CHAPTER IV

RESULT

The result of the study was conducted among the Myanmar migrant who resided and worked in Mae Sai, Chaing Rai Province, Thailand during the 4th to 25th February 2012. After introduction and getting approval from Mae Sai Hospital, each of the factories and places had been introduced by the staff and volunteers from the Hospital. After getting agreements with the Managers, the study was done at the office hours, lunch time or in the evening and also to their living places during the holidays according to their free times. Total 308 adult Myanmar migrant workers were conducted face to face interview.

It was found that most of the participants lives together as a cluster near to the work place or given by the factories. Moreover, most of the respondents came from the same district from Myanmar in each cluster. So, they had been friendly each other and living together like a family even they are not being relatives. After working hours, they play together the cane-ball or Zwel Tauk in the same compound. Sometime, they made appointment with each cluster to play a football match especially in the weekend.

One of the interesting was most of them were hard working to earn money. They said because of coming to earn the money we had to earn as much as we can. They work even in the weekend that was given as a part-time from their factories. Even in the night time, they gathered and worked together and discussion had been done.

It is composed of 5 parts. The data will be presented the descriptive characteristics of (1) socio-demographic characteristic, (2) access to health care services (3) knowledge and belief of HIV/AIDS (4) Substance use (smoking, alcohol and others) and (5) sexual risk behavior among the respondents. Finally, the relationship between socio-demographic characteristic, knowledge of HIV/AIDS, substance use and sexual risk behavior is determined.

4.1 Socio-demographic characteristics of adult Myanmar migrant workers

The socio-demographic of the respondents were described into gender, age, ethnics, marital status, education, income, migration status, accommodation and living status. According to gender, 53.9 % of the respondents are male and the majority of the respondents (about 35%) were between the age of 18-24 years of age followed by 25-29 year of age. Although there were Shan, Karen, Rakhine, Chin and Lar hu, the majority of the respondents were Burma (about 80%). Moreover, the majority of the people were married (about 58%). The widows and the divorced people were only included in 10 and 4 people respectively. Furthermore, over 33 % of people have primary education followed by middle and higher. Only 3 people have no education in Myanmar.

Moreover, most of the people are living in their rent rooms and lodge at their work place, i.e 49.36% and 47.40 % respectively. Only 1 people said live alone and the others lived with the spouse, the family, the relatives and with friends. It was found that nearly 26% of the people lived with their spouses and about 29% of the population lived together with spouse and others as about 58% were the married people. The mean duration of living in Thailand was 56 months and in Mae Sai was 43 months.

Among the respondents, about 54 % of the people got the income between 5000-7500 bahts. About one third (35%) of the people were unregistered. Table 4.1 showed the socio-demographic characteristics of the respondents with age, gender, ethnics, marital status, education, monthly income, registration status, migration to Thailand and Mae Sai, living and accommodation.

Table 4.1 : Frequency and percentage distribution of adult Myanmar Migrant workers according to the socio-demographic characteristics (n=308)

Socio-demographic Characteristics		Frequency (n=308)	Percent (%)
Gender			
	Male	166	53.9
	Female	142	46.1
	Total	308	100
Age			
	18-24 years	109	35.4
	25-29 years	74	24.0
	30-34 years	64	20.8
	35 and above	61	19.8
	Total	308	100.0
	Mean = 28.34	SD= 7.406	Range= 18-56
Ethnics			
	Burma	247	80.2
	Shan	29	9.4
	Karen	10	3.3
	Rakhine	6	2.0
	Others	16	5.2
	Total	308	100.0
Marital Status			
	Single	114	37.0
	Married	180	58.4
	Divorces/Widow	14	4.5
	Total	308	100.0
Education			
	Illiterate	3	1.0
	Primary	116	37.7
	Middle	95	30.8
	High school or higher	94	30.5
	Total	308	100.0
Migration Status			
	Registered	199	64.6
	Unregistered	109	35.4
	Total	308	100.0

Table 4.1(continue) :

Soio-demographic Characteristics	Frequency	Percent (%)
Duration of staying in Thailand		
Less than 1 year	69	22.4
1-4 years	87	28.3
5-7 years	66	21.4
More than 7 years	86	27.9
Total	308	100.0
Mean= 4.67	SD = 2.25	Range= 0.4 -20 years
Duration of staying in Mae Sai		
Less than 1 year	92	29.9
1-4 years	99	32.1
5-7 years	58	18.8
More than 7 years	59	19.2
Total	308	100.0
Mean=3.65	SD=4.05	Range=0.4-20 years
Accommodation		
Rent House	5	1.6
Rent Room	152	49.4
Lodge in work	146	47.4
Others (Own house, etc)	5	1.6
Total	308	100.0
Type of Living		
Alone	1	0.3
With Spouse Only	79	25.6
With Family Only	29	9.4
With Relatives Only	16	5.2
With Friends Only	83	26.9
Spouse and others	90	29.2
Family and others	5	1.6
Relative and others	5	1.6
Total	308	100.0
Monthly Income		
$\leq$ 5000 Bahts	58	18.8
5001 - 7500 Bahts	168	54.6
> 75000 Bahts	82	26.6
Total	308	100.0
Mean= 6467.21	SD= 1490.92	Range = 3000 -12000 Bahts

4.2 Access to health care services including health education

Table 4.2: Frequency and percentage distribution of health care seeking in Myanmar Migrants

	Frequency	Percent (%)
Have you ever seek for health care?		
Never	96	31.2
Ever*	212	68.8
Total	308	100.0
Where you usually go?		
District hospital/ Gov. health center	66	31.1
Private Hospital/Clinic Only	83	39.2
Pharmacy shop Only	6	2.8
Factory clinic Only	7	3.3
Traditional Medicine Only	1	0.5
District hospital and others	28	13.2
Private and others	11	5.2
Others	10	4.7
Total	212	100.0

* Multiple response answer

Accessibility to the health care services is also one of the important factors for the HIV knowledge and its related sexual behavior. Two hundred and twelve of the respondents were seeking health care in Mae Sai during the last 12 months and it was about 69% of the respondents. Although about 32% said they went to government hospital or clinic only, about 40% said they went to private hospital/clinic only. About 23% said they went to more than one source during the last 12 months.

Table 4.3: Frequency and percentage distribution of HIV-related health education services during the past 12 months

	Frequency	Percent (%)
Have you received during the past 12 months?		
Never	247	80.2
Ever *	61	19.8
Total	308	100.0
What did you receive in the past 12 months?*		
Health talk Only	19	31.1
Health talk and Pamphlets	17	27.9
Health talk and Booklets	3	4.9
Health talk and incentives	6	9.8
More than two things	16	26.2
Total	61	100.0

* Multiple response answer

Furthermore, HIV-related health education had also been asked to the respondents. According to the table 4.3 regarding HIV-related health education services in the last 12 months, 61 people said they had got HIV related health education. Among them, about 31% said they got health talk only and about 43% said they got health talk with the others, i.e, pamphlets, booklets and incentives which include condoms and small gifts. About 26% said they received more than two materials in health education.

Table 4.4 showed about the knowledge regarding where the condoms can get in Mae Sai. About 63 % said they knew where the condoms can get in Mae Sai. Among them, about 36% talked they can get the condoms at their work place, about 18.6% said they can buy condoms at the pharmacy shop. Moreover, about 40% of the respondents can mention more than one source of the place where the condoms can get. Only 3 people said that condoms can get from their friends and from commercial sex worker.

Table 4.4: Frequency and percentage distribution of knowledge regarding where the condoms can get

	Frequency	Percent (%)
Do you know where the condoms can get?		
No	114	37.0
Yes	194	63.0
Total	308	100
Mention where the condoms can get? *		
At wok only	70	36.1
Pharmacy only	36	18.6
Hospital/Clinic Only	13	6.7
Shop Only	8	4.1
NGO Only	8	4.1
Can mention two sources	52	26.8
More than two sources	7	3.6
Total	194	100.0

* Multiple response answer

4.3 Knowledge and beliefs of HIV/AIDS

4.3.1 Knowledge and belief scoring of HIV/AIDS

All the participants had been asked 15 questions regarding the knowledge and belief of HIV/AIDS. Table 4.5 showed that the frequency and percentage of HIV/AIDS knowledge of migrant workers who answered the question correctly. Among the knowledge questions, about 75% thought that a person can get HIV from receiving blood in the hospital. Another question that a blood test for HIV is a very good way to find out if they have HIV was got about 97%. Regarding both of the above two questions, the females and male percentage of the respondents who answered correctly were nearly the same and not much different.

Regarding the using condoms during sex, about 85% of the total population thought that it can reduce the transmission of HIV. It was only account for 79% of the female population but about 90% in the male population. The gender difference had also found in the question regarding HIV can be get by kissing. Although the total

population was 74%, it only represented for about 81% of male population and about 66% of female population.

Moreover, about 26% thought that HIV is not only a problem of gay men and the male percentage was about 30% and the female percentage was about 21%. About 81% of the total population thought wife may not get HIV although husband get HIV and the male percentage was more than the female and it was about 13% and about 22% respectively.

Fig 4.1 showed that the gender difference between the knowledge and belief of HIV/AIDS among the study population. It was found that both group got the high score in a blood test for HIV is a very good way and using the condoms can reduce the transmission followed by a person can get HIV from receiving blood. But it was found that both of the groups got less in the questions of if the husband had HIV, wife may not get HIV and HIV is only a problem of gay men and a positive blood test for HIV means a person had AIDS. For the other questions, both of the groups got the score between 40-60%.

For gender, it was found that the difference was wide in the questions regarding using condoms can reduce transmission and unlikely to get HIV by kissing. For both questions, male group got the higher scores. For the other questions, there was no much difference.

4.3.2 Level of Knowledge and belief of HIV/AIDS by grouping

The knowledge score was given to (1) if the answer was the correct one while the other was given to (0). After that the score for each participant was combined into total scores and then, it was grouped into low level of knowledge (below the average level) and high level of knowledge (above the average level) according to mean, (8.37).

According to table 4.6, 44% of male population got the low level of knowledge and about 60% of female population got the low level of knowledge. Moreover, 56% of the male population got the level of above the average and only about 40% of females population got the above the average level of knowledge.

Table 4.5: Knowledge and beliefs of HIV/AIDS among the Myanmar Migrant workers who answered the correct answer

		Male(n=166)		Female(n=142)		Total(n=308)	
	Item	Freq	Percent	Freq	Percent	Freq	Percent
(1)	A person can get HIV from receiving blood in the hospital.	123	74.1	108	76.1	231	75.0
(2)	A blood test for HIV is a very good way to find out if you have HIV.	159	95.8	139	97.9	298	96.8
(3)	A positive blood test for HIV means that a person has AIDS.*	48	28.9	31	21.8	79	25.7
(4)	Having sex during menstruation increases the chances of getting HIV.	119	71.7	86	60.6	205	66.6
(5)	HIV is only a problem of gay men.*	49	29.5	30	21.1	79	25.7
(6)	HIV is only a problem of injecting drug users.*	60	36.1	40	28.2	100	32.5
(7)	It is unlikely that someone can get HIV by kissing someone who has the virus.	134	80.7	94	66.2	228	74.0
(8)	Using condoms during sex can reduced the transmission of HIV.	150	90.4	112	78.9	262	85.1
(9)	A person can be infected with HIV and have no symptoms of the disease.	67	40.4	57	40.1	124	40.3
(10)	A person can get HIV through a mosquito bite.*	70	42.2	56	39.4	126	40.9
(11)	If you have a sexually transmitted disease, your chance of getting HIV is higher.	102	61.4	75	52.8	177	57.5
(12)	HIV/AIDS cannot be cured.	111	66.9	101	71.1	212	68.8
(13)	At present, there are drugs to treat HIV/AIDS.	114	68.7	89	62.7	203	65.9
(14)	If you get HIV and do not receive more viruses, you may live longer.	102	61.4	95	66.9	197	64.0
(15)	If husband get HIV, wife may not get HIV.	37	22.3	19	13.3	56	18.2

* Negative answer

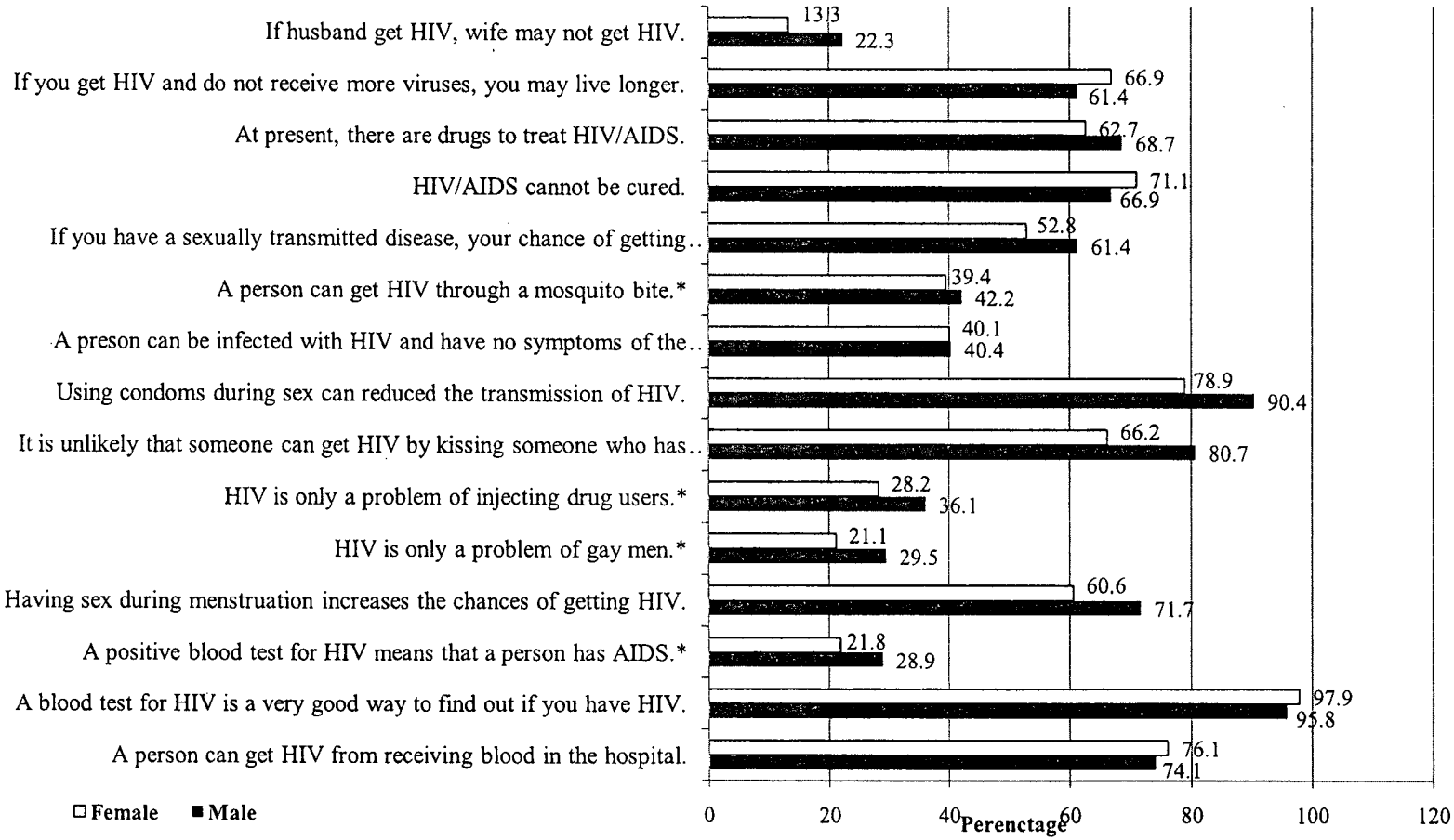

Figure 4.1: Knowledge and beliefs of HIV/AIDS among the Myanmar Migrant workers who answered the correct answer

Table 4.6 : Knowledge level among the Myanmar migrant workers who answered the correct answer

Level of Knowledge and beliefs of HIV/AIDS	Male		Female		Total	
	Freq	%	Freq	%	Freq	%
Low level (<8.37)	73	44.0%	84	59.2%	157	51.0%
High level (>8.37)	93	56.0%	58	40.8%	151	49.0%
Total	166	100.0%	142	100.0%	308	100.0%

4.4 Substance use

To know the situation of the substance use among the Myanmar migrant, all the participants had been asked the questions regarding the substance use which included tobacco use, alcohol drinking and other substance use including glue sniffing. To describe the substance use, it was asked whether they had had experience in life time or not, within 12 months or not and within 30 days.

4.4.1 Frequency and percentage of substance use

The following table 4.7 showed that the frequency and percentage of substance use among the Myanmar migrants in Mae Sai, Chiang Rai Province according to gender into ever use, use within 1year and used within 30days. As usual, it was found that more males use the substance than females.

For male, it was found that more alcohol used than tobacco use. For tobacco, about 52% had ever experience and 50% used within the last 12 months and about 49% used within 30 days. For alcohol use, 80% had ever use alcohol and about 78% were use within the last 1 year and about 68% used within the last 30 days. For tobacco use, it was found that there was not much difference in ever use and used within 30 days, i.e. about 53% and 49% respectively. But for alcohol use, the percentage was reduced in the ever use and used within 30 days, i.e. about 80% to about 68%.

For females, only 3% used tobacco and 0.7% was using in the last 30 days. For alcohol, 10.6% had ever and currently using alcohol (used within the last 1 year)

and only about 2% of females were used alcohol within 30 days. Similar to males, it was found that less female used within 30 days than ever use.

There was only one male who said he had ever use methamphetamine and there was no respondent for the other type of substance use as shown in the table 4.7.

Table 4.7: Frequency and percentage distribution of substance use

	Substance	Ever use		Use within 1 year		Use within 30 days	
		Freq	Percent	Freq	Percent	Freq	Percent
Male	Tobacco	87	52.4	83	50.0	81	48.8
(n=166)	Alcohol	134	80.7	129	77.7	112	67.5
	Methamphetamine	1	0.6	0	0	0	0
	Others	0	0	0	0	0	0
Female	Tobacco	3	2.1	1	0.7	1	0.7
(n=142)	Alcohol	15	10.6	15	10.6	3	2.1
	Methamphetamine	0	0	0	0	0	0
	Others	0	0	0	0	0	0

4.4.2 Reason for first used of substance use

The reasons for first used of substance were shown in the table 4.8. The reason for first use in the substance users was mainly due to peer pressure and it was about 48% followed by relaxation which means to release stress or happiness. According to gender, the more percentage of males had been first fuse of substance for curiosity than females and it was about 14% in male and 7% in females. But the more percentage for social reason in females than in males for first use of substance and it was 17% in females and 5% in males respectively. As shown in the table, male used the substance more than females with the reason for peer pressure for both gender. But for relaxation, the male percentage was more than the female, i.e. about 35% in male and about 28% in females.

Table 4.8 Frequency and percentage of the reason for first used of substance

	Male		Female		Total	
Reason	**Freq**	**Percent**	**Freq**	**Percent**	**Freq**	**Percent**
Curious	20	13.5	1	5.6	21	12.7
Peer Pressure	70	47.3	9	50.0	79	47.6
Relaxation	51	34.5	5	27.8	56	33.7
Health and social	7	4.7	3	16.7	10	6.0
Missing	(18)	-	(124)	-	(142)	-
Total	148	100.0	18	100.0	166	100.0

4.4.3 Tobacco

Tobacco is also one to the substance use in the study population although it not directly related to the HIV risk. The following table 4.9 showed that that starting age of tobacco use among the population according to gender.

Table 4.9: Frequency and percentage distribution of starting age of tobacco

	Male		Female		Total	
	Frequency	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Starting age of tobacco use						
<15 years	14	16.1	0	0.0	14	15.6
15-19 years	46	52.9	0	0.0	46	51.1
20-24 years	18	20.7	1	33.3	19	21.1
25 years and above	9	10.3	2	66.7	11	12.2
Total	87	100.0	3	100.0	90	100.0
Mean	17.94 yr		25 yr		18.29 yr	
SD	4.356		5		4.543	

Among the 90 participants who ever had a habit of tobacco use, the mean age for tobacco use was 18.29 yr with the standard deviation of 4.543. Among the tobacco use, the male had started to use younger than females and they started to use before the age of 15 and it was about 16% of the male population. Only 3 females had experienced in smoking and they started to use above 20 years of their age.

About the half of the male population who ever use tobacco started to use the age between 15-19 years within the mean age of 17.94 year with SD 4.356.

4.4.4 Alcohol

Table 4.10: Frequency and percentage distribution of starting age of alcohol

	Male		Female		Total	
	Frequency	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Starting age of Alcohol						
<15years	8	6.0	0	0.0	8	5.4
15-19 years	60	44.8	6	40.0	66	44.3
20-24 years	41	30.6	2	13.3	43	28.9
25 years and above	25	18.7	7	46.7	32	21.5
Total	134	100.0	15	100.0	149	100.0
Mean	20.15 yr		23.80 yr		20.64 yr	
SD	4.354		6.097		4.799	

According to table 4.11, the mean age to start use of alcohol was 20.64 year with the standard deviation of 4.779 among the 149 participants who used alcohol and the mean age in male is younger than females. The majorities who started to use alcohol are between the age of 15-19 years of age and it was about 44% of who ever drink. The starting age was also younger in male than female.

4.4.5 Methamphetamine use

Methamphetamine is also one of the substances used. In this study, there is only one person who said he had ever used for methamphetamine. He is 47 years old married man and he has been living for nearly 20 years in Mae Sai. He had been experienced in last 14 years ago (1997) when he was 23 year old. At that time he used with one of his friend. According to his saying, it was easily available at that time and he just wanted to know and had been tested. He bought from Myanmar at that time as the border can easily pass and it was only 6 Baht for one tablet.

According to his experience, the bitter taste present in the throat when sniff by using the wide opening bottle as a lot of drug arrived directly. If using with water, the drug arrive less and not bitter taste. He bought a bottle for 3 baht and put the water into the bottle and he sniffed the drug but he did not answer where he used that drug. "*I don't know about the different or desire as I haven't gone for sex ("A pyaw") after using the drug*", he said.

He answered as the following when he was being asked whether there are more users or not. Before 1998, if the illegal migrants caught, he was only deported back within 24 hours. Only after 1998, the border pass issued and if the illegal migrants caught, he had been in prison. So, the availability become less and less. When there is less available, the price was increased in Mae Sai and he had not been effort and it was only being tested for one to two times. He said that he thought it will become nearly 200 Baht per tablets. Moreover, another reason was a person can be surprised check for methamphetamine in his/her urine by the police when motorcycling or walking on the road. As conclusion, there will be so much reduced than before. Regarding his friends he said, "*As I used only for a short time and I have not many friends. As I have been moved from one place to another and also the same to my friend, I don't know about him and we haven't met for a long time*".

4.4.6 Substance use in Friends

Substance used in friends also important factors for starting to use the substance as peer pressure. According to table 4.8, about 48% of substance users became first used due to peer pressure. So, whether they had substance used friends or not also asked.

According to table 4.7, even though there was only one methamphetamine user, nearly 10% of the population had Myanmar friends of using methamphetamine and nine people had methamphetamine use Thai friends. There only one people who had a Thai friend of using opium and there also one people who had heroin using Myanmar friends. There were 4 people who ever had marijuana using Myanmar friends. There were 12 people who had Myanmar friends of using glue sniffing and there only 1 people who ever had a Thai friend of using the glue.

Table 4.11: Number and percentage of alcohol and methamphetamine use in Myanmar Friends and Thai Friends

	Myanmar Friends		Thai Friends	
	Frequency	**Percent**	**Frequency**	**Percent**
Ever friend of illegal substance use (n=308)				
Methamphetamine	30	9.7	9	2.9
Ecstasy	0	0	0	0
ICE	0	0	0	0
Opium	0	0	1	0.3
Heroinwww	1	0.3	0	0
Marijuana	4	1.3	0	0
Glue	12	3.9	1	0.3

4.5 Sexual risk behaviors

Sexual risk behavior is also a sensitive issue to the respondents. Thus starting from whether they had been sex in the past 12 months. Then if they answer yes, they had been asked with whom to have with.

Among the study population, 119 people had history of sex in the past 12 months and among them, 19 singles had included. Among the people who had history of sex within the past 12 months, about 78% of male had sex with spouse. It was found that only males said they had sex with other than housewives, i.e, lover, sex workers and the same sex. Only one male said he had experienced with the same sex. But the data for sex with spouse was not consistent with their marital status because one of the spouses died before the study had done.

The following table 4.14 showed that the frequency and percentage distribution of history of sex in the past 12 months.

Table 4.12 : Frequency and percentage distribution of history of sex in the past 12 months

	Male		Female		Total	
	Freq	%	Freq	%	Freq	%
Do you have sex in the past 12 months?						
Never	47	28.3	61	43.0	108	35.1
Ever	119	71.7	81	57.0	200	64.9
Total	166	100.0	142	100.0	308	100.0
With whom did you have with?						
Spouse only	93	78.2	81	100	174	87.0
Lover only	8	6.7	0	0.0	8	4.0
Sex worker only	8	6.7	n.a	n.a	8	4.0
Spouse and sex workers	7	5.9	n.a	n.a	7	3.5
Lover and sex workers	2	1.7	n.a	n.a	2	1.0
MSM only	1	0.6	n.a	n.a	1	0.5
Total	119	100.0	81	100.0	200	100.0

4.5.1 Alcohol use with sex

Alcohol can prevent sexual inhibition and thus alcohol use before or during sexual activity had been asked. Alcohol use with sex means that the alcohol used before or during sexual activity among the current drinkers.

According to the table 4.7, there were 44 respondents had ever use alcohol with sex among the 144 current alcohol drinkers and it was nearly 30% of current alcohol drinkers. For male current drinkers, about 32% had experienced with using alcohol and about 13% of female current drinkers had experienced with using alcohol with sex.

Among the participant who had experienced with the use of alcohol with sex, the frequency of condoms used had been asked in their last time use. The table 4.16 showed the frequency and percentage distribution of condom used with last time alcohol use with sex.

Table 4.13 : Frequency and percentage distribution of alcohol use before/during sex among the current drinkers (n=144)

	Male		Female		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Never	88	68.2	13	86.7	101	70.1
Ever	41	31.8	2	13.3	43	29.9
Never drink during last 12 month	(37)	-	(127)	-	(164)	-
Total	129	100	2	100	144	100

About 12% of the people used condoms in their last time sex and they were only males. The others did not use condoms in their last time and only 2 women said they used alcohol with sex and they did not used condoms at their last time alcohol use with sex.

Table 4.14: Frequency and percentage distribution of condom used with last time sex with alcohol use (n=43)

	Male		Female		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
No	36	87.8	2	100.0	38	88.4
Yes	5	12.2	0	0.0	5	11.6
Never drunk and never sex in the past 12 months	(125)	-	(140)	-	(265)	-
Total	41	100.0	2	100.0	43	100.0

4.5.1 Condoms use during sex

The nature of condom used can be depending on the type of their sexual partners. Therefore condom used had been also asked according to their partners. The partners also divided into spouses, lovers and sex workers. Always used means they use the condoms always when they have sex. Often means if they used the condom not always but more than half of the time when they have sex and if they used irregular and the frequency of usage was less than half, it was noted as often use. The following table showed the frequency of condoms used with their partners.

Table 4.15: Frequency and percentage distribution of condom used among who had sex within the past 12 months

	Never		Ever		Total	
	Freq	%	Freq	%	Freq	%
Male* (n=119)						
Spouse	91	76.5	9	7.6	100	84
Lover	5	4.2	5	4.2	10	8.4
Sex worker	0	0.0	17	14.3	17	14.3
MSM	1	0.8	0	0.0	1	0.8
Female* (n=81)						
Spouse	75	92.6	6	7.4	81	100

*Multiple responses

Table 4.16: Frequency and percentage distribution of frequency of condom used among who used condoms in the past 12 months

How often do you use condoms?

	Always		Often		Sometimes		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Male*								
Spouse	1	11.1	1	11.1	7	77.8	9	100.0
Lover	4	80	0	0.0	1	20.0	5	100.0
Sex worker	15	88.2	2	11.8	0	0.0	17	100.0
MSM	0	0.0	0	0.0	0	0.0	0	100.0
Female *								
Spouse	0	0.0	0	0.0	6	100.0	6	100.0

*Multiple Response

For condom used who had history of sex in the past 12 months, 31 males had ever used condoms during sex and 6 females had ever used condoms during sex. Only 20% of the male population (i.e 20) said they always used condoms at the time of sex and the couples used condoms with spouses for the contraception or birth control.

4.6 Relationship between independent and dependent variables

4.6.1 Relationship between socio-demographic characteristics and knowledge of HIV/AIDS

Before analysis the knowledge of HIV/AIDS with other variables, the knowledge group 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 (8.37). To find the relationships between socio-demographic and knowledge level of HIV/AIDS, Chi-square test was used. The statistical significant was used by 0.05.

For gender, males were the higher percentage in the high level knowledge but oppositely females had higher percentage in the low level of knowledge. It was statistically association found between the gender and knowledge level with the p-value of 0.008.

For education with the knowledge level, both of the knowledge levels had the higher number of education level in the middle and above education groups. Moreover, it was significantly associated with the education and the knowledge of HIV/AIDS with the p-vale of <0.000 and the higher education person had the higher knowledge level.

Income of the respondents can also attribute to the knowledge of HIV/AIDS. The higher proportion of low income peoples were found both in the two levels of knowledge. But in the higher income people, the higher proportion of the respondents with the high level of knowledge was found. Furthermore, it was also statistically significance with the p-value of 0.012 with the knowledge level of HIV/AIDS.

The age of the respondents was grouped into below that age of 24 and above the 24 years. There was no statistically significance found between the age group and the knowledge of HIV/AIDS. Bu the percentage of the younger age group was more in the low level and the high level group had more percentage of the people from the older group.

As the majorities of the people was Burma in the study population. There was no statistically significance found between the races and the knowledge of HIV/AIDS.

In Burma, more people in the lower level but oppositely, the more people in the high level in other races.

Marital status was divided into single and the people who had ever married. But in this group both the levels of knowledge had the lower proportion of single than the ever married group and the marital status was not statistically significance with the knowledge of HIV/AIDS.

For registration status, there was not much difference between the low and high level of knowledge in the registered and un-registered groups. The knowledge of HIV/AIDS was not statistically significance with the registration status.

Table 4.17: Relationship between socio-demographic and knowledge level of HIV/AIDS

	Low level Freq (%)	High level Freq (%)	χ^2	p-value
Age			3.144	0.076
18-24 years	63 (57.8)	46 (42.2)		
Above 24 years	94 (47.2)	105 (52.8)		
Gender			7.056	0.008
Male	73 (44.0)	93 (56.0)		
Female	84 (59.2)	58 (40.8)		
Race			1.371	0.242
Burma	130 (52.6)	117 (47.4)		
Others	27 (44.3)	34 (55.7)		
Marital Status			1.209	0.272
Single	70 (54.7)	58 (45.3)		
Ever married	87 (48.3)	93 (51.7)		
Registration status			0.118	0.732
Unregistered	57 (52.3)	52 (47.4)		
Registered	100 (50.3)	99 (49.7)		
Education			26.802	0.000
≤Middle education	130 (60.7)	84 (39.3)		
>Middle education	27 (28.7)	67 (71.3)		
Income			6.385	0.012
≤ 7500 Bahts	125 (55.3)	101 (44.7)		
> 7500 Bahts	32 (39.0)	50 (61.0)		

4.6.2 Relationship between socio-demographic characteristics and alcohol

Before finding the relationship between the use of alcohol with other variables of interest, current drinkers were defined as the person who had drunk within the past 12 months and non-current drinkers were defined as the person who had never drunk as well as the person who had not drunk within the past 12 months.

Among the current drinkers, the male population was in the higher proportion but in the non-current drinker, the female population was in the high ratio. Moreover, the statistically significance found between the current drinking status and the gender with the p-value of <0.000.

The large proportion of non-drinker had been found in the low income group but opposite to this, a large proportion of current drinker had been found in the high income group. It was statistically significance between the income and current drinking status with the p-value of <0.000.

The people who never use tobacco or not the current drinkers had been found the large proportion in the study population. But in the population of the people who ever use tobacco had been found in the large proportion in the current drinkers. There also statistically significance found between the tobacco use and the current drinking status with the p-value of <0.000.

According to table 4.19, more population was in the older age group both in the current and non-current drinkers. Moreover, a large proportion of non-drinkers found in Burma and but for the other races, it was not much difference in current and non-current drinkers. Both in the age and the race, it was not statistically significance was found between the current drinking status with the age and the race.

For marital status, single have less proportion in both the current and non-current drinker groups than the person who ever married. For registration status, the registered population had the higher percentage both in the unmarried and non-current drinker. There was no statistically significance was found between the current drinking status with the marital status and the registered status.

Table 4.18: Relationship between socio-demographic characteristic and alcohol

	Non-Current drinker	Current drinker	χ^2	p-value
	Freq (%)	Freq (%)		
Age			0.527	0.468
18-24 years	55 (50.5)	54 (49.5)		
Above 24 years	109 (54.8)	90 (45.2)		
Gender			138.61	0.000
Male	37 (22.3)	129 (77.7)		
Female	127 (89.4)	15 (10.6)		
Race			0.555	0.477
Burma	134 (54.3)	113 (45.7)		
Others	30 (49.2)	31 (50.8)		
Marital Status			1.834	0.176
Single	74 (57.8)	54 (42.2)		
Married/Widow/Divorce	90 (50.0)	90 (50.0)		
Registration status			1.448	0.229
Unregistered	53 (48.6)	56 (51.4)		
Registered	111 (55.8)	88 (44.2)		
Education			2.253	0.133
≤Middle education	120 (56.1)	94 (43.9)		
>Middle education	44 (46.8)	50 (53.2)		
Income			12.462	0.000
≤ 7500 bahts	134 (59.3)	92 (40.7)		
> 7500 bahts	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)		

4.6.3 Relationship between socio-demographics and sexual behavior

In this study, multiple sexual partners were the one who had more than one type of partner in the last 12 months (spouse, lover or sex-workers). Firstly, purposing to find the relationship between the socio-demographic characters with the multiple partners, chi-square test was used.

The multiple sexual partners were found only in 9 people and among them three were single and the other six were who had ever married.

The significant association was found between age and multiple partners with the p-value of 0.017. According to fisher's exact test, statistically significant was found between gender and the multiple partners with the p-value of 0.004.

Table 4.19: Relationship between socio-demographic and multiple sexual partners

	Multiple Sexual Partner		p-value (Fisher's Exact Test)
	No	Yes	
	Freq (%)	Freq (%)	
Age			1.000
18-24 years	106 (97.2)	3 (2.8)	
Above 24 years	193 (97)	6 (3)	
Gender			0.004
Male	157 (94.6)	9 (5.4)	
Female	142 (100)	0 (0)	
Education			1.000
≤ Middle education	208 (97.2)	6 (2.8)	
> Middle education	91 (96.8)	3 (3.2)	
Race			0.080
Burma	242 (98)	5 (2)	
Others	57 (93.4)	4 (6.6)	
Marital status			0.740
Single	125 (97.7)	3 (2.3)	
Married/ Widow/Divorce	174 (96.7)	6 (3.3)	
Registration Status			0.288
Registered	104 (95.4)	5 (4.6)	
Unregistered	195 (98)	4 (2)	
Income			1.000
≤ 7500 bahts	219 (96.9)	7 (3.1)	
>7500 bahts	80 (97.6)	2 (2.4)	

4.6.4 Relationship between socio-demographic characteristics and alcohol use with sex

There are so many studies found that alcohol use is strongly associated with HIV risk for sexual behavior. Thus better understanding about the alcohol use with sex, the relationship with the socio-demographic characteristics and alcohol use with sex among the current drinkers had been done and chi square test was used and the significant association was determined with the p-vale of <0.05.

According to table 4.21, the older age group (above 24 years of age) were the higher proportion both in ever alcohol use with sex or never use. Furthermore, age was statistically significant with alcohol use with sex (p=0.001). Similar to the age, the people who ever married were the higher proportion both in ever alcohol use with sex or never use. . The single group was less use of alcohol with sex and it was only about 9% of the single population. Moreover, the alcohol use with sex was also statistically significant with marital status of p-value <0.000

Among the 43 participants who ever used alcohol among the current alcohol user(144), the majority were the male population and 41 out of 43 who ever use alcohol with sex were male and only 2 were female. But after running chi-square test, there was no statistically significance with gender and alcohol with sex.

Among the participants who had ever use alcohol with sex, the proportion of registered population was higher than the unregistered population. Moreover, Burma was the higher proportion both in the people who ever use alcohol with sex and also in the people who had never use alcohol use with sex.

Concerning about the level of education, the middle and above middle level of education were the higher proportion both in the ever and never use alcohol use with sex. For income status, less income group were the higher proportion both in the ever and never use alcohol use with sex. Moreover, the proportion was not much different for the two level of knowledge of HIV/AIDS in the people who ever use alcohol with sex.

Table 4.20 : Relationship between socio-demographic characteristic and alcohol use with sex

	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)		
Gender			2.184	0.139
Male	88 (68.2)	41 (31.8)		
Female	13 (86.7)	2 (13.3)		
Registration status			0.073	0.787
Unregistered	40 (71.4)	16 (28.6)		
Registered	61 (69.3)	27 (30.7)		
Marital status			17.509	0.000
Single	49 (90.7)	5 (9.3)		
Married/Divorce/Widow	52 (57.8)	38 (42.2)		
Race			3.557	0.059
Burma	75 (66.4)	38 (33.6)		
Others	26 (83.9)	5 (16.1)		
Education			1.113	0.291
<Middle education	33 (64.7)	18 (35.3)		
≥Middle education	68 (73.1)	25 (26.9)		
Income			2.946	0.086
≤ 7500 bahts	60 (65.2)	32 (34.8)		
> 7500 bahts	41 (78.8)	11 (21.2)		
Knowledge on HIV/AIDS			1.297	0.255
≤Average level	39 (65.0)	21 (35.0)		
> Average level	62 (73.8)	22 (26.2)		

The registration status, the races, the level of education, the income level, the knowledge level of HIV/AIDS were found that there were no statistically significance with alcohol use with sex.