Original Research Article S203

# ASSESSMENT OF HIV/AIDS PREVENTIVE PRACTICE AMONG MYANMAR FEMALE SEX WORKERS IN MAE SOT DISTRICT, TAK PROVINCE, THAILAND

## Napapan Der Kinderen\*, Tepanata Pumpaibool

College of Public Health Sciences, Chulalongkorn University, Bangkok, 10330, Thailand

#### ABSTRACT:

**Background:** Myanmar female sex workers (MFSW) in Mae Sot district, Tak province, Thailand are seriously at risk of HIV/AIDS infection and transmission due to their profession and their migration status. They hardly access and/or being accessed to HIV/AIDS prevention and treatment services by health service providers both non-government organizations (NGOs) and government agencies since they are "hard-to-reach population".

**Methods:** This study was conducted for assessing HIV/AIDS preventive practice among MFSW in Mae Sot district. A structured interview questionnaire was used to collect the data from 120 Myanmar female sex workers, aged 18 years old and above who worked in different prostitution businesses in Mae Sot during 21 October-4 November 2016.

**Results:** More than half (57%) of MFSW were unregistered migrant workers. More than 60% of them had regular partners, including husbands/spouses, boyfriends or lovers, and 15% of them also had both husband and boyfriend at the same time. Crucially, only 37% of them revealed that their regular partners knew about their prostitution works. A significant barrier to accessing HIV blood testing was the fear of arrest by the police officers which was about 40%. For HIV/AIDS preventive practice, the majority or 60% of MFSW had moderate level while 22% and 18% of them had good preventive practice and poor preventive practice, respectively.

**Conclusion:** MFSW respondents had a moderate level of practice towards HIV/AIDS prevention and numbers of MFSW also have many regular partners. Such findings address the hidden critical alarms for more opportunity of HIV infection and transmission among MFSW, regular partners, their clients and others. There is an urgent need for critical and comprehensive interventions on HIV/AIDS prevention and treatment, particular communication for behavior change programming.

**Keywords:** Preventive practice; Condom use; HIV/AIDS; HIV/AIDS Prevention; Cross-border migrant workers; Myanmar Female Sex Workers; Thailand

DOI: 10.14456/jhr.2017.85

Received: June 2017; Accepted: July 2017

## INTRODUCTION

Due to the rapid economic growth and expansion of investment and infrastructure in Mae Sot district as a special economic zone (SEZ) and the crucial border trading as an East-Western Economic Corridor in Association of Southeast Asian Countries (ASEAN), visitors and massive waves of

Myanmar migrants, including Myanmar female sex workers (MFSW) keep commuting for responding such developments [1]. Massive migrations and rapid socio-economic developments have facilitated large demand and supply of sexual commercials for filling upon undisclosed sex industry which is highly operated in Mae Sot district [2]. Nevertheless, Myanmar migrant workers and MFSW keep migrating to Thailand without having proper knowledge, life skills and proper practice on

Cite this article as:

Der Kinderen N, Pumpaibool T. Assessment of HIV/AIDS preventive practice among Myanmar female sex workers in Mae Sot district, Tak province, Thailand. J Health Res. 2017; 31(Suppl.2): S203-8. DOI: 10.14456/jhr.2017.85

<sup>\*</sup> Correspondence to: Napapan Der Kinderen E-mail: napapanderkinderen@gmail.com

HIV/AIDS prevention [3]. Therefore, MFSW in Mae Sot district is seriously at risk of HIV/AIDS infection and transmission due to the limitation of their mobility and visibility. They hardly access health care service as well as HIV/AIDS prevention and treatment services by NGOs and government agencies since they are "hard-to-reach population". Fear of being arrest as well as extortion and harassment due to their illegal work and their illegal status in Thailand was the most crucial barriers that discouraging them to access to HIV/AIDS services and any health care services [4]. At the same time, financial aids for combating HIV/AIDS in Thailand both national budget and international aids had decreased dramatically. The National AIDS Centre (NAC) also reported that it needed to pay significant attention to female sex workers on STD/STIs and HIV/AIDS prevention and treatment since they still had insufficient knowledge and preventive practice on HIV/AIDS HIV prevention [5]. <sup>1</sup>Therefore, there is a great need of assessment of practice towards HIV/AIDS prevention and behavior among MFSW for development of proper and cost-effective HIV/AIDS prevention interventions of Nongovernment organizations (NGOs) and government agencies.

#### MATERIALS AND METHODS

## **Participants**

Study populations were Myanmar female sex workers (MFSW), aged 18 years and above who were venue-based MFSW in Mae Sot district. The sample size was 120 MFSW respondents according to Yamane calculation [6]. This cross-sectional study carried out among MFSW who work in 6 permanent prostitution places (venue-based prostitution places) in 5 different sub-districts in Mae Sot district.

Non-probably sampling method with purposive and convenient sampling techniques were used for collecting data. This method commonly used for KAP surveys of sex workers where the target population of this study was difficult to reach and or located. Multi-stage sampling technique was used for collecting data. In addition to the first stage,

purposive sampling technique was used for selecting sub districts (Tambon) in Mae Sot district (Amphor), Tak Province where several venue-based prostitution places highly operated. The second stage, venue-based prostitution places in the selected sub districts (Tambon) were selected by convenient sampling technique. At the final stage, Myanmar female sex workers (MFSW) in the randomly selected venue-based prostitution places who meet the eligible criteria and available for participation were selected by convenient sampling technique.

During the data collection period, out of 10 random venue-based prostitution places approached, 6 venue-based prostitution places agreed to participate in the research. For MFSW respondents in these 6 places who met the inclusion criteria and agreed to participate in this study were recruited randomly until the sample size was reached.

### **Data collection**

Field research team screened the potential respondents prior the interview for considering whether they met the inclusion criteria. These were included MFSW, aged 18 years and above who performed sexual services to their clients directly/indirectly in permanent prostitution places (venue-based prostitution places) in Mae Sot district.

The interviews took place in the quiet and private areas in their accommodations and/or workplaces. A structured interview questionnaire tool developed from the existing HIV knowledge attitude practice (KAP) research guidelines and other research, and it already received reliability test (preventive practice: 0.725 and the Cronbach's alpha coefficient: 0.70). For validity test by the Expert Committees, there were 61 questions could be used/0.67-1.00, 6 questions needed to be improved/0.33-0.66 and 2 questions needed to be deleted/0.00. The questionnaire tool also translated into Thai and Myanmar languages for face to face interview by research team members with local language skills (Thai, Myanmar, and Karen). The data collection was carried out from 21 October to 4 November 2016. Prior field research operation, all research assistants were given overview information

<sup>&</sup>lt;sup>1</sup> Based on program data, a significant proportion is non-Thai female sex workers (FSW), about 21% based on program reports from the Global Fund sites in 2014. HIV prevalence among venue-based FSW at national level has declined steadily from 2.7% in 2010 to 2.2% in 2012 and 1.1% in 2014. However, from 2015 to present, there is an estimation that the HIV/AIDS prevalence among migrant sex workers both male and female sex workers, including Myanmar female sex workers will be increased. This is because different HIV/AIDS prevention and response projects had to scale down and close down due to funding constraint caused by dramatic reduce of development aids of donors in Thailand.

**Table 1** Socio-demographic characteristic of MFSW (n=120)

Socio-demographic characteristic	Number	Percentage
Age (years)		
18-24	63	52.5
25-34	46	38.3
35-41	11	9.2
Mean = $25.32$ , SD = $1.123$		
Median = $24$ , Min = $18$ , Max = $41$		
Marital status		
Single	46	38.3
Married	33	27.5
Divorced	36	30.0
Widow	5	4.2
<b>Educational level</b>		
Never went to school & illiterate (cannot read &write)	20	16.7
Never went to school but literate (can read & write)	27	22.5
Primary education	48	40.0
Secondary education	24	20.0
Higher education	1	0.8
Thai language communication		
Cannot communicate in Thai	25	20.8
Can communicate in Thai with a little communication skill	59	49.2
Can communicate in Thai with very good communication skill	36	30.0
Migration status in Thailand		
Unregistered (Undocumented/illegal) migrant worker	68	56.7
Registered (Documented/legal) migrant worker	44	36.6
Tourist passport	4	3.3
Border pass	2	1.7
10 years residential permit (by the Thai Ministry of Interior)	2	1.7

of this research project and they were trained in interview techniques and how to use questionnaire tool. Prior the interview, all respondents received overview information about the research and they also gave their informed verbal consent. Furthermore, security, privacy, and confidentiality of all MFSW respondents were highly respected.

## Data analysis

The analysis was performed using SPSS version 16. Descriptive statistics including frequencies, percentage, means, and standard deviation were applied to analyze practice on HIV/AIDS prevention.

## **Ethical consideration**

This study was approved by the Ethics Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University (COA No.180/2559).

## **RESULTS**

The age of MFSW respondents ranged from 18 to 41 years and the median was 24 years old. The majority of them were aged between 18 and 24 years

old which were 52% of all respondents. The majority of them or 67% were Burmese and 90% of them were Buddhist. Around 38.3% were single. For educational level, about 83% of respondents were literate and more than 60% attended formal educational system. As Thai language communication, 20% of these women cannot communicate in Thai and 49% of them possessed a little communication skill in Thai. Furthermore, more than half of MFSW respondents or 57% were unregistered migrant workers as shown in Table 1. These sex workers migrated from different states and divisions of Myanmar including Karen, Mon, Shan, Yangon, Bago, and Ayeyarwady.

In term of blood testing for HIV infection, 74% of MFSW already experienced receiving HIV blood testing. More than half (60%) of MFSW received HIV blood testing from the out-reach HIV/AIDS services of Mae Sot hospital and 26% of them received the same services from NGO, mainly by PPAT. For obstacles of MFSW respondents in accessing HIV blood testing, 40% of MFSW respondents were afraid of being arrested by the police officers, followed by 37% of them stated that

**Table 2** Utilisation of HIV blood testing and its obstacles (n=120)

Utilisation service and its obstacles	Number	(%)
Experienced HIV blood testing		
Voluntary Counselling and Testing (VCT) & referral services for HIV screening	89	74.2
(Multiple answers)		
Mae Sot Hospital (MSH)	53	59.6
Out-reach HIV/AIDS services by NGOs health providers	23	25.8
Out-reach HIV/AIDS services by governmental (GOs) Health Providers	9	10.1
Nearby public health centers of the Ministry of Public Health (MOPH)	13	14.6
Visiting private clinics or hospitals	16	18.0
Obstacles in accessing HIV blood testing		
Fear of arrest by police	48	40.0
Lack of financial means	45	37.5
No means of translation	34	28.3
Language barrier	28	23.3
No obstacles as MSH provided referral arrangement	19	15.8

**Table 3** The level of HIV/AIDS preventive practice (n=120)

Level of HIV/AIDS preventive practice	Number	%
Poor preventive practice	21	17.5
Moderate preventive practice	74	66.7
Good preventive practice	25	20.8

Table 4 HIV/AIDS preventive practice and sexual behaviour

HIV/AIDS preventive behaviors	Good behavior	
III V/AIDS preventive behaviors	n (%)	
Always using condoms during sexual intercourse with clients (n = 120)	53 (44.2)	
Convinced and insisted clients to use condom if deny $(n = 120)$	41 (34.2)	
Always using condoms during sexual intercourse with regular partner $(n = 79)$	59 (74.7)	
Using condom with regular partner $(n = 79)$	70 (88.6)	
Refused to have sexual intercourse with regular partner if using condom is denied (n = 79)	44 (57.7)	
Not consuming alcohol before and during sexual intercourse (n =120)	29 (24.2)	
Not consuming drugs before and during sexual intercourse (n= 120)	63 (52.5)	

they did not have enough money to pay for medical bills. Nevertheless, 16% of them stated that they did not have a problem in accessing such service as Mae Sot hospital staffs and volunteers provided transportation services and facilitated blood testing referral services (Table 2).

To assess the level of HIV/AIDS preventive practice, the MFSW were asked with 10 questions according to their behaviors regarding condom use, alcohol and drugs consumption during sexual intercourse and the levels of practice were classified using the mean of the score and standard deviation. It revealed that the majority or 67% of 120 MFSW respondents had moderate HIV/AIDS preventive practice, while 21% of them had good preventive practice and 17% had poor preventive practice. In other words, nearly 80% of FSWs had risk behaviors of HIV/AIDS (Table 3).

There were some critical concerns about sexual behavior among MFSW. Only 44% of MFSW always use condoms during having sexual intercourse with their clients and 34% still convinced and insisted having sex if their clients deny using a condom. Fortunately, 59 out of 79 (75%) MFSW who have regular partner responded that they always use condoms with a regular partner during sexual intercourse. However, 57% of those responded that they always refused to have sex with their regular partner if they denied using a condom. Regarding consuming alcohol and drugs, one-fourth of respondents had good behavior which did not consume alcohol before and during sexual intercourse and, fortunately, more percentage of respondents who responded that they did not consume drugs before and during sexual intercourse (Table 4).

#### DISCUSSION

In this study, socio-demographic characteristics of MFSW respondents had similar findings with the other studies about migrants from Myanmar and male sex workers, particularly education level and age range of FSW. For the study of Shan sex workers in Chiang Rai showed that 36.4% of FSW has low education level [7]. For age range, many findings demonstrated the same range of the age of sex workers, 56.6% of Shan male sex workers aged between 18-21 years old and 58.9% of FSWs in Nepal were in 20-25-year age group [8]. Similarly, 52.5% of MFSW respondents of this study aged between 18-24 years old.

For HIV/AIDS blood testing, the majority or 74.2% of MFSW respondents already experience receiving HIV blood testing services. Also, 35% of FSW in major cities Myanmar ever had counseling for HIV and 68% already received HIV testing [9]. Meanwhile, HIV testing was significantly low among Myanmar migrant workers and one of the crucial barriers in accessing to HIV testing was knowing about the places that providing such service [10].

In this study, 40% of MFSW revealed that the fear of arrest by the police officers was one the most significant barriers to accessing HIV/AIDS testing and services. This was because prostitution considered illegal in Thailand and many of MFSW respondents also had illegal status as unregistered migrant workers. Similarity, the study of Ugandan female migrant sex workers in Guangzhou, China stated that the lack of legal documentation was a major barrier to health services access at hospitals. Because many hospitals ask for identification (though not a valid visa specifically). Many of them were afraid that they would be arrested if they went to the hospital [11].

With this respect, it can be noted that migrant sex workers whether in Thailand and elsewhere have faced similar barriers in accessing sexual health services due to the limitation of movement which caused from their fear of being arrested by police officers. This is because migrant sex workers, especially many MFSW in Mae Sot district have irregular migration status and prostitution works are also illegal in Thailand. For condom use, compared to the study of FSW in India, the practice of alcohol use prior to sex among both FSWs and their clients has a significant association with consistent condom use during paid and unpaid sex [12]. Also, in Nepal. More than two-thirds or 71.2% of the respondents

had used alcohol during sexual activity and more than half of them or 59.6% had neglected to use a condom [8].

At a personal level, all MFSW respondents seem to have better HIV/AIDS preventive practice. But when they have to deal with power relationship with regular partners like spouses, husbands, boyfriends or lovers and sometimes with male clients, the findings clearly pinpoint "power imbalance and gender inequality issues" in negotiation for having safe sex and using condoms with their male sexual partners both regular partners and male clients. Comparing to the case study of FSW in Cambodia, they faced difficulties in negotiating condom use with male clients as they depend upon pleasing these clients for their economic well-being. In the other cases, violence and drunkenness also discouraged condom use during sexual intercourse with their clients [13]. Comparing to the study of FSW in India, condom use in last sex was 91% and 84.7% with occasional and regular clients, respectively. Consistent condom use (CCU) was slightly lesser with regular clients compared to occasional clients and 28.7% of the FSWs could not use a condom though they desire [14].

Nevertheless, this study had significant limitation due to the accessibility of MFSW respondents who worked in a different venue based and non-venue-based prostitution places in Mae Sot district. This research had a significant limitation in representing all MFSW in Mae Sot district as it was carried out by using convenient sampling technique. This study could carry out field research from the collaborated venue-based prostitution places and MFSW respondents. Nevertheless, the findings from this study was differ from the national survey on HIV/AIDS among female sex workers in Thailand, which mainly focused on Thai sex workers and other non-Thai sex workers in other areas where female sex workers had better ability in accessing to HIV/AIDS services and performing HIV/AIDS preventive practice than MFSW in Mae Sot district, Tak province.

## CONCLUSION

Although Thailand reached its success implementing HIV/AIDS prevention and particularly reducing HIV prevalence and mother-to-child-transmission (MTCT) rate, Thailand still has the problem of HIV rapid spread among Myanmar female sex workers. This study revealed that generally, MFSW respondents

had a moderate level of practice towards HIV/AIDS prevention. In addition, the limitation of movement due to the fear of arrest was one of the most crucial obstacles in accessing HIV/AIDS service, especially HIV blood testing and condom distribution among MFSW in Mae Sot district, Tak province.

## **ACKNOWLEDGEMENTS:**

The authors would like to thank all participants in this study. We are also grateful to generous supports from staffs of Planned Parenthood Association of Thailand (PPAT), particularly field staff in Mae Sot Field Office.

#### REFERENCES

- Burmese Migrant Workers' Education Committee. Border boomtown: a tale of winners and losers. [cited 2015 August 15]. Available from http://www.bmwec. org/border-boomtown-a-tale-of-winners-and-losers/
- Planned Parenthood Association of Thailand [PPAT]. A report of follow up visit of prostitution places in Mae Sot district, Tak province, 25-29 May 2015. Planned Parenthood Association of Thailand; 2015.
- International Organization for Migration [IOM].
   Assessment of mobility and HIV vulnerability among Myanmar migrant sex workers and factory workers in Mae Sot district, Tak province, Thailand. Bangkok,: IOM; 2007. [cited 2015 May 11]. Available from: http://www.migrationcenter.mahidol.ac.th/download\_publication/IOM%20MS%20report.pd
- Hla Oo's Blog. Myanmar Express Group. Burmese prostitutes of Mae Sot across Myawaddy. [cited 2015 May 11]. Available from: http://hlaoo1980.blogspot.com/ 2013/01/burmese-prostitutes-of-mascot-across\_24.html
- National AIDS Committee [NAC]. Thailand AIDS response progress report 2015. Bangkok: Ministry of Public Health; 2014.
- Yamane T. Statistics: an introductory analysis, 3<sup>rd</sup> ed. New York: Harper and Row; 1973.

- Guadamuz TE, Kunawararak P, Beyrer C, Pumpaisanchai J, Wei C, Celentano DD. HIV prevalence, sexual and behavioral correlates among Shan, Hill tribe, and Thai male sex workers in Northern Thailand. AIDS Care. 2010 May; 22(5): 597-605. doi: 10.1080/09540120903280935
- Singh BK, Lall BS, Gupta N, Bose DK, Singh RK. Knowledge and attitude on HIV-AIDS and practice of sexual behavior among female sex workers: a pilot study in Jhapa, Nepal. IOSR Journal of Dental and Medical Sciences. 2014; 13(11): 46-52.
- Swe LA, Rashid A. HIV prevalence among the female sex workers in major cities in Myanmar and the risk behaviors associated with it. HIV AIDS (Auckl). 2013; 5: 223-30. doi: 10.2147/hiv.S50171
- Musumari PM, Chamchan C. Correlates of HIV Testing Experience among Migrant Workers from Myanmar Residing in Thailand: A Secondary Data Analysis. PLoS One. 2016; 11(5): e0154669. doi: 10.1371/journal.pone. 0154669
- Davis A, Meyerson BE, Aghaulor B, Brown K, Watson A, Muessig KE, et al. Barriers to health service access among female migrant Ugandan sex workers in Guangzhou, China. Int J Equity Health. 2016 Oct; 15(1): 170. doi: 10.1186/s12939-016-0453-2
- Verma RK, Saggurti N, Singh AK, Swain SN. Alcohol and sexual risk behavior among migrant female sex workers and male workers in districts with high inmigration from four high HIV prevalence states in India. AIDS Behav. 2010 Aug; 14(Suppl 1): S31-9. doi: 10.1007/s10461-010-9731-y
- 13. Nishigaya K. Female garment factory workers in Cambodia: migration, sex work and HIV/AIDS. Women Health. 2002; 35(4): 27-42. doi: 10.1300/J013v35n04\_03
- 14. Hemalatha R, Kumar RH, Venkaiah K, Srinivasan K, Brahmam GN. Prevalence of & knowledge, attitude & practices towards HIV & sexually transmitted infections (STIs) among female sex workers (FSWs) in Andhra Pradesh. Indian J Med Res. 2011 Oct; 134: 470-5.