

SUBSTANCE USE AND HIV-RELATED SEXUAL RISK BEHAVIORS AMONG MYANMAR MIGRANT WORKERS IN MAE SAI, CHIANG RAI PROVINCE, THAILAND

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ABSTRACT: The migration from Myanmar to Thailand was already known since the early 1990's. But little is known about the substance use and sexual risk behavior in the migrants' population in Mae Sai district, Chiang Rai province, Thailand. A cross-sectional study was carried out to Myanmar migrant workers in February 2013. The main purpose of this study was to access current situation of substance use and sexual risk behaviors. The purposively selected 308 participants of the study were 18-56 years of age with 53.9% males and 46.1% females. This study was conducted by the use of an interview questionnaire after approval from the ethical review committee from Chulalongkorn University. Among the respondents, ever smoking was found 52.4% in the males and 2.1% in the females. Ever alcohol drinking was found 80.7% in males and 10.6% in females and only one male methamphetamine user with no injection drug user was found. The low level of knowledge of HIV/AIDS was associated with being females (59.2%) ($p=0.008$) and low level of education (60.7%) ($p<0.000$). The current drinking status was associated with being males (77.7%), higher income (63.4%) and ever tobacco use (76.7%) with the p -value of <0.000 . Sex after alcohol use was associated with older age (40%) ($p= 0.001$) and being married (42%) ($p<0.000$). This study acted as a baseline for further studies as there still need to be studied on the social behaviors on the substances use including hazardous drinking and the sexual behaviors. Interventions are needed to focus the special consideration to include females in the HIV/AIDS knowledge promotion program and to give the early education to the young males to prevent alcohol drinking throughout their lives.

Keywords: Substance use, Sexual risk behaviors, Myanmar migrants, Thailand

INTRODUCTION

There were 34 millions of people with HIV including 2.7 million of people of acquired HIV infection in 2010 [1]. According to UNAIDS, nearly 520,000 people (ages 15-49 years) living with HIV and AIDS, Thailand has the highest adult HIV prevalence in the South East Asia region. It was estimated that the HIV prevalence in the adult population (aged 15 and more) at 0.53% in 2011 [2]. It is estimated that around 216,000 people were living with HIV in Myanmar in 2011 and was estimated 18,000 people died of AIDS related illness. It was estimated that there were above 8,000 new infections in 2011 [2]. Movement from

Myanmar to Thailand began since 1984. According to International Organization for Migration's report based on Thailand, Ministry labour 2010, there are total 1,078,767 Myanmar migrants registered in December 2009 that includes 591,370 male and 487,397 females [3].

Nowadays, due to the effect of globalization and urbanization, migration has been increasing throughout the World and it increases vulnerable and tend to engage with the sexual risk behavior as the migrants have been separated from families, lack of support from the relatives and loneliness, social and cultural difference; become higher income, lack of a stable partner and language barriers. Sexual risk behaviors include high number of sexual partner, inconsistent and improper use of condoms. Having multiple sexual partners in the

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Cite this article as: Aung H, Perngparn U. Substance use and HIV-related sexual risk behaviors among Myanmar migrant workers in Mae Sai, Chiang Rai province, Thailand. *J Health Res.* 2014; 28(1); 53-7.

migrant's area is assumed that the role of migration in the spread of HIV [4]. Another risk factor for migrants is the use of substances including alcohol and illicit drugs. Facing the new risk environment of easily accessible alcohol and drug in migrants are associated with increased the desire of sexual intercourse, having multiple partners and low rate of condoms uses especially with the illicit drug use [5]. A study done in rural-to-urban migrants in China found that alcohol intoxicated people were more likely to engage with premarital sex, have multiple sexual partners and purchase sex [6]. According to United Nations Office on Drugs and Crime'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. 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 [7].

Mae Sai district in Chiang Rai province, Thailand is included in the area of the Golden Triangle and labor migration has been occurred in that area especially from Myanmar to Thailand. Moreover, very few studies had been done for substance use and the sexual risk behaviors among the Myanmar migrant workers in Mae Sai district, Chiang Rai Province, Thailand. Therefore, a study was done among Myanmar migrants in Mae Sai, Chiang Rai province, Thailand in order to know the situation relation to the substance use and HIV/AIDS risk behaviors.

MATERIALS AND METHODS

A cross-sectional purposive study with quantitative approach was used to describe the substance use and sexual behaviors of Myanmar migrants in Mae Sai district, Chiang Rai province, Thailand. Based on information from Mae Sai Hospital, the five factories and one construction site were purposively selected where Myanmar migrants were working. After introduction and getting agreement from owners or managers, all migrants were interviewed with their voluntary participation except who refuse to participate. Three hundred and eight samples of Myanmar migrant workers working in Mae Sai were recruited. Ethical approval was taken from the Ethics Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University in January 2013. Participants were interviewed with a questionnaire which included socio-demographic information,

access to health care services and health education, knowledge of HIV/AIDS, practices of substance use and sexual risk behaviors. Data were collected in February 2013. Descriptive statistics and chi-square test were used for analysis with SPSS version 17.

RESULTS

Among 308 participants (males =166 and females =142), nearly 80% was Burma and one third of the population were less than 25 years old. More than a half of the population was married and about 60% of the population had middle and above education. It was found that two-third of the populations was registered. The duration of stay in Mae Sai district was about 4 years on average and they arrived to Thailand about 5 years on average. Nearly half of the population was living at their rent rooms and another nearly half of the population was living at the place provided by their workplace and more than half of the people were living together with their spouses. More than half of the population had monthly income between 5,000 THB and 7,500 THB. The average income was about 6,500 THB.

The knowledge of HIV/AIDS was divided into two groups, i.e. low level of knowledge (below the level of average) and high level of knowledge (above the average level) according to the mean scores (8.37). Regarding to the knowledge, males were more likely to have higher knowledge of HIV/AIDS. Having higher education was also more likely to have the higher HIV/AIDS knowledge and also higher income workers can get more information regarding HIV/AIDS and they were more likely to have higher knowledge of HIV/AIDS than the low income workers. There were statistically association found between the gender, education, income and knowledge levels of HIV/AIDS with the *p-value* of <0.05 (Table 1).

In Mae Sai district, it was found that tobacco and alcohol were the common substances used in Myanmar migrants. Among them, about 52% of males and 2% of females had ever smoked. For alcohol, about 81% of males and about 11% of females had ever drunk. The mean age of first used for tobacco was 18 years but for alcohol was 21 years. About half of the reason for using the substance was the peer pressure. Although tobacco use was stable in nature, alcohol use was declining comparing to the current use and used within 30 days. In this study, only one methamphetamine user was found and no injecting drug user was found (Table 2).

Table 1 Association between socio-demographic characteristics and two level HIV knowledge

| Variables | Low level | High level | χ^2 | P-value |
|----------------------------|------------|------------|----------|---------|
| | Freq (%) | Freq (%) | | |
| Gender | | | 7.056 | 0.008 |
| Male | 73 (44.0) | 93 (56.0) | | |
| Female | 84 (59.2) | 58 (40.8) | | |
| Education | | | 14.633 | 0.000 |
| <Middle education | 77 (64.7) | 42 (35.3) | | |
| Middle education and above | 80 (42.3) | 109 (57.7) | | |
| Income | | | 6.385 | 0.012 |
| < 7,500 THB | 125 (55.3) | 101 (44.7) | | |
| Above 7,500 THB | 32 (39.0) | 50 (61.0) | | |

Table 2 Frequency and percentage distribution of the substance use of respondents

| Substance use of respondents | Ever used | Used within 1 year | Used within 30 days |
|------------------------------|-----------|--------------------|---------------------|
| | Freq (%) | Freq (%) | Freq (%) |
| Male (n=166) | | | |
| Tobacco | 87(52.4) | 83(50.0) | 81(48.8) |
| Alcohol | 134(80.7) | 129(77.7) | 112(67.5) |
| Methamphetamine | 1(0.6) | 0(0.0) | 0(0.0) |
| Female (n=142) | | | |
| Tobacco | 3(2.1) | 1(0.7) | 1(0.7) |
| Alcohol | 15(10.6) | 15(10.6) | 3(2.1) |
| Methamphetamine | 0(0.0) | 0(0.0) | 0(0.0) |

Table 3 Association between socio-demographic characteristic and current drinking status

| Variables | Non-Current drinker | Current drinker | χ^2 | P-value |
|--------------------|---------------------|-----------------|----------|---------|
| | Freq (%) | Freq (%) | | |
| Gender | | | 138.61 | 0.000 |
| Male | 37 (22.3) | 129 (77.7) | | |
| Female | 127 (89.4) | 15 (10.6) | | |
| Income | | | 12.462 | 0.000 |
| <7,500 THB | 134 (59.3) | 92 (40.7) | | |
| Above 7,500 THB | 30 (36.6) | 52 (63.4) | | |
| Tobacco use | | | 45.705 | 0.000 |
| Never | 143 (65.6) | 75 (34.4) | | |
| Ever | 21 (23.3) | 69 (76.7) | | |

Table 4 Relationship between socio-demographic characteristic and alcohol use with sex

| Variables | Never | Ever | χ^2 | P-value |
|-----------------------|------------|------------|----------|---------|
| | Freq (%) | Freq (%) | | |
| Age | | | 11.78 | 0.001 |
| 18-24 years | 47 (87.0) | 7 (13.0) | | |
| Above 24 years | 54 (60.0) | 36 (40.0) | | |
| Marital status | | | 17.509 | 0.000 |
| Single | 49 (90.7) | 5 (9.3) | | |
| Married/Divorce/Widow | 52 (57.8) | 38 (42.2) | | |

Among the current drinkers who used within one year, the male population was in the higher proportion than females. Being males, having higher income and tobacco use were more likely to be current drinker and the statistically significances found between the gender, income, smoking and the current drinking status with the *p-value* of <0.000 (Table 3).

Table 4, the older age group (above 24 years) was the higher proportion both in ever alcohol use

with sex or never use. Similar to the age, the people who ever married were the higher proportion both in ever alcohol use with sex or never use. The alcohol use with sex was found also statistically significant with the older age and being married with *p-value* <0.05.

Condom used was low in partners especially with the spouses and only 7.6% in males and 7.4% in females ever used condoms with spouses. Fifteen respondents out of seventeen respondents who ever

had sex with sex worker always used condoms.

DISCUSSION

Age groups of participants were between the age of 18-24 years of age (35.4%) followed by 25-29 years of age (24%) with the mean age of 28.34 years. About 58% of the populations were married and married workers were more likely to use substances than singles [8]. This showed that the study population were sexually active for the risk behavior.

It was found that alcohol drinking was more than tobacco smoking both in males and females. This was similar to the previous study done in Myanmar [8]. The percentage of current drinkers was 77.7% in males and 10.6 % in females. This male figure was more than the previous study done in Ratchaburi province [9] in which was 73.8%. This may be due to the social acceptance on alcohol was greater in males and the females had more challenges and restriction to use [8] and they can access with the prices that they can afford. Moreover, the females said that they had experienced especially in the New Year festival celebrated in the factory or their workplace. This was consistency with the finding about 81% of the participants gave the reason for using the substance were peer pressure and relaxation.

More percentages of females was found in the low level of knowledge of HIV/AIDS than males and this may be due to level of education and more percentage of males had been found in higher education than females. Education is also one of the factors concerned with HIV/AIDS knowledge and low education level is associated with level of HIV/AIDS knowledge[10].

In general, condom used was low in the study population. Among the respondents who had history of sex in the past 12 months, about 14% said they had experienced with sex workers. Only 12.6% said they always used condoms when had sex with sex workers. Even some have knowledge of condoms as they used, it was found that they were not using condoms regularly when having sex with the sex workers. This can be due to they had been drunk [9] or not ready to have sex especially at the time of first experience [11] or believe to the sex workers as they were young and pretty. Moreover, they did not use the condoms with their spouses and used only with the reason of birth control.

There are some limitations in this study. As a cross sectional purposive study, this interpreting the results cannot present as a whole migrant population and the true causality between

exposures and outcomes. With the use of structured interview, there would be recall bias and also time constraints. Even though, many Myanmar ethnics are working in Thailand, the majority of the study population was Burma from central region of Myanmar although there is no reason to believe that the relationship between substance use with sexual behavior is related to ethnics. Thus, further research need to be considered to include all the Myanmar ethnics staying or working in Thailand with the use of self-administrated qualitative questionnaires. As the amount of drinking was not measured in this study, further research needs to examine the effect of heavy drinking on condom use or risk behaviors.

In conclusion, the situation of tobacco and alcohol use was quite high with low condom used. This study acts as baseline information for situation of Myanmar migrants in Mae Sai district to design the community based tobacco/alcohol use prevention program and support for further studies with socio-cultural issues on alcohol with sexual risk.

ACKNOWLEDGEMENTS

The author thanks for funding support from the scholarship of the Higher Education Research Promotion and National Research University Project of Thailand, Office of the Higher Education Commission with the account number (AS1148A-55) and also to staffs from Mae Sai Hospital and all respondents of Myanmar migrants in this study.

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