(က) ေန႕စား ( ) (ခ) လခစား ( ) (ဂ) အျခား .....

၁၀။ ျပီးခဲ့ေသာလတြင္ ဝင္ေငြ ဘယ္ေလာက္ရွိပါသလဲ။ ..... ဘတ္

၁၁။ သင္ မည္သူ့ႏွင့္အတူ ေနထိုင္ပါသလဲ။ (သက္ဆိုင္သည့္ အခ်က္မ်ားကို အမွတ္အသားျပဳပါ)

(က) ခင္ပြန္း/ဇနီး ( ) (ခ) မိသားစု ( ) (ဂ) ေဆြမ်ိဳးမ်ား ( )

(ဃ) သူငယ္ခ်င္းမ်ား ( ) (c) တစ္ဦးတည္း ( ) (စ) အျခား .....

၁၂။ သင့် ထိုင်းႏိုင်ငံတြင်ေရာက်ရှိေနသည်မှာ အခ်ိန်ယ်ေလာက်ၾကာပါျပီလဲ။ .....

ႏွစ် ..... လ

၁၃။ သင် Samut Sakhon တြင်လာေရာက်ေနထိုင်ေနသည်မှာ အခ်ိန်ယ်ေလာက်ၾကာပါျပီလဲ။ ..... ႏွစ်.....လ

အပိုင်း (၂) လိင်မွတဆင့်ကူးစက်ေသာ ေရာဂါမ်ား၊ အိက်(စ်)အိုဒ္ဒြိ ႏွင့် ေအ့ေရာဂါ အေၾကာင်း ဗဟုသုတေမးခြန်းလႊာ

၁။ လိင်မွတဆင့် ကူးစက်ေသာ ေရာဂါမ်ားအေၾကာင်း ၾကားဖူးပါသလား။

(က) ၾကားဖူးပါသည့်( ) (ခ) မၾကားဘူးပါ ( )

(မၾကားဘူးပါဟု ေျဖဆိုခဲ့ပါလွင့် ေမးခြန်းနံပါတ် (၈)ကို ေျဖဆိုပါ)

၂။ သင်သိေသာ လိင်မွတဆင့် ကူးစက်ေသာ ေရာဂါမ်ားကို ေဖာ်ျပႏိုင်ပါသလား။ တိက်စြာေျဖဆိုပါ

(က)

.....

(ခ)

.....

(ဂ)

.....

(ဃ)

.....

ရွင်းလင်းခဲ့။ ေက်းဇူးျပဳ၍ အမွန္ကန္ဆံုးဟု ေျဖဆိုသူမွယူဆေသာ အခ်က္ကို ေအာက္ေဖာ္ျပပါ (မွန္/မွား/မသိ) အကြက္တြင္ အမွတ္အသားျပဳပါ။ မွန္ကန္ေသာ အေျဖအတြက္ တစ္မွတ္သတ္မွတ္ျပီး၊ မွားယြင္းေသာအေျဖႏွင့္ မသိေသာ အေျဖအတြက္ သုညဟု သတ္မွတ္ထားပါသည္။

လိမ္မတဆင့္ ကူးစက္ေသာ ေရာဂါမ်ားဆိုင္ရာ ဗဟုသုတမ်ား	မွန္	မွား	မသိ
၃။ လိမ္မတဆင့္ ကူးစက္ေသာ ေရာဂါမ်ားသည္ မိခင္မတဆင့္ ကေလးသို႔ ကူးႏိုင္ပါသည္			
၄။ လိမ္မတဆင့္ ကူးစက္ေသာ ေရာဂါမ်ားသည္ အမ်ိဳးသမီးတြင္ ကိုယ္ဝန္ေဆာင္ေႏိုင္ပါ။			
၅။ အခ်ိဳ့ေသာ လိမ္မတဆင့္ ကူးစက္ေသာ ေရာဂါမ်ားသည္ သင္၏ ဦးေႏွာက္အား ထိခိုက္ေစႏိုင္ပါသည္။			
၆။လိမ္မတဆင့္ကူးစက္ေသာေရာဂါမ်ားကိုေရာဂါျဖစ္ပြားသူအခ်ိဳ့၏			

လိင္အဂါၤအျပင္ဘက္၌ သင္ျမင္ေတြ.ႏိုင္ပါသည္။			
၇။ သင္သည္ လိင္မွတဆင့္ကူးစက္ေသာေရာဂါမ်ားအား ကြန္ဒံုးအသံုးျပဳျခင္းျဖင့္ ကာကြယ္ႏိုင္ပါသည္။			

၈။ အိက္(စ္)အိုင္ဒီေရာဂါကို ၾကားဖူးပါသလား။

(က) ၾကားဖူးပါသည္ ( ) (ခ) မၾကားဘူးပါ ( )

(မၾကားဘူးပါဟု ေျဖဆိုခဲ့ပါလွ်င္ **သေဘာထားဆိုင္ရာေမးခြန္းလႊာ အပိုင္း၂ အပိုင္းခြဲ ၁** ကို ေျဖဆိုပါ)

ရွင္းလင္းခ်က္။ ေက်းဇူးျပဳ၍ အမွန္ကန္ဆံုးဟ ေျဖဆိုသူမွ၊ ယူဆေသာ အခ်က္ကို ေအာက္ေဖာ္ျပပါ (မွန္/မွား/မသိ) အကြက္တြင္အမွတ္အသားျပဳပါ။ မွန္ကန္ေသာ အေျဖအတြက္ တစ္မွတ္သာတမွတ္ျပဳ၊ မွားယြင္းေသာအေျဖႏွင့္ မသိေသာ အေျဖအတြက္ သုညဟု သတ္မွတ္ထားပါသည္။

အိက္(စ္)အိုင္ဒီ ေရာဂါဆိုင္ရာ ဗဟုသုတမ်ား	မွန္	မွား	မသိ
၃။ ေအ့(စ္)/ ေအအိုင္ဒီအက္(စ္)ေရာဂါသည္ HIV ဗိုင္းရပ္(စ္)ပိုးမွ ကူးစက္ပါသည္။			

၄။ အိုက်(စ်)အိုင်ဒြီ ေရာဂါ ကူးစက်ခံရျခင်းမွာ (ေမးခြန်း ၁၀ မွ ၁၄ အထိ)			
၁၀။ လိင်ဆက်ဆံျခင်းမွ			
၁၁။ ေဆးထိုးအပ်၊ ေဆးထိုးျပြန်မှား အတူေဝမွ် သံုးဆြဲျခင်း			
၁၂။ မိခင်မွတဆင့် ကေလးထံသို့			
၁၃။ အင်းဆက်၊ျခင်မွား ကိုက်ခံရျခင်းမွ			
၁၄။ အိုက်(စ်)အိုင်ဒြီ ဗိုင်းရက်ပွိုးရွိေသာလူးဝင့် နီးကပ်စွာအလုပ် အတူလုပ်ျခင်း			
၁၅။လိင်ဆက်ဆံသည့်အခ်ိန်ိုင်း သို့.မဟုတ် ဆက်ဆံအမူျပဳသည့် အစမွအဆံုးတိုင်ေအာင် ကြန်ဒုံသံုးျခင်းသည်အိုက်(စ်)အိုင်ဒြီေရာဂါကိုကာကြယ်းုိုင်ပါသည်။			
၁၆။ က်နး်မာသည့်သူ ထင်ရှေသာ လူတစ်ဦးးဝင့် လိင်ဆက်ဆံျခင်းမွလည်း အိုက်(စ်)အိုင်ဒြီ ေရာဂါ ကူးဆက်ခံနိုင်ေျခရွိပါသည်။			
၁၇။ အိုက်(စ်)အိုင်ဒြီေရာဂါကိုကုသေသာ ကုထံုးျဖင့်သက္ကည်က်နး်မာေသာဘဝကိုပိုင်ဆိုင်းိုင်ပါသည်။			

အပိုင္း (၂) အပိုင္းခြဲ (၁) လိင္မွတဆင့္ ကူးဆက္ေသာေရာဂါ၊ အိက္(စ္)အိုင္ဗြီ၊ ေအ့(စ္)ေရာဂါ ႏွင့္ ကြန္ဒံုးအသံုးျပဳျခင္း အေပၚသေဘာထားဆိုင္ရာေမးခြန္းလႊာ

ေက်းဇူးျပဳ၍ ေျဖဆိုသူ၏ ထင္ျမင္ခ်က္ႏွင့္ ခံစားခ်က္ ထပ္တူညီေသာေနရာတြင္ အမွတ္အသားျပဳပါ။

(က)တိက်စြာ သေဘာတူညီျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို တိက်စြာ လက္ခံသေဘာတူျခင္း ျဖစ္သည္။

(ခ) သေဘာတူညီျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို လက္ခံသေဘာတူျခင္း ျဖစ္သည္။

(ဂ) မေသခ်ာျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို ေသခ်ာမသိျခင္းျဖစ္သည္။

(ဃ) သေဘာမတူျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို လက္မခံျခင္းျဖစ္သည္။

(င) လံုး၀သေဘာမတူျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို (လံုး၀) လက္မခံျခင္းျဖစ္သည္။

	လံုးဝ သေဘာတူပါသည္	သေဘာတူပါသည္	မေသခ်ာပါ	သေဘာမတူပါ	လံုးဝ သေဘာမတူပါ
၁။လိင္မွတဆင့္ကူးစက္ေသာေရာဂါမ်ားသည္ျပင္းထန္ေသာက်န္းမာေရးဆိုင္ရာျပႆနာျဖစ္ပါသည္။					
၂။အိက္(စ္)အိုင္ဗြီ၊ေအ့(စ္)ေရာဂါမ်ားသည္ျပင္းထန္ေသာက်န္းမာေရးဆိုင္ရာျပႆနာျဖစ္ပါသည္။					

၃။လူတိုင္းလူတိုင္းတြင္ လိင္မွတဆင့္ ကူးစက္ေသာ ေရာဂါမ်ားႏွင့္ အိက္(စ္)အိုင္ဗြီ၊ ေအ့(စ္)မ်ားကို တူညီစြာ ကူးစက္ခံရႏိုင္ပါသ ည္။					
၄။သင့္မွာ လိင္မွတဆင့္ ကူးစက္ေသာ ေရာဂါမ်ားႏွင့္ အိက္(စ္)အိုင္ဗြီ၊ ေအ့(စ္)ေရာဂါခံ စား ေနရေသာအခါ ေဆးခန္းသို႔					

သြားေရာက္ျပီး ကုသမူခံရျခင္း အေပၚ စိတ္ကသိကေအာင့္ ခံစားရပါသလား။					
၅။ကြန္ဒံုးကို လြယ္ကူစြာ အသံုးျပဳုိင္ပါ သည္။					
၆။ ကြန္ဒံုးကို ေနရာအႏွံ႔ လြယ္ကူစြာ ရရွိုိင္ပါသည္။					
၇။သင္သည္ ကြန္ဒံုးရရန္ ရွက္ရြံစြာ ခံစားရပါသည္။					

အပိုင္း(၃) က်န္းမာေရးေစာက္ေရွာက္မူ လက္ခံရရွိရန္ အတားအဆီးမ်ား

ေက်းဇူးျပဳ၍ ေျဖဆိုသူ၏ ထင္ျမင္ခ်က္ႏွင့္ ခံစားခ်က္ ထပ္တူညီေသာေနရာတြင္ အမွတ္အသားျပဳပါ။

(က) သေဘာတူညီျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို လက္ခံသေဘာတူျခင္း ျဖစ္သည္။

(ခ) မေသခ်ာျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို ေသခ်ာမသိျခင္းျဖစ္သည္။

(ဂ) သေဘာမတူျခင္းဆိုသည္မွာ ေျဖဆိုခ်က္သည္ ေမးခြန္းကို လက္မခံျခင္းျဖစ္သည္။

	သေဘာတူပါသည္	မေသခ်ာပါ	သေဘာမတူပါ
၁။ ကၽြႏ္ုပ္သည္ အလုပ္မ်ားပါသည္။ ကၽြႏ္ုပ္သည္ က်န္းမာေရး ေစာင့္ေရွာက္မႈ ေနရာမ်ားသို႔ မသြားႏိုင္ပါ။ (ဥပမာ ေဆးရုံ၊ ေဆးခန္းႏွင့္ က်န္းမာေရးဆိုင္ရာ ပညာေပး ေဟာေျပာမႈ အစီအစဥ္)			
၂။ ကၽြႏ္ုပ္သည္ အလုပ္မ်ားပါသည္။ က်န္းမာေရးဆိုင္ရာ ပညာေပး			

အေၾကာင္းမ်ားအား မေလ့လာႏိုင္ပါ။ (ဥပမာ စာအုပ္မ်ား၊ ဂ်ာနယ္မ်ား၊ မစၥဇင္းမ်ား)			
၃။ ကြ်ဲႏြားသည္ က်န္းမာေရးေစာင့္ေရွာက္မူေနရာသို႔ သြားေရာက္မစစ္ေဆးႏိုင္ပါ။ အဘယ့္ေၾကာင့္ဆိုေသာ့ ကြ်ဲႏြားလက္ရွိေနထိုင္ေသာ ေနရာႏွင့္ အလြန္ေဝးကြာေသာေၾကာင့္ ျဖစ္ပါသည္။ (၅ ကီလိုမီတာအထက္ သို႔မဟုတ္ ၃မိုင္ခန္႔)			
၄။ ကြ်ဲႏြားသည္ ကြန္ဒုိး ဝယ္ယူခ်ဳပ္ေသာ့လည္း ၎အတြက္ ေငြေပးရန္မရွိေသာေၾကာင့္ မဝယ္ယူႏိုင္ပါ။			
၅။ကြ်ဲႏြားတြင္ လိင္မတဆင့္ ကူးစက္တတ္ေသာ ေရာဂါျဖစ္ပြားခဲ့လွ်င္ ဓါတ္ခြဲစစ္ေဆးခ်က္မ်ားျပဳလုပ္ရန္ႏွင့္ ေဆးဝယ္ယူရန္ေငြမရွိေသာေၾကာင့္က်န္း မာေရးေစာင့္ေရွာက္မူေနရာသို႔သြားေရာ က္အစစ္ေဆးမခံႏိုင္ပါ။			

၆။ ကြဲပြားသည့် ထိုင်းဘာသာစကား မတတ်ေျမာကွါ။ ထို႔ေၾကာင့္ ကြဲပြားသည့် က်နး်မာေရးေစာင့္ေရွာက္သူမ်ားႏွင့္ စကားေျပာဆုိရန္ အခက္အခဲရွိပါသည္။			
၇။ ကြဲပြားသည့် ကြန္ဒုိးအသံုးျပဳခ်င္ေသာ္လည္း ကြဲန္သည့် (တရားမဝင္)ေရြ.ေျပာင္းလုပ္သားတစ္ဦးျဖစ္ ေသာေၾကာင့္ သက္ဆုိရွာ အာဏာပိုင္မ်ားမွ ဖမ္းဆီးထိန္းသိမ္းခံရမည့္ ေၾကာင့္ရြဲ.ေသာေၾကာင့္ ကြဲပြားသည့် ကြန္ဒုိးမဝယ္ယူရဲပါ။			

အပိုင္း(၄) အရက္ေသစာေသာက္သံုးျခင္း

၁။ သင္သည္ အရက္ေသစာ ေသာက္သံုးျခင္းရွိပါသလား။

(က) ေသာက္သံုးပါသည္။ ( ) (ခ) မေသာက္တတ္ပါ။ ( )

ေသာက္သံုးပါသည္ဟု ေျဖဆိုပါလွ်င္ ေအာက္ပါေမးခြန္းမ်ားကို ေက်းဇူးျပဳ၍ ေျဖဆိုပါ။

မေသာက္တတ္ပါဟု ေျဖဆိုပါလွ်င္ ဤအပိုင္းကို ေျဖဆိုစရာမလိုပါ။ အပိုင္း(၅)ကိုဆက္လက္ေျဖဆိုပါ။

၂။ သင္သည္အရက္ေသစာကိုမည္သို့ ေသာက္သံုးပါသနည္း။

(က) ေန႕စဥ္ေသာက္သံုးျခင္း ( ) (ခ) ရံဖန္ရံခါ ေသာက္သံုးျခင္း ( )

(ဂ) လူမ်ိဳေရးအရ ေသာက္သံုးျခင္း ( )

၃။ မည္သည့္ အရက္အမ်ိဳးအစားကို သင္ေသာက္သံုးပါသနည္း။

(က) ဝိုင္ ( ) (ခ) ဘီယာ ( )

(ဂ) အရက္ (ဝီစကီ/ ရမ္) ( ) (ဃ) အရက္ျဖဴ ( )

၄။သင္သည္အရက္ေသစာေသာက္သံုးေသာအခါအလြန္အကၽြံ(အမူးလြန္သည္အထိ) ေသာက္တတ္ပါသလား။

(က) ေသာက္တတ္ပါသည္ ( )(ခ) မေသာက္တတ္ပါ ( )

အေျဖသည္ မေသာက္တတ္ပါ ဟုဆိုပါက ေမးခြန္းနံပါတ္ ၆ ကိုေျဖဆိုပါ။

၅။သင္သည္တစ္ဘတ္အတြင္းအရက္ေသစာအလြန္အကၽြံ(အမူးလြန္သည္အထိ)ဘယ္ႏွစ္ၾကိမ္ေသာက္သံုးပါသနည္း။

အၾကိမ္အေရအတြက္ ( )

၆။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ အရက္ေသာက္ျပီးခ်ိန္တြင္ လိင္ဆက္ဆံခဲ့ပါသလား။

(က) လိင္ဆက္ဆံခဲ့ပါသည္ ( ) (ခ) လိင္မဆက္ဆံခဲ့ပါ ( )

သင္၏အေျဖသည္ လိင္ဆက္ဆံခဲ့ပါသည္ဟု ေျဖဆိုခဲ့ပါလွ်င္ ေအာက္ပါေမးျမန္းခ်က္ကို ေျဖဆိုပါ။ လိင္မဆက္ဆံခဲ့ပါ ဟု ေျဖဆိုခဲ့ပါလွ်င္ အပိုင္း (၅) ကိုဆက္လက္ေျဖဆိုပါ။

ေမးခြန္း ၆ အပိုင္းခြဲ ၁

လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ အရက္ေသာက္ျပီးလိင္ဆက္ဆံေသာအခါတြင္ ကြန္ဒံုးသံုးပါသလား။

(က) အျမဲတမ္း ( ) (ခ) အျမဲတမ္းနီးပါး ( )

(ဂ) အခ်ိန္ခ်ိန္စဥ္းလာကိုးပါး ( )

(ဃ) အခ်ိဳ့ေသာအခ်ိန္မ်ား ( )

(င) ဘယ္ေတာ့မွ ( )

အပိုင္း (၅) လိင္မွီဆိုရာ အျပဳအမူမ်ား

၁။ သင္သည္ ဘဝတြင္ လိုင္ဆန္ဆံမူျပဳျခင္း ရွိခဲ့ပါသလား။ (လိုင္ဆန္ဆံမူျပဳျခင္းဆိုသည္မွာ စအို သို႔မဟုတ္ ေယာနိအတြင္းသို႔ သြတ္သြင္းျခင္းကို ဆိုလိုပါသည္။ လိင္အဂၤါကို ႏိုဝင္းဆြဲျခင္းႏွင့္ ပါးစပ္ျဖင့္ လိင္ဆန္ဆံျခင္း မပါဝင္ပါ။

(က) ရွိခဲ့ဖူးပါသည္။ ( ) (ခ) မရွိခဲ့ဘူးပါ။ ( )

သင္၏ အေျဖသည္ **ရွိခဲ့ဖူးပါ**သည္ဟု ေျဖဆိုခဲ့ပါလွ်င္ ေအာက္ပါေမးျမန္းခ်က္မ်ားကို ေက်းဇူးျပဳ၍ ေျဖဆိုပါ။

မရွိခဲ့ဘူးပါဟု ေျဖဆိုခဲ့ပါလွ်င္ ေျဖဆိုခ်က္မ်ားကို ျပန္လည္စစ္ေဆးျပီး ဤသုေတသနတြင္ ပါဝင္ေျဖဆိုေပးမူအတြက္ ေက်းဇူးတင္ရွိေၾကာင္းေျပာျကားပါမည္။

၂။ သင္သည္ ပထမဆံုးအၾကိမ္ လိင္ဆန္ဆံဖူးသည့္အခ်ိန္တြင္ အသက္မည္မွ်ရွိပါသလဲ။

(က) အသက္၁၅ႏွစ္ေအာက္ ( ) (ခ) ၁၅-၁၈ႏွစ္ၾကား ( )

(ဂ) ၁၈-၂၀ႏွစ္ၾကား ( ) (ဃ) ၂၀-၂၄ႏွစ္ၾကား ( )

၃။ ပထမဆံုးအၾကိမ္တြင္ မည္သူႏွင့္ လိင္ဆန္ဆံခဲ့ပါသလဲ။

(က) အိမ္ေထာင္ဖက္ ( ) (ခ) လက္ရွိအေဖာ္ ( )

(ဂ) တခါတရံတြဲသည့္အေဖာ္ ( ) (ဂ)ျပည့္တန္ဆာ ( )

၄။ သင္မွာ အိမ္ေထာင္ရွိပါသလား။

(က) ရွိပါသည္ ( ) (ခ) မရွိပါ ( )

သင္၏ အေျဖသည္ ရွိပါသည္ဟု ေျဖဆိုခဲ့ပါလွ်င္ ေအာက္ပါေမးျမန္းခ်က္မ်ားကို ေျဖဆိုပါ။

မရွိပါဟု ေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္ (၈)မွစေျဖပါ။

၅။ သင္သည္ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္၏အိမ္ေထာင္ဖက္ႏွင့္ လိင္ဆက္ဆံျခင္းျပဳေသာအခါ ကြန္ဒံုးအသံုးျပဳပါသလား။

(က) အသံုးျပဳပါသည္ ( ) (ခ) အသံုးမျပဳပါ ( )

အသံုးမျပဳပါ ဟုေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္(၇) မွဆက္လက္ေျဖဆိုပါ။

၆။ ထိုသို႔ဆက္ဆံမူျပဳလုပ္ေနသည့္ အခ်ိန္အတြင္းတြင္ သင္သည္ ကြန္ဒံုးကို မည္သို့ အသံုးျပဳသနည္း။ (အစမွ အဆံုးတိုင္ေအာင္)

(က) အျမဲတမ္း ( ) (ခ) အျမဲတမ္းနီးပါး ( )

(ဂ) အခ်ိန္တစ္ဝက္ေလာက္နီးပါး ( )

(ဃ) အခ်ိဳ့ေသာအခ်ိန္မ်ား ( )

(င) ဘယ္ေတာ့မွ ( )

၇။ အသံုးမျပဳဘူးဆိုပါက အဘယ့္ေၾကာင့္ပါလဲ။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) မိမိဆက္ဆံဖက္ အေဖာ္မွ အလိုမရွိေသာေၾကာင့္ ( )

(ခ) ကြန္ဒံုးမရရွိေသာေၾကာင့္ ( )

(ဂ) ကြန့်ုံးသည့် ေစ်းၾကီးေသာေၾကာင့္ ( )

(ဃ) အသံုးျပဳရမည္ကို ရွက္ေသာေၾကာင့္ ( )

(c) အိမ္ေထာင္ဘက္ႏွင့္ လိင္ဆက္ဆံျခင္းျပဳေသာအခါ တြင္မလိုအပ္ဘူးထင္ျခင္းေျကာင့္ ( )

၈။ သင္သည္ ယခုလက္ရွိအေဖာ္ႏွင့္ လိင္ဆက္ဆံျခင္းရွိပါသလား။ (ယခုလက္ရွိအေဖာ္ဆိုသည္မွာ သင္သည္ ထိုသူႏွင့္ ႏွစ္လအထက္ ခင္မင္ရင္းႏွီးျခင္း၊ ပံုမွန္လိင္ဆက္ဆံမူ ရွိရွင္း ႏွင့္ ထိုသူႏွင့္ စိတ္ပိုင္းဆိုင္ရာ ဖက္တြယ္ရင္းႏွီး ကြ်မ္းဝင္ျခင္းကို ဆိုလိုပါသည္)

(က) ရွိပါသည္ ( ) (ခ) မရွိပါ ( )

သင္၏ အေျဖသည္ ရွိပါသည္ဟု ေျဖဆိုခဲ့ပါလွ်င္ ေအာက္ပါေမးျမန္းခ်က္မ်ားကို ေျဖဆိုပါ။

မရွိပါဟု ေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္ (၁၇)မွစေျဖပါ။

၉။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္မွာ လက္တြဲေဖာ္ အဘယ္မွ်ရွိပါသလဲ။

စုစုေပါင္းအေရအတြက္ .....

၁၀။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ ပ်မ္းမွ်အားျဖင့္ သင္သည္ လက္ရွိအေဖာ္ႏွင့္ ဘယ္ႏွယ္ၾကိမ္ခန္႔ လိင္ဆက္ဆံျခင္းရွိပါသလဲ။

အၾကိမ္အေရအတြက္ .....

၁၁။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ လက္ရွိအေဖာ္ဝန္ထမ္း လိုင္ဆင္စံေသာအခါ ကြန္ဒံုးအသံုးျပဳပါသလား။

(က) အသံုးျပဳပါသည္ ( ) (ခ) အသံုးမျပဳပါ ( )

အသံုးမျပဳပါဟုေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္(၁၃) မွဆက္လက္ေျဖဆိုပါ။

၁၂။ ထိုသို႔ဆက္ဆံမူျပဳလုပ္ေနသည့္ အခ်ိန္အတြင္းတြင္ သင္သည္ ကြန္ဒံုးကို မည္သို့ အသံုးျပဳသနည္း။ (အစမွ အဆံုးတိုင္ေအာင္)

(က) အျမဲတမ္း ( ) (ခ) အျမဲတမ္းနီးပါး ( )

(ဂ) အခ်ိန္တစ္ဝက္ေလာက္နီးပါး ( )

(ဃ) အခ်ိဳ့ေသာအခ်ိန္မ်ား ( )

(င) ဘယ္ေတာ့မွ ( )

၁၃။ အသံုးမျပဳဘူးဆိုပါက အဘယ့္ေၾကာင့္ပါဘလဲ။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) မိမိဆက္ဆံဖက္ အေဖာ္မွ အလိုမရွိေသာေၾကာင့္ ( )

(ခ) ကြန္ဒံုးမရရွိေသာေၾကာင့္ ( )

(ဂ) ကြန္ဒံုးသည္ ေစ်းၾကီးေသာေၾကာင့္ ( )

(ဃ) အသံုးျပဳရမည္ကို ရွက္ေသာေၾကာင့္ ( )

၁၄။ သင္သည္ ေနာက္တစ္ၾကိမ္တြင္ လက္ရွိအေဖာ္ႏွင့္ လိင္ဆက္ဆံေသာအခါတြင္ ကြန္ဒံုးအသံုးျပဳရန္ ရည္ရြယ္ပါသလား။

(က) လံုးဝေသခ်ာပါသည္ ( ) (ခ) ေသခ်ာေလာက္ရွိပါသည္ ( )

(ဂ) ေသခ်ာသလိုလို မေသခ်ာသလိုလို ( ) (ဃ) မေသခ်ာေလာက္ပါ။ ( )

(င) လံုးဝမေသခ်ာပါ ( )

၁၅။ သင္သည္ လက္ရွိလိင္ဆက္ဆံအေဖာ္ကို မည္သည့္ေနရာတြင္ ေတြ႕ဆံုခဲ့ပါသနည္း။

(က) ေက်ာင္း ( )(ခ) အိပ္ေဆာင္ ( ) (ဂ) ကလပ္ ( )

(ဃ) အရက္ဆိုင္ ( ) (င)စားေသာက္ဆိုင္ ( ) (စ) ညေစ်း ( )

(ဆ) အျခား .....

၁၆။ သင္သည္ လက္ရွိအေဖာ္ႏွင့္ လိင္ဆက္ဆံမူျပဳျခင္းကို မည္သည့္ေနရာတြင္ ျပဳလုပ္ပါသနည္း။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) အိပ္ေဆာင္ ( ) (ခ) တည္းခိုခန္း ( )

(ဂ) အိမ္ ( ) (ဃ) အျခား .....

၁၇။ သင္သည္ ရံဖန္ရံခါအေဖာ္ႏွင့္ လိင္ဆက္ဆံျခင္းရွိပါသလား။ (ရံဖန္ရံခါအေဖာ္ဆိုသည္မွာ သင္သည္ အခေၾကးေငြ၊ လက္ေဆာင္ သို႔မဟုတ္ အခြင့္အေရး ေပးစရာမလိုေသာ တစ္ေယာက္ေယာက္ျဖင့္ လိင္ဆက္ဆံျခင္းႏွင့္ အခေၾကးေငြ၊ လက္ေဆာင္

(သို႔မဟုတ္) အခြင့္အေရး ေပးရျခင္း သို႔မဟုတ္ လက္ခံျခင္း အားျဖင့္ တစ္ေယာက္ႏွင့္ တစ္ေယာက္ လိဋ္ဆက္ဆံျခင္းကို ဆိုလိုပါသည္။)

(က) ရွိပါသည္ ( ) (ခ) မရွိပါ ( )

သင္၏ အေျဖသည္ ရွိပါသည္ဟု ေျဖဆိုခဲ့ပါလွ်င္ ေအာက္ပါေမးျမန္းခ်က္မ်ားကို ေျဖဆိုပါ။

မရွိပါဟု ေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္ (၃၄)မွစေျဖပါ။

၁၈။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္မွာ ရံဖန္ရံခါလက္ထြဲေဖာ့ အဘယ္မွ်ရွိပါသလဲ။

စုစုေပါင္းအေရအတြက္ .....

၁၉။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ ပ်မ္းမွ်အားျဖင့္ သင္သည္ ရံဖန္ရံခါအေဖာ္ႏွင့္ ဘယ္ႏွယ္ကိမ္ခန္႔ လိဋ္ဆက္ဆံျခင္းရွိပါသလဲ။

အၾကိမ္အေရအတြက္ .....

၂၀။ သင္သည္ လိဋ္ဆက္ဆံျခင္းအတြက္ အခေၾကးေငြ၊ လက္ေဆာင္ သို႔မဟုတ္ အခြင့္အေရး လက္ခံပါသလား။

(က) လက္မခံပါ ( ) (ခ) လက္ခံပါသည္/ေငြေၾကး ( )

(ဂ) လက္ခံပါသည္/လက္ေဆာင္ (သို႔မဟုတ္) အခြင့္အေရး .....( )

၂၁။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ ရံဖန္ရံခါအေဖာ္ေႏွင့္ လိင္ဆက္ဆံေသာအခါ ကြန္ဒံုးအသံုးျပဳပါသလား။

(က) အသံုးျပဳပါသည္ ( ) (ခ) အသံုးမျပဳပါ ( )

အသံုးမျပဳပါဟုေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္(၂၃) မွဆက္လက္ေျဖဆိုပါ။

၂၂။ ထိုသို႔ဆက္ဆံမူျပဳလုပ္ေနသည့္ အခ်ိန္အတြင္းတြင္ သင္သည္ ကြန္ဒံုးကို မည္သို့ အသံုးျပဳသနည္း။ (အစမွ အဆံုးတိုင္ေအာင္)

(က) အျမဲတမ္း ( ) (ခ) အျမဲတမ္းနီးပါး ( )

(ဂ) အခ်ိန္တစ္ဝက္ေလာက္နီးပါး ( )

(ဃ) အခ်ိဳ့ေသာအခ်ိန္မ်ား ( )

(င) ဘယ္ေတာ့မွ ( )

၂၃။ အသံုးမျပဳဘူးဆိုပါက အဘယ့္ေၾကာင့္ပါဘလဲ။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) မိမိဆက္ဆံဖက္ အေဖာ္မွ အလိုမရွိေသာေၾကာင့္ ( )

(ခ) ကြန္ဒံုးမရရွိေသာေၾကာင့္ ( )

(ဂ) ကြန္ဒံုးသည္ ေစ်းၾကီးေသာေၾကာင့္ ( )

(ဃ) အသံုးျပဳရမည္ကို ရွက္ေသာေၾကာင့္ ( )

၂၄။ သင္သည္ ေနာက္တစ္ၾကိမ္တြင္ လိင္ဆက္ဆံျခင္းခအတြက္ ေငြေၾကး၊ လက္ေဆာင္ သို႔မဟုတ္ အခြင့္အေရးအတြက္ လိင္ဆက္ဆံေသာအခ်ိန္တြင္ ကြန္ဒံုးအသံုးျပဳရန္ ရည္ရြယ္ပါသလား။

(က) လံုးဝေသခ်ာပါသည္( ) (ခ) ေသခ်ာေလာက္ပါသည္ ( ) (ဂ) ေသခ်ာသလိုလို မေသခ်ာသလိုလို ( )

(ဃ) မေသခ်ာေလာက္ပါ။ ( ) (င) လံုးဝမေသခ်ာပါ ( )

၂၅။ သင္သည္ ရံဖန္ရံခါအေဖာ္ေႏွာင့္ မည္သည့္ေနရာတြင္ ေတြ႕ဆံုခဲ့ပါသနည္း။

(က) ေက်ာင္း ( )(ခ) အိပ္ေဆာင္( ) (ဂ) ကလပ္ ( )

(ဃ) အရက္ဆိုင္ ( ) (င)စားေသာက္ဆိုင္ ( ) (စ) ညေစ်း ( )

(ဆ) အျခား .....

၂၆။ သင္သည္ ရံဖန္ရံခါအေဖာ္ေႏွာင့္ လိင္ဆက္ဆံမူျပဳျခင္းကို မည္သည့္ေနရာတြင္ ျပဳလုပ္ပါသနည္း။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) အိပ္ေဆာင္ ( ) (ခ) တည္းခိုခန္း ( )

(ဂ) အိမ္ ( ) (ဃ) အျခား .....

၂၇။ သင္သည္ လိင္ဆက္ဆံျခင္းအတြက္ အခေၾကးေငြ၊ လက္ေဆာင္ သို႔မဟုတ္ အခြင့္အေရး ေပးရပါသလား။

(က) မေပးရပါ ( ) (ခ) ေပးရပါသည္/ေငြေၾကး ( )

(ဂ) ေပးရပါသည္/ လက္ေဆာင္ (သို႔မဟုတ္) အခြင့္အေရး ..... (
)

၂၈။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ ရံဖန္ရံခါအေဖာ္ေႏွင့္ လိင္ဆက္ဆံေသာအခါ ကြန္ဒံုးအသံုးျပဳပါသလား။

(က) အသံုးျပဳပါသည္ ( ) (ခ) အသံုးမျပဳပါ ( )

အသံုးမျပဳပါဟုေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္(၃၄) မွဆက္လက္ေျဖဆိုပါ။

၂၉။ ထိုသို႔ဆက္ဆံမူျပဳလုပ္ေနသည့္ အခ်ိန္အတြင္းတြင္ သင္သည္ ကြန္ဒံုးကို မည္သို့ အသံုးျပဳသနည္း။ (အစမွ အဆံုးတိုင္ေအာင္)

(က) အျမဲတမ္း ( ) (ခ) အျမဲတမ္းနီးပါး ( )

(ဂ) အခ်ိန္တစ္ဝက္ေလာက္နီးပါး ( )

(ဃ) အခ်ိဳ့ေသာအခ်ိန္မ်ား ( )

(င) ဘယ္ေတာ့မွ ( )

၃၀။ ဘယ္ေတာ့မွ အသံုးမျပဳဘူးဆိုပါက အဘယ့္ေၾကာင့္ပါဘလဲ။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) မိမိဆက္ဆံဖက္ အေဖာ္မွ အလိုမရွိေသာေၾကာင့္ ( )

(ခ) ကြန္ဒံုးမရရွိေသာေၾကာင့္ ( )

(ဂ) ကြန္ဒံုးသည္ ေစ်းၾကီးေသာေၾကာင့္ ( )

(ဃ) အသံုးျပဳရမည္ကို ရွက္ေသာေၾကာင့္ ( )

၃၁။ သင္သည္ ေနာက္တစ္ၾကိမ္တြင္ လိင္ဆက္ဆံျခင္းခအတြက္ ေငြေၾကး၊ လက္ေဆာင္ သို႔မဟုတ္ အခြင့္အေရးအတြက္ လိင္ဆက္ဆံေသာအခ်ိန္တြင္ ကြန္ဒံုးအသံုးျပဳရန္ ရည္ရြယ္ပါသလား။

(က) လံုးဝေသခ်ာပါသည္ ( ) (ခ) ေသခ်ာေလာက္ပါသည္ ( ) (ဂ) ေသခ်ာသလိုလို မေသခ်ာသလိုလို ( )

(ဃ) မေသခ်ာေလာက္ပါ ( ) (င) လံုးဝမေသခ်ာပါ ( )

၃၂။ သင္သည္ ရံဖန္ရံခါအေဖာ္ေႏွာင့္ မည္သည့္ေနရာတြင္ ေတြ႕ဆံုခဲ့ပါသနည္း။

(က) ေက်ာင္း ( )(ခ) အိပ္ေဆာင္ ( ) (ဂ) ကလပ္ ( )

(ဃ) အရက္ဆိုင္ ( ) (င)စားေသာက္ဆိုင္ ( ) (စ) ညေစ်း ( )

(ဆ) အျခား .....

၃၃။ သင္သည္ ရံဖန္ရံခါအေဖာ္ေႏွာင့္ လိင္ဆက္ဆံမူျပဳျခင္းကို မည္သည့္ေနရာတြင္ ျပဳလုပ္ပါသနည္း။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) အိပ္ေဆာင္ ( ) (ခ) တည္းခိုခန္း ( )

(ဂ) အိမ္ ( ) (ဃ) အျခား .....

၃၄။ သင္သည္ ျပည့္တန္ဆာႏွင့္ လိင္ဆက္ဆံျခင္းရွိပါသလား။ (ျပည့္တန္ဆာဆိုသည္မွာ သင္သည္ လိင္ဆက္ဆံျခင္းအတြက္ အခေၾကးေငြေပးရေသာ တစ္ေယာက္ေယာက္ကို ဆိုလိုပါသည္။)

(က) ရွိပါသည္ ( ) (ခ) မရွိပါ ( )

သင္၏ အေျဖသည္ ရွိပါသည္ဟု ေျဖဆိုခဲ့ပါလွ်င္ ေအာက္ပါေမးျမန္းခ်က္မ်ားကို ေျဖဆိုပါ။

မရွိပါဟု ေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္ (၄၃)မွစေျဖပါ။

၃၅။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ ျပည့္တန္ဆာ ဘယ္ႏွစ္ေယာက္ႏွင့္ လိင္ဆက္ဆံျခင္းရွိခဲ့ပါသလဲ။

စုစုေပါင္းအေရအတြက္ .....

၃၆။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ ပ်မ္းမွ်အားျဖင့္ သင္သည္ ျပည့္တန္ဆာႏွင့္ ဘယ္ႏွယ္ၾကိမ္ခန္႔ လိင္ဆက္ဆံျခင္းရွိပါသလဲ။

အၾကိမ္အေရအတြက္ .....

၃၇။ လြန္ခဲ့ေသာ ၃လခန္႔တြင္ သင္သည္ ျပည့္တန္ဆာႏွင့္ လိင္ဆက္ဆံေသာအခါ ကြန္ဒံုးအသံုးျပဳပါသလား။

(က) အသံုးျပဳပါသည္ ( ) (ခ) အသံုးမျပဳပါ ( )

အသံုးမျပဳပါဟုေျဖဆိုခဲ့ပါလွ်င္ ေမးခြန္းနံပါတ္(၃၉) မွဆက္လက္ေျဖဆိုပါ။

၃၈။ ထိုသို့ဆက်ဆံမှုပြုလုပ်နေသည့် အခ်ိန်အတြင်းတြင် သင်သည် ကြန်ဒုံးကို မည်သို့အသုံးပြုသနည်း။ (အစမွ အဆုံးတိုင်အောင်)

(က) အမဲတမ်း ( ) (ခ) အမဲတမ်းနီးပါး ( )

(ဂ) အခ်ိန်စုဝက်လောက်ခဲပါး ( )

(ဃ) အခ်ိဳသောအခ်ိန်မ်ား ( )

(င) ဘယ်တော့မွ ( )

၃၉။ အသုံးမပြုဘူးဆိုပါက အဘယ့်ကြောင့်ပါဘလဲ။ (တစ်ခုမက ပြောဆိုနိုင်ပါသည်)

(က) မိမိဆက်ဆံဖက် အေဖာ်မွ အလိုမရှိသောကြောင့် ( )

(ခ) ကြန်ဒုံးမရရှိသောကြောင့် ( )

(ဂ) ကြန်ဒုံးသည် စေ်းကြီးသောကြောင့် ( )

(ဃ) အသုံးပြုရမည်ကို ရွက်သောကြောင့် ( )

၄၀။ သင်သည် နောက်တစ်ကိမ်တွင် ပြည်တန်ဆားငံ့ လိင်ဆက်ဆံသောအခ်ိန်တွင် ကြန်ဒုံးအသုံးပြုရန် ရည်ရွယ်ပါသလား။

(က) လုံးဝသခ်ာပါသည် ( ) (ခ) သခ်ာသေလာရွံပါသည် ( )

(ဂ) သခ်ာသလိုလို မသခ်ာသလိုလို ( )

(ဃ) မသခ်ာလောက်ပါ ( ) (င) လုံးဝမသခ်ာပါ ( )

၄၁။ သင္သည္ ျပည့္တန္ဆာကို မည္သည့္ေနရာတြင္ ေတြ႕ဆံုခဲ့ပါသနည္း။

(က) ကလပ္ ( ) (ခ) အရက္ဆိုင့္ ( ) (ဂ) စားေသာက္ဆိုင္ ( )

(ဃ) ညေစ်း ( ) (င) အျခား .....

၄၂။ သင္သည္ ျပည့္တန္ဆာႏွင့္ လိင္ဆက္ဆံမူျပဳျခင္းကို မည္သည့္ေနရာတြင္ ျပဳလုပ္ပါသနည္း။ (တစ္ခုမက ေျဖဆိုႏိုင္ပါသည္)

(က) အိပ္ေဆာင္ ( ) (ခ) တည္းခိုခန္း ( )

(ဂ) အိမ္ ( ) (ဃ) အျခား .....

၄၃။ သင္၏အေဖာ္သည္ ကြန္ဒံုးအသံုးျပဳရန္ မၾကိဳက္ႏွစ္သက္ေသာ္လည္း သင္သည္ ကြန္ဒံုးကိုအသံုးျပဳပါသလား။

(က) အျမဲတမ္း ( ) (ခ) အျမဲတမ္းနီးပါး ( )

(ဂ) အခ်ိန္တစ္ဝက္ေလာက္နီးပါး ( )

(ဃ) အခ်ိဳ့ေသာအခ်ိန္မ်ား ( )

(င) ဘယ္ေတာ့မွ ( )

APPENDIX (E): ETHICAL CONSIDERATION

AF 02-12

The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University
Jamjuree 1 Building, 2nd Floor, Phyathai Rd., Patumwan district, Bangkok 10330, Thailand,
Tel/Fax: 0-2218-3202 E-mail: eccu@chula.ac.th

COA No. 092/2016

Certificate of Approval

Study Title No. 059.1/59 : FACTORS INFLUENCING SEX BEHAVIORS AMONG YOUTH MYANMAR MIGRANT WORKERS IN SAMUT SAKHON, THAILAND

Principal Investigator : MR. HEIN PYAE AUNG

Place of Proposed Study/Institution : College of Public Health Sciences, Chulalongkorn University

The Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University, Thailand, has approved constituted in accordance with the International Conference on Harmonization – Good Clinical Practice (ICH-GCP).

Signature: ..... Signature: .....

(Associate Professor Prida Tasanapradit, M.D.) Chairman

(Assistant Professor Nuntaree Chaichanawongsaroj, Ph.D.) Secretary

Date of Approval : 4 May 2016 Approval Expire date : 3 May 2017

The approval documents including

1) Research proposal
2) Patient/Participant Information Sheet and Informed Consent Form
3) Researcher
4) Questionnaire

Protocol No. 059.1/59
Date of Approval - 4 MAY 2016
Approval Expire Date - 3 MAY 2017

The approved investigator must comply with the following conditions:

1. *The research/project activities must end on the approval expired date of the Research Ethics Review Committee for Research Involving Human Research Participants, Health Sciences Group, Chulalongkorn University (RECCU). In case the research/project is unable to complete within that date, the project extension can be applied one month prior to the RECCU approval expired date.*
2. *Strictly conduct the research/project activities as written in the proposal.*
3. *Using only the documents that bearing the RECCU's seal of approval with the subjects/volunteers (including subject information sheet, consent form, invitation letter for project/research participation (if available).*
4. *Report to the RECCU for any serious adverse events within 5 working days*
5. *Report to the RECCU for any change of the research/project activities prior to conduct the activities.*
6. *Final report (AF 03-12) and abstract is required for a one year (or less) research/project and report within 30 days after the completion of the research/project. For thesis, abstract is required and report within 30 days after the completion of the research/project.*
7. *Annual progress report is needed for a two- year (or more) research/project and submit the progress report before the expire date of certificate. After the completion of the research/project processes as No. 6.*

VITA

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