



CHAPTER IV

RESULTS

The present research aimed at investigating condom use practice and determining factors related to condom used among DCSWs at the Cambodian-Thai border in Osmach commune, Oddar Meanchey Province, Cambodia. The population consisted of 62 DCSWs. This chapter presents the finding of the data analysis and is divided into two major sections: quantitative and qualitative data analysis. The quantitative data analysis reports on the survey outcomes and is divided into (i) univariate analysis, (ii) bivariate analysis, and (iii) multivariable analysis of independent variables and condom use. The qualitative data analysis deals with the outcomes from the in-depth interviews and focus group discussion on personal experience and opinions about condom use among DCSWs.

4.1 Quantitative Data Analysis

4.1.1 Univariate Analysis

The univariate analysis includes the distribution of frequencies and percentage of the factors below:

4.1.1.1 Predisposing factors related to

- (i) Demographic characteristics of DCSWs
- (ii) Having steady partner/sweetheart
- (iii) Having dependent people
- (iv) Duration in the profession
- (v) Past history of STDs
- (vi) Knowledge regarding STD and HIV/AIDS
- (vii) Attitudes regarding STD and HIV/AIDS

4.1.1.2 Reinforcing factors related to

- (i) Clients' characteristics
- (ii) Brothel owner/manager pimps
- (iii) Peers

4.1.1.3 Enabling factors related to

- (i) Availability of condoms
- (ii) Availability of health services
- (iii) Negotiation skills of DCSWs

4.1.1.4 Condom use among DCSWs

4.1.1.1 Predisposing factors related to

(i) Demographic characteristics (i.e age of DCSWs, nationality, marital status, education, and income)

Table 4 presents the demographic characteristics of DCSWs who work at the Cambodian-Thai border in Osmach commune. All DCSWs were female and live in the brothels. All DCSWs were recruited from 13 brothels in Osmach.

Age of DCSWs:

The majority of DCSWs (62.9%) were between 20 and 25 years old, followed by those younger than 20 years, between 26-30 years, and more than 30 years (24.2%, 11.3 % and 1.6% respectively). The mean age of the respondents was 22.02 years (Std. Deviation = 3.12, range 18-31).

Nationality:

Out of 62 DCSWs interviewed, 79% (49) stated that they were Cambodian, and 21% (13) were Vietnamese. The Cambodian came from 19 (of 23) provinces but primarily from Battambang, Kandal, and Kampong Cham Provinces. The Vietnamese came from Chau Doc, Kien Giang and Taxninh Provinces of South Vietnam. Two DCSWs were born in Site B refugee camp in the Burirum Province of Thailand.

Marital status:

Half of the study population (51.6%) was single and about one quarter (25.8%) was married. Only 12.9% and 9.7% were widowed or divorced respectively

Education:

Half of the population (56.5%) had never attended school at all. 17.7% attended primary school (maximum grade reached was 1-4), 12.9% attended primary school (maximum grade reached 5-6), 8.1% attended secondary school (maximum grade 7-9), and 4.8% reached grade 10-12. Literacy rates were similar with half of the DCSWs (50%) not being able to read and write. About 40% of them could read and write and the remaining 10% could read only i.e. not write.

Income:

The majority of DCSWs (67.7%) stated that they have received the payment from brothel owner monthly whereas 22.6% of them received the payment daily and 9.7% received occasionally. About 79% of the population had sufficient income for daily expenses, whereas the remainder (21%) had insufficient income for daily expenses. 54.8% of respondent stated that they have saving money, another half of them (45.2%) reported that they have no saving money. Among 34 respondents who those have saving money, 55.9% of them have saving money less than 5000 Baht. 26.5% have saving money equal or more than 5000 baht but less than 20,000 Baht. 17.6% of them have saving money more than or equal 20,000 Baht. The mean of saving money was 7779.41 Baht (Std. deviation=8577.80, Minimum=500 Baht, Maximum=30,000 Baht).

Debt:

44% of DCSWs replied that they have a debt to pay but 56% had no debt to pay. Among those who have debt to pay, 59.3% of them have debt to pay less than 5,000 baht. 22.2% whereas 22.2% have debt to pay equal or more than 5,000 Baht but less than 20,000 Baht, and 18.5% have debt equal or more than 20,000 Baht. The mean of debt was 6796.43 Baht (Std. deviation= 6837.44, Minimum=150 Baht, Maximum=20,000 Baht)

Reason to become sex worker:

The majority of respondents (91.9%) replied that they have become sex worker voluntary whereas another 9.1% were involuntary to become sex worker.

Feeling about the career:

43.5% of respondents stated that they were satisfied with the career. Another 43.5% were neutral and only 13.0 % were dissatisfied with the career.

Among 27 of respondents who were satisfied with the career, 63% of them were satisfied because they could earn money. 22.2% were satisfied because of good living condition, and 14.8% were satisfied with the career because of easy job to do.

Among 27 of respondents who felt neutral with the career, 70.4% of them stated that because of no choice then they have to work in this career. 18.5% of them stated that because of good living condition, and 11.1% felt neutral because they accepted the career.

Among those who were dissatisfied with this career, 5 of 8 stated that they felt boring and have no future when they work in this career. Another 3 of 8 stated that they were dissatisfied with this career but they have to work because they were poor and still had debt to pay.

Experience of abortion since has been working in this profession

The majority of respondents (83.9%) did not experience an abortion since working in this profession whereas 16.1% had experienced an abortion.

Table 4: Frequency and Percentage of Predisposing factors (Demographic Characteristics) of the Study Population

Demographic Characteristics	Frequency (N=62)	Percentage
<i>Age of DCSWs</i>		
Less than 20 yrs	15	24.2
Between 20-25 yrs	39	62.9
Between 26-30 yrs	7	11.3
More than 30 yrs	1	1.6
Total	62	100
Mean 22.02 years. Std. deviation= 3.12, Range 18-31		
<i>Nationality</i>		
Cambodian	49	79.0
Vietnamese	13	21.0
Total	62	100
<i>Marital Status</i>		
Single	32	51.6
Married	16	25.8
Widow	8	12.9
Divorce	6	9.7
Total	62	100
<i>Steady partner/sweetheart</i>		
No steady partner/sweetheart	33	53.2
Only one steady partner/sweetheart	26	41.9
More than one partner or sweetheart	3	4.8
Total	62	100

Table 4 (Continued): Frequency and Percentage of Predisposing factors (Demographic Characteristics) of the Study Population

Demographic Characteristics	Frequency (N=62)	Percentage
<i>Education</i>		
Never attended school	35	56.5
Primary school (Grade 1-4)	11	17.7
Primary school (Grade 5-6)	8	12.9
Secondary school (Grade 7-9)	5	8.1
Secondary school (Grade 10-12)	3	4.8
Total	62	100
<i>Ability of reading and writing Cambodian language</i>		
Cannot read and write	31	50.0
Can read only	6	9.7
Can read and write	25	40.3
Total	62	100
<i>Payment from Brothel Owner</i>		
Monthly	42	67.7
Daily	14	22.6
Occasionally	6	9.7
Total	62	100
<i>Income</i>		
Sufficient for daily expense	49	79.0
Insufficient for daily expense	13	21.0
Total	62	100
<i>Saving money</i>		
Yes	34	54.8
No	28	45.2
Total	62	100

Table 4 (Continued): Frequency and Percentage of Predisposing factors (Demographic Characteristics) of the Study Population

Demographic Characteristics	Frequency (N=62)	Percentage
<i>How much of saving money in approximately?</i>		
<5000 Baht	19	55.9
≥5000 Baht < 20000 Baht	9	26.5
≥ 20000 Baht	6	17.6
Mean= 7779.41, Std. deviation=8577.80, Min=500, Max=30,000		
<i>Debt to pay</i>		
No	35	56.5
Yes	27	43.5
Total	62	100
<i>How much of debt in approximately?</i>		
<5000 Baht	16	59.3
≥5000 Baht < 20000 Baht	6	22.2
≥ 20000 Baht	5	18.5
Mean=6796.43, Std. deviation= 6837.44, Min=150, Max=20,000		
<i>Reason to become sex worker</i>		
Voluntary	57	91.9
Involuntary	5	9.1
Total	62	100
<i>Feeling about the career</i>		
Satisfy	27	43.5
Neutral	27	43.5
Dissatisfy	8	13.0
Total	62	100

Table 4 (Continued): Frequency and Percentage of Predisposing factors (Demographic Characteristics) of the Study Population

Demographic Characteristics	Frequency (N=62)	Percentage
<i>Why satisfy?</i>		
Earn money	17	63.0
Good living condition	6	22.2
Easy job	4	14.8
Total	27	100
<i>Why neutral?</i>		
No choice	19	70.4
Good living condition	5	18.5
Accept the career	3	11.1
Total	27	100
<i>Why dissatisfy?</i>		
Bored and no future	5	62.5
Poor and had debt to pay	3	37.5
Total	8	100
<i>Experience of abortion since working in this profession</i>		
Yes	10	16.1
No	52	83.9
Total	62	100

(ii) Steady partner or sweetheart:

Among the respondents, 53.2% of them had no steady partner/sweetheart, 41.9% had one steady partner/sweetheart. Only one of them (4.8%) of them had more than steady partner/sweetheart (Table 5).

Table 5: Frequency and Percentage of the Study Population as categorized according to Having steady partner/sweetheart

Predisposing factor	Frequency (N=62)	Percentage
Having steady partner/sweetheart		
No steady partner/sweetheart	33	53.2
Only one steady partner/sweetheart	26	41.9
More than one partner or sweetheart	3	4.8
Total	62	100

(iii) Dependent people:

Overall, nearly one-third of DCSWs (30.6%) did not have dependent people for them to support, another one-third (33.9%) reported that they had 3-5 dependent people, and 25.8% had 1-2 people who they were responsible for. Only 9.7% had more than 5 people under their responsibility (Table 6).

Table 6: Frequency and Percentage of the Study Population as categorized according to Having dependent people

Predisposing factor	Frequency (N=62)	Percentage
Having dependent people		
None	19	30.6
1-2 people	16	25.8
3-5 people	21	33.9
More than 5 people	6	9.7
Total	62	100

(iv) Duration in the profession

The results in Table 7 show the duration in this profession. 53.2 % had worked for less than one year as a sex worker, 32.3 % had worked for between one to three years, and 14.5 % had worked in the sex industry for more than three years. The mean duration in the profession was 14.47 months (Std. Deviation= 16.32, range 1-72 months).

Table 7: Frequency and Percentage of the Study Population as categorized according to duration in the profession

Predisposing factor	Frequency (N=62)	Percentage
Duration in the profession (years)		
<1 year	33	53.2
≥1 year <3	20	32.3
≥ 3 years	9	14.5
Total	62	100
Mean =14.47 months, Std. deviation= 16.32 m, Range 1-72 m		

(v) Past history of STDs

Regarding past history of STDs, the majority of DCSWs (72.6%) stated that they had no experience of STDs whereas 27.4% of DCSWs stated that they had experienced an STD in the past (Table 8).

Table 8: Frequency and Percentage of the Study Population as categorized according to Past history of STDs

Predisposing factor	Frequency (N=62)	Percentage
Past history of STDs		
Never experienced	45	72.6
Experienced	17	27.4
Total	62	100

(vi) Knowledge regarding STD and HIV/AIDS

Regarding knowledge about STD and HIV/AIDS, 100 % of respondent stated that they have heard about STD and HIV/AIDS. Concerning of sources of information about STD and HIV/AIDS that they have heard, the majority of the respondent (95.1%) were heard from Health centre or NGO staff. They have received information about STD and HIV/AIDS by reading the leaflet or poster as well as by watching television and listening radio (25.8% and 25.8% respectively). 19.3% of respondents were received information from friend, and 8% were received information from other people. There was only one respondent (1.6%) was received information from reading newspaper and magazine.

The questionnaire which elicited knowledge regarding STD and HIV/AIDS consisted of 15 items covering the topics of contracting and symptom of STD and HIV/AIDS as well as the prevention of STD and HIV/AIDS. Each item required a response of 'yes' or 'no'. If the answer was correct, the score was equal to 1; if the answer was incorrect, the score was equal to 0. The total scores would then be calculated into a percentage which was then divided into two levels: $\geq 80\%$ and Less than 80%.

When categorizing the population according to their knowledge of STD and HIV/AIDS, it was found that 59.7% had knowledge greater than or equal to 80%, while 40.3% had less than 80% knowledge about STD and HIV/AIDS. The maximum score attained was 15 and the minimum score was 5, with the mean score of 12.27 and the standard deviation of 2.36, as show in Table 9.

Table 9: Frequency and percentage of the Study Population as categorized according to Knowledge regarding STD and HIV/AIDS

Knowledge on STD and HIV/AIDS	Frequency (N=62)	Percentage
Heard of STD and HIV/AIDS		
Yes	62	100
Sources of information that you have heard (Multiple choice)		
Health Centre or NGO staff	59	95.1
Leaflet or poster	16	25.8
Television, radio	16	25.8
Friend	12	19.3
Other people	5	8.0
Newspaper, magazine	1	1.6
Total Knowledge		
≥ 80%	37	59.7
Less than 80%	25	40.3
Total	62	100
Mean= 12.27,Std.deviation=2.36, Range 5-15		

(vii) Attitude regarding STD and HIV/AIDS

The questionnaire eliciting attitudes toward STD and HIV/AIDS used the Likert-scale with 4 positive and negative items. As for the positive items, ‘agree’ got the score of 2; ‘ disagree’ got 1 and vice versa for the negative items.

The finding shows that most of the respondents were afraid of getting an STD and/or HIV/AIDS, and felt pity for the HIV infected person (100% and 96.8 % respectively). Around 83% of them disagreed to use a condom with their steady partner/sweetheart, as it would indicate that they did not love them. 98.4% of DCSWs disagreed not to use condom from time to time if client asked (Table 10).

Table 10: Frequency and percentage of the Study Population as categorized according to Attitude regarding STD and HIV/AIDS.

Attitude regarding STD and HIV/AIDS.	Frequency (N=62)	Percentage
You are afraid of getting STD and HIV/AIDS		
Agree	62	100
Disagree	0	0
You feel pity for the HIV infected person		
Agree	60	96.8
Disagree	2	3.2
You feel satisfied not to use condom with your husband/steady partner/sweetheart because you can show that you love and trust them not to transmit HIV.		
Agree	11	17.7
Disagree	51	82.3
You think that you should not use condom to prevent HIV from time to time if clients ask you.		
Agree	1	1.6
Disagree	61	98.4

4.1.1.2 Reinforcing factors related to

(i) Clients' characteristics

Number of Clients within last week

Among the population, 48.4% stated they had less than 10 clients within the last week, 37.1% had between 10-20 clients within the last week, and 14.5% had more than 20 clients within last week.

Age of clients

Regarding the age of clients, the majority (81%) were adults with the age given as between 20-50 years old. About 19% of respondents mentioned that clients younger than 20 years old did visit them. None of the DCSWs stated that the majority of their clients were senior people (older than 50 years).

Nationality of clients

Regarding the nationality of clients, 72.6% of DCSWs replied that the majority of clients who visited them were Cambodian whereas 27.4% of them replied that a majority of clients were non-Cambodian (Table 11).

Table 11: Frequency and percentage of the Study Population as categorized according to reinforcing factors of clients characteristics

Clients Characteristics	Frequency (N=62)	Percentage
Number of Clients within last week		
More then 20	9	14.5
Between 10-20	23	37.1
Less than 10	30	48.4
Total	62	100
Mean= 11.34, Median=11.50, Std. Deviation=8.20, Min=0, Max=40		
Age of clients		
Young (Younger than 25 yrs)	12	19.4
Adult (Between 25-50 yrs)	50	80.6
Senior (Older than 50 years)	0	0
Total	62	100
Nationality of clients		
Cambodian	45	72.6
Non- Cambodian	17	27.4
Total	62	100

(ii) Brothel owner/manager/pimps

In terms of the brothel owner/manager/pimps forcing DCSWs not to use condoms with clients, 100% of DCSWs stated that they have never been forced by a brothel owner/manager/pimps to have sex with clients without using a condom (Table 12).

Table 12: Frequency and percentage of the Study Population as categorized according to reinforcing factors of brothel owner/manager/pimps.

Brothel owner/manager/pimps	Frequency (N=62)	Percentage
Never been forced	62	100
Ever been forced	0	0
Total	62	100

(iii) Peers

A person that DCSWs chose to consult or discuss with when they had STD problems was also an important factor for DCSWs to use safe sex practices by using condoms. The majority (64.5%) consulted or discussed with brothel owner/managers when they had an STD problem, followed by peers (62.9%), and medical staff (32.3%). Only 3.2% of the population answered that they consulted or discussed with their steady partners/sweetheart and 1.6% with a relative (Table 13).

Table 13: Frequency and percentage of the Study Population as categorized according to reinforcing factors of peers

Person that DCSWs consulted or discussed with when they had any STD problems. (Multiple choices)	Frequency (N=62)	Percentage
Brothel owner/manager	40	64.5
Peers	39	62.9
Medical staff	20	32.3
Steady partner/sweetheart	2	3.2
Relative	1	1.6

4.1.1.3 Enabling factors related to

(i) Availability of condoms

Regarding the availability of condoms for DCSWs, most of them (100%) stated that condoms were always available for them to use.

When condoms were unavailable, 74.2% of DCSWs had asked the brothel owner to buy for them whereas 16.1% of them bought from shop/pharmacy by themselves. Only 8.1% of respondents answered that they refused to have sex at that time, and 4.8% borrowed condoms from a peer. There was only 1 respondent who answered that a client had gone out to buy a condom, and only 1 DCSW replied that they decided to have sex without using a condom (Table 14).

Table 14: Frequency and percentage of the Study Population as categorized according to enabling factors of Availability of condoms

Enabling factors	Frequency (N=62)	Percentage
Availability of condoms		
Always available	62	100
Available sometimes	0	0
Total	62	100
What do you do if they run out of condoms? (Multiple choice)		
Tell brothel owner to buy	46	74.2
Buy from shop/pharmacy by themselves	10	16.1
Refuse to have sex	5	8.1
Borrow from peer	3	4.8
Client goes to buy	1	1.6
Have sex with no condom	1	1.6

(ii) Availability of health services

In terms of availability of health services, those who have experienced an STD (17 out of 45) stated that they had sought treatment from various places both within and outside Osmach town. For health services within Osmach town, 4 of those who have experienced an STD went to Osmach Health Center, another 4 bought drugs from a shop/pharmacy, 3 and 2 stated that they had self care or went to a private clinic respectively. For STD treatment services sought outside Osmach town, 2 visited Oddar Meanchey Provincial Hospital, 4 received treatment from places outside the province, and 1 sought treatment in Thailand (Table 15).

Table 15: Frequency and percentage of the Study Population as categorized according to reinforcing factors of Availability of health services

Enabling factors	Frequency (N=62)	Percentage
Experienced an STD		
No experience	45	72.6
Experienced	17	27.4
Total	62	100
Those with experience of an STD, place of treatment? (Multiple choice)		
Within Osmach town		
Osmach Health Center	4	20.0
Purchased drug from shop/pharmacy	4	20.0
Self care	3	15.0
Private clinic	2	10.0
Outside Osmach town		
Provincial hospital	2	10.0
Outside the province (in Cambodia)	4	20.0
Thailand	1	5.0

(iii) Negotiation skills of DCSWs

In terms of the negotiation skills of DCSWs to persuade clients to use condoms, more than half of the respondents answered that they always have success in persuading clients to use condoms (54.8%), 33.5% of DCSWs said that they sometimes could not convince clients to use condoms and only 9.7% stated that they have never had success in persuading clients to use condoms (Table 16).

Table 16: Frequency and percentage of the Study Population as categorized according to reinforcing factors of Negotiation skills of DCSWs

Negotiation skills of DCSWs to persuade clients	Frequency (N=62)	Percentage
Always Successful	34	54.8
Success sometimes	22	35.5
Never have Success	6	9.7
Total	62	100

4.1.1.4 Condom use among DCSWs

In terms of condom use, Table 17 shows the condom use among DCSWs with clients and steady partners/sweethearts.

The majority of respondents (96.8%) replied that they always used condoms with clients whereas only 2 respondents (3.2 %) mentioned that they have not used condoms with clients all the time.

29 of 62 DCSWs had a steady partner/sweetheart with 51.8 % of those answering that they used condoms every time when they had sex with their steady partner/sweetheart whereas 48.2% answered that they used condoms from time to time only.

Regarding condom use with clients and steady partners/sweethearts among DCSWs, the majority of respondents (75.8%) stated that they used a condom when they

had sex every time either with clients or steady partners/sweethearts whereas 24.2 % of DCSWs answered that they did not use a condom every time with clients or steady partners/sweethearts when they had sex (Table 17).

Table 17: Frequency and percentage of Condom use among DCSWs

Condom use	Frequency (N=62)	Percentage
With clients		
Use every time	60	96.8
Not used every time	2	3.2
Total	62	100
With steady partners/sweethearts		
Use every time	15	51.8
Not used every time	14	48.2
Total	29	100
Condom use with clients and steady partners/sweethearts		
Use every time	47	75.8
Not used every time	15	24.2
Total	62	100

4.1.2 Bivariate Analysis

The association between condom use among DCSWs and independent variables (Predisposing, Reinforcing and Enabling factors), were tested by using Chi-square, Fisher's exact test. The level of significance for the association was set at $p = .05$.

Age of DCSWs, marital status, steady partner/sweetheart, education, duration in the profession, number of clients within last week and negotiation skills were regrouped in order to facilitate the Chi-square test by avoiding cell values below 5.

The overall condom use rate which DCSWs used a condom with clients and steady partner/sweetheart was taken into the Chi-square test.

4.1.2.1 Bivariate Analysis of predisposing factors and condom use

The predisposing factors investigated in this study were Demographic characteristics. The Chi-square test was used, and the results indicated that predisposing factors which were significantly associated with condom use were steady partners/sweethearts and experience of abortion since working in the profession ($p < .001$ and $.045$ respectively) (Table 18).

Table 18: Association between predisposing factors and condom use

Predisposing factors	Condom use		χ^2	p-value
	Not used every time n = 15	Used every time n = 47		
Demographic characteristics				
<i>Age of DCSWs</i>				
<21 years old	6(40.0)	24(51.1)	.556	.455
≥21 years old	9(60.0)	23(48.9)		
<i>Nationality of DCSWs</i>				
Cambodian	14(93.3)	35(74.5)	.159 ^a	
Vietnamese	1(6.7)	12(25.5)		
<i>Marital Status</i>				
Single	6(40.0)	26(55.3)	1.069	.301
Married/ever married	9(60.0)	21(44.7)		
<i>Steady partner/sweethearts</i>				
Don't have steady partner/sweetheart	1(6.7)	32(68.1)	17.229	< .001
Have steady partner/sweetheart	14(93.3)	15(31.9)		
<i>Experience of abortion since working in the profession</i>				
No	10(66.7)	42(89.4)	.045 ^a	
Yes	5(33.3)	5 (10.6)		
<i>Education</i>				
Never attended school	6(40.0)	29(61.7)	2.178	.140
Ever attended school	9(60.0)	18(38.3)		

^a is Fisher's Exact test.

Table 18(Continued): Association between predisposing factors and condom use

Predisposing factors	Condom use		χ^2	p-value
	Not used	Used		
	every time n =15	every time n = 47		
income				
Sufficient for daily expenses	3(20.0)	10(21.3)		.615 ^a
Insufficient for daily expense	12(80.0)	37(78.7)		
Debts to pay				
None	8(53.3)	27(57.4)	.078	.780
Yes	7(46.7)	20(42.6)		
Dependent people				
None	3(20.0)	16(34.0)		.356 ^a
Yes	12(80.0)	31(66.0)		
Duration in the profession (years)				
≤1 year	12(80.0)	31(66.0)		.356 ^a
>1 year	3(20.0)	16(43.0)		
Past history of STDs				
Never experienced	9(60.0)	36(76.6)		.318 ^a
Experienced	6(40.0)	11(23.4)		
Reason to become sex worker				
Voluntary	15(100.0)	42(89.4)		.323 ^a
Involuntary	0	5(10.6)		
Feeling about the career				
Satisfy	13(86.7)	41(87.2)		1.000 ^a
Dissatisfy	2(13.3)	6(12.8)		
Knowledge regarding STD and HIV/AIDS				
Less than 80%	4(26.7)	21(44.7)	1.533	.216
≥ 80%	11(73.3)	26(55.3)		

^a is Fisher's Exact test.

4.1.2.2 Bivariate Analysis of reinforcing factors and condom use

Table 19 shows that the reinforcing factors investigated in this study were only client characteristics including number of clients within the last week, age and nationality of clients. There was a significant association between age of clients and condom use among DCSWs ($p = .030$). There were no associations between the number of clients within the last week and nationality of clients to condom use among DCSWs.

Table 19: Association between reinforcing factors and condom use

Reinforcing factors	Condom use		χ^2	p-value
	Not used every time n = 15	Used every time N = 47		
Client characteristics				
<i>Number of Clients within last week</i>				
<10 clients	6(40.0)	6(12.8)		.054 ^a
≥ 10 clients	9(60.0)	41(87.2)		
<i>Age of clients</i>				
Young (Younger than 25 yrs)	6(40.0)	6(12.8)		.030 ^a
Adult (Between 25-50 yrs)	9(60.0)	41(87.2)		
<i>Nationality of clients</i>				
None Cambodian	2(13.3)	15(31.9)		.200 ^a
Cambodian	13(86.7)	32(68.1)		

^a is Fisher's Exact test

4.1.2.3 Bivariate Analysis of enabling factors and condom use

Table 20 shows that the enabling factor investigated in this study was regarding the negotiation skills to persuade clients to wear a condom. There was no association between negotiation skills and condom use among DCSWs.

Table 20: Association between enabling factor and condom use

Enabling factor	Condom use		χ^2	p-value
	Not used every	Used every		
	time n=15	time n =47		
Negotiation skills to persuade client to wear condom				
Not successful every time	8(53.3)	20(42.6)	.534	.465
Success every time	7(46.7)	27(57.4)		

4.1.3 Multivariable Analysis using Binary Logistic Regression Model

The purpose of using multivariable analysis was to find out whether there was a statistically significant relationship between independent and dependent variables, controlling other independent variables. To use the binary logistic regression model, the independent variables were changed to binary or dummy variables, while dependent variable was dichotomous outcomes. The results of binary logistic regression are presented with Expected Beta values or odds ratio. The odds ratio was interpreted as the proportion change in the odds of the events occurring for the unit change in the value of the predictor variable. The odds ratio for the reference category is 1 by definition. The results are shown with Odds Ratios with the 95% confidence Intervals and p-value. Condom use was entered into the Binary Logistic regression as a dependent variable, the statistical association was determined as p-value less than .05. Ever attended school, having steady partners/sweetheart, young age of DCSWs <21 years, and old age of clients between 25-50 years old were selected as independent variables for multivariate analysis.

Table 21 shows that the result of multivariate analysis, having a steady partner/sweetheart was significantly associated with condom use ($p = .010$) (OR=.191, 95%CI: 0.054 to 0.677), and Older age of clients between 25-50 years old ($p= .039$, OR= 5.583, 95%CI: 1.090 to 28.597). DCSWs that had a steady partner/sweetheart were less likely to use a condom than those who did not have a steady partner/sweetheart (OR= .191). DCSWs who had clients age between 25-50 years old more likely to use a condom than those who had other group age of clients (OR=5.583).

Table 21: Relationship among Factors and Condom Use

Factors	Model		Odds Ratio	95% CI for OR	
	Coefficient (B)	p -value		Lower	Upper
Ever attended school	-1.352	.077	5.583	.054	.677
Having steady partners/sweethearts	-1.655	.010	.191	.054	.677
Young DCSWs age < 21 years	1.084	.158	2.958	.657	13.326
Old clients age between 25-50 years	1.720	.039	5.583	1.090	28.597

'B' is the modeled coefficient or regression coefficient.

4.2 Qualitative Data Analysis

4.2.1 Introduction

The purpose of the in-depth interviews and focus group discussion were to explore and describe the opinions of DCSWs, brothel owners and health center staff about condom use among DCSWs who work in Osmach

To protect the confidentially, the names of respondents were not recorded with only their opinion and experiences noted. A log book and code- book were maintained and tabulation was used to facilitate data analysis. This report makes use of a set of questions in exploring the various aspects related to condom use among DCSWs in Osmach town.

4.2.2 Findings

4.2.2.1 Focus group discussion

The Focus Group Discussion (FGD) was held at the AIDS Border office where there is a quiet atmosphere. Eight DCSWs who had more than 3 years work experience participated. The objectives of the study were presented to the participants before the discussion began. Participants were aged between 19 and 28 years of age with an average work experience of 4 years. There were two Vietnamese and six Cambodian. The findings of the FGD are shown below.

1. What is the experience of condom use among DCSWs?

The conclusion of the discussion has been divided into experience of condom use (i) prior to having sex and (ii) during sex

(i) Before having sex: the respondents mentioned that they used condoms with clients all the time. Some clients asked to use condoms provided by the brothel whereas other clients took their own condoms with them. The respondents did not want to use condoms which clients brought with them because they did not trust the quality of those condoms. DCSWs refused to use them and instead tried to convince clients to use condoms provided by the brothel. When clients refused to use the brothel's condoms, the respondents refused to have sex with that particular client.

Girl A: "I don't want to use condoms which clients bring along with them. I don't know the quality of that condom. I don't know where they get them. Thai clients usually brought Thai condoms along with them. I thought they might prepare for themselves in case we did not have condoms".

Girl D: "I saw once the condom "Srom-Khlar" (tiger condom-researcher). It was really rough. The man liked them because they felt good but it really hurt. It had no lubricant. I did not like it. I had to be careful."

Girl H: "Some clients refused to use my condoms so I refused to sleep with him. Later on, he chose another girl. I don't know what kind of condoms they used."

(ii) During sex: Some respondents mentioned that some clients wore two to three condoms at the same time because they wanted to be well protected whereas some clients tried to cheat on them during sex. Despite agreeing to use a condom some clients took condoms out or tried to break the tip of the condom by using their nails. Some respondents shared the experience that they found a condom broke during sex.

Girl A: "I knew when the client took the condom out because I felt warm in my vagina. I pushed that client away and stopped having sex with him. I told my brothel owner that the client tried to cheat on me. My brothel owner did not say anything."

Girl E: "I had an experience with a broken condom. That sex act was really long. I did not know but my client told me that the condom was broken. He wore the new one instead. I did not know what to do."

Girl D: "When we had sex, I had to hold the client's hands until we finished because I did not trust him. They might take the condom out during sex."

2. What is your opinion about condom use?

The respondents mentioned that they wanted to use only one brand of condom named "Number One". The "Number One" was a brand of condom that PSI and CARE was marketing for 100% condom use throughout Cambodia. The participants trusted the quality of Number One more than other brands. Two of the respondents had previously used female condoms when they worked in Phnom Penh. They told other girls in the group that it was really useful to use a female condom. They used condoms because they wanted to protect themselves against disease and did not want to get pregnant. If they were pregnant, they could lose their job.

Girl F: "I only want to use "Number One" condoms because it has a lubricant. I felt hurt and hot when I used a different one. I use them because an NGO introduced them to us and I have seen many advertisements about "Number One"."

Girl A: "I use condoms because I don't want to get HIV and I don't want to be pregnant. I think, to be pregnant, we can terminate the pregnancy but if I get disease, I cannot do anything and will have to stop working. I know my house owner is not happy if we get pregnant because it brings bad luck to her business."

Girl D: "I used to wear a female condom when I was working in Phnom Penh. We could wear female condoms for almost eight hours,; there was no need to take it out. Clients did not know that we were wearing condoms. We could ask for more money from clients because they did not know. We got more money. I was really happy and clients were happy as well. In Osmach, there is no female condom. It costs 50 Bath per piece. It is very expensive. If it was available here, I would buy it."

In addition to the above, it was noted during visits to the brothels that "Number One" condoms were provided in every brothel and were kept in an accessible place. "Number One" condoms were also available in the market. The researcher also observed condoms in brothel guest rooms, in toilets in two brothels and in some brothels, used condoms in the rubbish bin. Identification of the brand and the number used was not possible.

3. The difficulties of using condoms.

The major difficulty experienced by those in the group was dealing with clients who did not want to wear condoms, particularly in young men. The majority of young men were casino workers. Another group which was difficult was drunken clients. DCSWs usually refused to have sex if clients refused to use condoms. In case clients gave up, they would find a new sex worker in the same or different brothel.

Girl H: "I don't like to sleep with drunken clients because it takes time for the ejaculation. I hurt. They also are impolite to me and cause condom breakages. Some of them also do not want to wear condoms. It is very difficult to convince them."

Girl A: "Those young people particularly from casinos did not want to use condoms. I don't understand why they aren't scared. They knew that they might get STD from sex workers but they still wanted to have sex without a condom."

4. Access to STD clinic

Since Malteser (NGO) stopped their stationary and mobile STD clinic in 2004, DCSWs were required to go the government health centre. This service is unsatisfactory as HC staff are often absent and examination of the vagina was often avoided. Sometimes a male staff member treated them so they sought treatment from pharmacies and private clinics instead which is more expensive. The owner often pays for them with the DCSW paying them back at a later date. Some brothel owners provide drugs for the STD treatment.

Girl F: "My brothel owner sent us to clean the vagina (vaginal exam-researcher) at the health center but they (HC staff) did not clean my vagina. I don't want to go again. It wasted my time."

Girl D: "My brothel owner is smart. She knows how to treat STD. She prescribed the treatment for me. I bought drugs from the pharmacy. It is cheaper than visiting the doctor at a private clinic."

Girl C: "I don't want to go to the health center. I am shy. Sometimes there is only a man at the health center."

5. Peers

Regarding STDs, the group did not want to tell their friends because they did not want friends to know about their health particularly an STD. They were shy to tell their friends and friends could blame them.

Girl A: "I don't want my friends to know if I have an STD. I am too shy to tell them. I told my brothel owner. They can help us."

Girl D: "Some friends may feel pity for us but some may blame us if we have an STD. I don't want to tell friends."

4.2.2.2 In-depth interview

- The in-depth interviews were held at the working place of respondents. Two new DCSWs, one new brothel owner, three old brothel owners, and Health center staff (medical assistant and midwife) were interviewed.

- Two new DCSWs had worked for three and six months. DCSWs had been permitted by brothel owners for an interview.

- One new brothel owner was a man 26 years old and had operated the brothel for three months.

- Three old brothel owners were (A) a woman 39 years old with four years experience in operating a brothel, (B) a man 42 years old with three and half years experience of operating a brothel, and (C) a woman 46 years old with four years experience operating a brothel.

The objectives of the study were presented to respondents. Open-ended questions were applied in the interview. The findings of in depth interviews are shown below.

4.2.2.2.1 New DCSWs:

The respondent learnt how to wear a condom from a friend who came from the same village and from an NGO worker who visits the brothel once a month. She had experienced a broken condom but she did not do anything except tell her friend.

"I used condoms every time. I don't want to be sick. I am scared of HIV/AIDS. I want to have money. I want to send money home.

I came here because of her (friend). I will talk with her. She usually reminded me to use condoms and be careful about clients.

My brothel owner is really nice. She takes care of me. She always reminds me to use condoms."

4.2.2.2.2 Health center staff

The STD clinic in the health center was combined with the general clinic. The STD clinic rarely had STD patients with only 10-15 STD cases recorded per month. The majority of patients were housewives with only 2 or 3 DCSWs using the STD clinic of the health center each month. The medical assistant usually treated the STD patients. There have been no visits from health centre staff to the brothels for four months since there has been no incentive (from NGO) for health promotion in brothels.

STD clinic:

Medical Assistant: "I don't know why sex workers did not come to use our service. They can get free treatment here. The national protocol does not allow us to take the money from sex workers."

Midwife: "I am very busy. Sometimes I cannot check the vagina of women but we provide the treatment according to the national protocol. We keep that guideline in the consultation room so the medic and I can use it easily."

IEC materials

Medical Assistant: "We have some IEC materials. It is not enough because we have to provide to military and police. I know that ATC (NGO- researcher) has many posters and leaflets to provide to brothels."

Midwife: "I used to go to each brothel to give the health education about condom use. I stopped going there about four months ago because I have been really busy."

4.2.2.2.3 Brothel owners:

1. What is the experiences of condom use among DCSWs?:

All respondents mentioned that they usually emphasized to their workers to use condoms and they helped to explain to clients when there were any problems. They could not check whether girls used condoms or not. Brothel owners only made sure that condoms were always available in their house. They have never forced girls not to use condoms.

Old brothel owner 2: "My house uses condoms a hundred percent. I know my girls listened to me particularly Vietnamese girls. They are concerned about their health. I also can tell my clients. If clients don't want to use condoms, I will let them go. I am no afraid of them."

Old brothel owner 1: "I cannot say that my girls use condoms a hundred percent. I did not know what the agreement between my girl and client was particularly when they were inside the room. I saw my girls terminate the pregnancy inside my house. I did not know what happened. I know that I only have condoms available for them."

New brothel owner: "I always reminded them to use condoms but if they have a boyfriend, I don't know that they will use a condom or not."

2. What is your opinion about condom use?

All respondents had a positive opinion to condom use but for the practice, it was out of their control. They usually reminded their girls to use condoms. They did not want girls to have diseases or get pregnant because then they could not work. They had to stop working or leave home if they had HIV or did not want to terminate the pregnancy.

Old brothel owner 2: "I believe that the Vietnamese girls always use condoms. They don't want to get sick and I don't want them to get sick either. If they are sick, they cannot work. I have to feed them every day. If they have HIV, I will find the way to send them home."

Old brothel owner 3: "I want them to look after themselves (use condoms). If they are sick, they cannot work. I have to pay for their treatment. It is very expensive. If they are sick, clients are not happy. It is not good for our business and reputation."

New brothel owner: "I always have condoms available in my house. It is not expensive. I got some from an NGO but it is not enough so I bought more from the market. It costs one dollar per box (100 pieces)."

Old brothel owner 2: "Sometimes when my girls were really sick, I called a doctor from a private clinic to come to my place. It was very expensive. One injection cost one hundred baht but it was convenient for us because I can pay them later."

3. The difficulties of using condoms.

All respondents replied that they did not have any major difficulties. They faced only some clients who did not want to use condoms. Brothel owners usually supported girls if clients refused to use condoms.

Old brothel owner 1: "I don't mind if I lost one or two clients. I don't want my girls to be sick because it is not worth to have an STD or HIV. I know I have to pay more for the treatment if my girls are sick."

Old brothel owner 3: "Since I increased the price from 50 to 100 Baht per sex contact I have good clients. They know how to protect themselves. I have less trouble with clients."

New brothel owner: "I have no problems about condom use. I let my girls go free: they can go wherever they want to go. It is different to the house opposite where they always control their girls. I saw they used electric shock on the girls. I don't know why they do so."

4. Access to STD clinic

All respondents mentioned that they were dissatisfied with the service of the health center and instead chose to use the STD service from pharmacies or private clinics. The cost of treatment was high. Normally, they paid for the treatment later on, and they deduct it from girls' services."

New brothel owner: "My girls used to go to the health center once. They were not happy because the service was not good."

Old Brothel owner 3: "Now, it is very difficult. My girls have nowhere to go to check their vagina. I saw sometimes they cleaned their vagina by themselves. They use "soda" (sparkling water-researcher) to wash their vagina. I don't know if it helps or not."

Old brothel owner3: "I have to pay everything for my girls. When they are sick, I have to look after them. I pay for food, electricity, water and housing. If they have a serious illness, I will lose money."

4.2.3 Summary

From the qualitative data above, it is obvious that DCSWs and brothel owners see the usefulness of condoms and have a positive attitude to condoms. Brothel owners usually remind and support DCSWs to use condoms. Condoms are always available in each brothel, and easy to buy from the market. Condoms are not expensive. The most popular condom is "Number One" and DCSWs do not want to use other brands of condoms. They believe in the quality of "Number One" rather than others. There were many problems about condom use particularly with clients who did not want to use condoms. DCSWs refuse to have sex if clients refuse to use condoms so clients may go to choose other girls within the same or a different brothel. Some clients brought

condoms along with them but DCSWs refused to use clients' condoms. They have to refuse to have sex with clients who insisted not to use "Number One" condom. There was mention of termination of pregnancy in brothels but no one could explain why this happened. Those DCSWs who have a long experience in this career have good knowledge about STD and HIV/AIDS including condom use. They learnt from many NGOs who went there regularly for the condom use promotion. Most DCSWs did not use the STD clinic of the health center but used the STD services from pharmacies and private clinics instead. Some brothel owners treat STDs. The brothel owners are responsible for food, water, electricity, housing as well as treatment costs. However, the treatment cost will be reimbursed to brothel owners when DCSWs are able to work again. Some DCSWs were reluctant to express their experience of condom use or sexual activities. Some referred to "my friends in the same house" while talking about themselves. In the focus group discussion, there were some dominant girls and some were shy to express their opinion.

Regarding STD activities of the health center, there is only treatment provided at the clinic (rather than brothel based treatment visits), but it is rare that DCSWs visit the health center. Only one NGO visits brothels once a month to provide condoms and health education.