

CHAPTER II

LITERATURE REVIEW

2.1 Migration and HIV/AIDS

Many people migrate according to economic, political and social reasons. In general, this can create mixing of people creating environment for transmission of diseases, subsequent transmission. Transmission of HIV can only be transmitted by the exchange of body fluids. Thus migration itself cannot occur the spread of HIV but it increase the risk of HIV risk behaviors.

In South-East Asia, Thailand becomes a regional hub for migration over a decade and has been attracting low-wage workers since the early 1990s. There were more than 3.5 million persons without Thai nationality (International Organization for Migration, 2011a). About 45 percents of the low-skilled migrants are women. In Thailand, the deployment of migrants is fluctuated in nature. It went up to 202,000 in 2002 from 63,000 in 1990 but declined to 143,795 in 2010 (International Organization for Migration, 2011a). Moreover, there were 95330 displaced persons registered along the Thailand-Myanmar border. From public health point of views, the health care/system should not be excluded as they are unstable in nature and could contract diseases and transmit them to the wider community.

Movement from Myanmar to Thailand began since 1984. According to IOM's Migration report based on Thailand, Ministry labor 2010, there are total 1,078,767 Myanmar migrants registered in December 2009 that includes 591,370 male and 487,397 females (International Organization for Migration, 2011a).

2.2 Substance Use

Substance abuse means the harmful or adverse use of psychoactive substances that include illicit drugs and alcohol and it was defined in 1969 by the WHO Expert Committee on Drug Dependence as 'persistent or sporadic excessive drug use with or unrelated to acceptable medical practice'. Substance abuse has been a problem since people known how to produce the products of fermented fruits. There after people used it according to their desire throughout the World. Among the

psychoactive substances, alcohol is the most widely use legal substance and followed by the others.

2.2.1 Illicit drug use

According to UNODC's World Drug Report 2011, 3.3% to 6.1% of the population aged between 15-64 years i.e., 149 to 272 million people used the substances in the previous year. About half are estimated as current drug users. While the total number of illicit drug users has increased since the late 1990s, the prevalence rates is estimated at between 15 and 39 million that remain stable which indicates that there is not much declining. Moreover, WHO estimated that 5.4% of the total global burden of attributable to alcohol and illicit drug use and the tobacco use attribute to 3.7% of the global burden of diseases (World Health Organization, 2010a).

Cannabis was by far the most commonly used illicit drug (3.3–4.4% of the population aged 15–64 years). Some 16–53 million people aged 15–64 years were estimated to have used amphetamines (0.4–1.2%), with the highest levels in South-East Asia. The number of opiate users was estimated at 16–20 million; with the main drug trafficking routes out of Afghanistan having the highest levels of use according to UNODC, 2009. Those who use drugs once or twice have, at most, a very small increase in morbidity and mortality, with the concentration of harms occurring among those who use drugs regularly.

According to UNODC, the estimated number of problem with drug users (i.e injecting drug users or problem users of opiates, cocaine or amphetamine) were between 18 and 38 millions (World Health Organization, 2010a). There are approximately 13.2 million PWID globally and in South and South-east Asia estimated that between 1.3 and 5.3 million (25.36%) IDU live in the region (Aceijas, Stimson, Hickman, & Rhodes, 2004). According to WHO 2010, there are more than half a million of people who inject drugs present in South-East Asian Regions. Among them, Indonesia, Myanmar, Nepal, Thailand and some regions of India have a significant problems and high national prevalence rates of HIV among the injection drug users.

In Asia and Pacific Region, ATS, opiates, and cannabis are reported as the most prevalent and problematic drugs. Methamphetamine is the leading drug of concern in Brunei, Cambodia, Lao PDR, the Philippines and Thailand. Yaba or Yama, the methamphetamine pill, is the common form in Cambodia, Lao PDR, and Thailand. According to UNODC, abuse of both the pill and crystal forms of methamphetamine presents only in Thailand among the ASEAN countries. Ecstasy, the ATS drug is a drug of concern especially in Brunei, Indonesia, and Vietnam. But China, Malaysia, Myanmar and Vietnam have heroin as the number one problem. Another major drug of abuse, cannabis is also one with the highest abuse prevalence in many countries of the world. A narcotic analgesic, Buprenorphine, has been a leading drug of concern in Singapore. Moreover, the abuse of volatile substances such as glue becomes attention in the Philippines, Thailand and Lao PDR. This type of inhalant abuse is becoming a gateway to the abuse especially for amphetamine-type stimulants (ATS) and heroin.

According to ATLAS on substance use 2010 by WHO, only 4 deaths per 100000 populations contribute to illicit drug use. This will contribute to poor social and economic development and also to crime, insecurity and the spread of HIV. Among the substance abusers, youths are the most common groups of illicit drug use and age between 18-25 years of age are the peak and initiation of the substance use starts in the teens or early adult ages.

2.2.2 Alcohol

People first used alcohol among the psychoactive substance. As a legal recreation drug, it is widely used in recreation and relaxation activities. The patterns of alcohol consumption vary individually and it was clearly known that alcohol use can lead to harmful effect on health and it lead to the highest demand for the treatment among the substance use disorders in the world.

Around 2.3 million die each year from the harmful use of alcohol, accounting for about 3.8% of all deaths in the world. More than half of these deaths occur from NCDs including cancers, cardiovascular disease and liver cirrhosis (World Health Organization, 2010b). The effect produced by alcohol is not only due the level of consumption but also due to the pattern of drinking (heavy drinker or light drinkers)

(e.g. by heavy drinking occasions). But both of them are associated with many diseases i.e, cancer and cirrhosis of liver, cardiovascular, neuropsychiatric disorders.

It effect of alcohol to human has been studied for a long time and it can lead to forms of health problems, i.e physical, mental, social and environmental. The moderate consumption of alcohol may produce weakening of speech and behavior, development of euphoria and an increase in self-confidence. (Winger, Woods, & Hofmann, 2004). This can also lead to the attitude toward sexual risk behavior and increase the risks mainly social and it related health consequences such as violence, sexual abuse and absence in their work (Soe, 2011).

According to ATLAS on substance use 2010 by WHO, 35 deaths per 100000 populations attribute to alcohol use. Binge drinking was also associated with variety of risk behaviors including risky sexual behaviors, smoking and illicit substances use.(Miller, Naimi, Brewer, & Jones, 2007)

Among the substance abuse problems, the alcohol use disorders is significantly higher than the other drug use disorders and male are more common than females in alcohol and drug use disorders (United Nations Office on Drugs and Crime, 2012b). Moreover, active young people are sexually active and they may also combine alcohol, drugs and sex although not being thought as a risk behavior.

2.2.3 Tobacco use

Cigarette smoke is also higher in the illicit drugs. According to WHO's Global status report on non-communicable report 2010, there are nearly 6 million people die from tobacco use in each year and this will increase to 7.5 million in 2020 contributing to for 10% of all deaths. Moreover, about 71% of lung cancer, 42% of chronic respiratory disease and nearly10% of cardiovascular disease is being estimated by the cause of smoking.

Tobacco was smoked as in cigars, in pipe or inhaled as snuff. After inventing of cigarette-making machine, cigarettes become the most popular method of using tobacco throughout the world. The main content of cigarette, nicotine is released when the cigarette is burned. After inhaled to the lungs and it dissolved into the plasma and then carried and arrived to the brain.

The effect of smoking is also depend upon the individuals and nature of smoker that how he smoked. Cigarette smoking can also lead to a health risk and well known by an increased risk of lung cancer, bronchitis and coronary heart diseases. Moreover, maternal smoking can also lead to the low birth weight weigh babies causing retarding in fetal growth.

Not only active smoking, but also indirect smoking can also lead to the adverse effect on health. But the main difference is between active and passive is only the dose that they exposed and the long term effects are mostly similar. But infants and young children are more vulnerable than adults. As a result of being lonely and living in new environment, most of the migrants want to smoke in their free time and this is the initiator to start the use of other substances. There was overall 35.2% prevalence of cigarette smoking found with the involvement of current 59.2% male smokers and 8% of female smoker (S. T. Zaw, 2008).

2.3 Situation of substance use in Thailand

Thailand becomes a major destination for migrants from neighboring countries i.e., Cambodia, the Lao People's Democratic Republic and Myanmar. (International Organization for Migration, 2011b). Furthermore, this golden triangle of Thai, Lao PDR and Myanmar, the substance production, trafficking and usage are common. Since the mid-1990s, methamphetamine has been the most significant illicit drug of concern in Thailand. Thailand has one of the largest markets of methamphetamine users in the region. In 2009 methamphetamine in pill form ranked as the most commonly used drug in the country.

However, recent increases in the use of high purity crystalline methamphetamine, cannabis, and kratom are also serious problems. Crystalline methamphetamine use is increasing in Thailand and there are indications that transnational drug trafficking networks are targeting Thailand both as a destination and transit country for the drug. There has also been an increase in the use of ecstasy, cocaine and ketamine, although users of these drugs tend to be wealthy and concentrated in major cities. There has been an increasing trend in the number of

drug-related arrests and the estimated number of drug users. This trend continued in 2009.

Cannabis cultivation has declined significantly in Thailand over the past two decades. However, cannabis continues to be widely used and Thailand is also a transit country for cannabis trafficked to third countries, particularly Malaysia. Opium poppy cultivation and use also continue, particularly in the northern part of the country although at far lower levels than two decades ago. Heroin use has steadily decreased since 2003, but Thailand remains a transit country for heroin trafficking from the Golden Triangle to the global market.

Nowadays, there have been problems of narcotics abuse, trafficking, and crime related to narcotic in Thailand. According to office of narcotic control board, there are 163,909 cases of narcotics offences and 177,523 offenders in 2010. Methamphetamine is the main one among the illicit drugs and also the others which include such as opium, heroin and ATS. Moreover, UNODC estimated that both of the annual prevalence of opiates and opioids use are 0.2 percent of the population of age between 15-64 years of age but the cocaine and cannabis use are more than 1 percents (UNODC world drug report, 2011).

Past-year drinking students were about 1.5 to 7 times likely to engage to risk behaviors compared to non-drinkers. (Assanangkornchai, Mukthong, & Intanont, 2009) Moreover, according to assessment done in migrant factory workers in Mae Sot, Thailand found that male have more experience to the drugs and alcohol to a greater degree especially in holidays and weekends. The study done among Myanmar youth working in Samut Sakhon Province found that about 21.5% were current smokers and 25.4% were alcohol drinkers and married status was associated with alcohol drinking. (N Howteerakul, N Suwannapong, & M Than, 2005).

2.3 Situation of substance use in Myanmar

Myanmar is one of the manufacturers of the substances especially methamphetamine in the South East Asia region. Opium and heroin are the most common drugs in Myanmar followed by methamphetamine (United Nations Office on Drugs and Crime, 2010). Furthermore, the majority of methamphetamine pills were seized in Myanmar was from North Shan and East Shan states which are areas close to the border area of the Chiang Rai Province, Thailand.

An estimation of the total area under opium poppy cultivation in Myanmar was increased from 28,500 hectares in 2011 to 31,700 hectares in 2012 (United Nations Office on Drugs and Crime, 2012a). Although heroin and opium have declined, the use of methamphetamine pills has increased, especially in border areas located close to methamphetamine manufacturing centers. Moreover, the authorities from Myanmar and Thailand confirmed that crystalline methamphetamine manufacture in the Golden Triangle area, Myanmar, Lao PDR and Thailand. During 2009, over 10 millions of methamphetamine pills were seized in Shan East State in Myanmar (United Nations Office on Drugs and Crime, 2010).

As the availability is increased, the domestic use of the substance is also increasing even though there has no comprehensive household or school survey in Myanmar. UNODC estimated that both of the annual prevalence of opiates and opioids use are 0.8 (0.7-0.9) percents of the population of age between 15-64 years of age (UNODC world drug report, 2011).

The drug use in Myanmar has shifted markedly from traditional use of opium to heroin over recent decades and heroin is mainly administered through injection, while opium and methamphetamine are mostly smoked / inhaled. Although heroin is still widely used in Myanmar, amphetamine-type stimulants (ATS), particularly methamphetamine currently has become popular. The increase risk of overlapping unprotected sexual behavior and injection behavior by using stimulants drugs are the emerging concerns to the policy makers. Evidence suggests that ATS uses become higher among young adult males and also associated with special employment such as high-way drivers.

A cross-sectional study among 400 medical students and 410 community youths in Myanmar found that 34.5% consumed alcohol among medical students and 32.1% among community youths. (Htay, Oo, Yoshida, Harun-Or-Rashid, & Sakamoto, 2010)

2.5 Sexual risk behaviors with substance use

Substance use and sexual risk behaviors become a great concern in the area of public health and are also a main health concern. A study done for HIV risk behavior in the adolescent substance abuser in South Carolina, found that the risk behaviors revealed significant differences between the substance use disorder group and the controls (Deas-Nesmith, Brady, White, & Campbell, 1999). Moreover, a study done in the middle school students of public schools in rural Tennessee found that the average 35- 40% of students had tried cigarettes, alcohol and inhalants. Among the students who reported ever having had sexual intercourse, 75% are the cigarettes and alcohol users and marijuana and inhalant users include nearly 50% (Dunn et al., 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 & Cleland, 2006). Moreover, more males have been drunk before engaging sex than females. A study done in China found that the risky sexual behaviors were strongly associated in temporary migrants. Moreover, family and peer were found to be influenced to the risky sexual behaviors (Yang, Derlega, & Luo, 2007).

Assessment done by IOM in 2005 showed that there were the misconceptions that HIV can be transmitted by a bite of mosquito, a healthy-looking person cannot transmit HIV and there is a medicine that can cure HIV/AIDs. Both of the knowledge, belief and accessible to health education services, can promote better understanding of HIV and can reduce its related sexual behavior. A study done in Tak province, Thailand found that only 12 percent can identify that HIV was not transmitted by casual contacts (Mullany, Maung, & Beyrer, 2003). Moreover, 23 percent of married male and 17 percent of single male had never heard of HIV or AIDS prior to their arrival to Thailand (IOM 2005).

There is well known that having multiple sexual partners and inconsistent use of condoms, intoxicated with the substances during sex can lead to the higher transmission of HIV. A study done by IOM found that 26 percent of single female, 22 percents of married female, and nearly 10 percent of single male were not heard about the condom. Condom used among Myanmar Migrants was low and it was only 17% of migrants with sexual experience regularly used condoms (M. M. Zaw, 2002). Another study done in China found that intoxicated persons with alcohol were more likely to have multiple sexual partners, purchase or sell sex (Lin et al., 2005).

A cross-sectional study was conducted from December 2007 to February 2008 in among male high school students in Thailand found that the current alcohol consumption was associated with ever had sexual intercourse and alcohol or drug use before last sexual intercourse.(Wisit Chaveepojnkamjorn & Pichainarong, 2011)

Methamphetamine use was strongly associated with decrease condom use during intercourse, sex with a prostitute, received money or drugs for sex and sex with injection drug users (Molitor, Truax, Ruiz, & Sun, 1998).