



## CHAPTER III

### METHODOLOGY

#### 3.1 Site of Study

The study was conducted at the Cambodian,-Thai border in Osmach town, Oddar Meanchey Province, Cambodia.

The population of the town is estimated to be around 5,500 people (Malteser, 2003). There are two casinos with approximately 1,000 staff, and a market targeting international tourists close by. The total number of brothels is thirteen with 62 DCSWs working in these brothels. There is one health centre staffed by a medical assistant, midwife, and three workers for Expanded Program of Immunization, administrative person and midwife assistant.

The data collection for this study was carried out between January 25 and February 9, 2005. For concerning of the working hours of DCSWs, the data collection was conducted between 10.00 AM to 15.00 PM.

#### 3.2 Research Design

This was a Cross sectional descriptive study in order to assess the magnitude and determinants of condom use among DCSWs by using quantitative and qualitative data collection methods.

#### 3.3 Sampling Method and Sample Size:

**3.2.1 Quantitative data collection method:** The target population for this study was DCSWs working in brothels at the Cambodia-Thai border in Osmach town, Oddar Meanchey Province. All 62 DCSWs from 13 brothels, which were operating during the field study, were recruited. A structured questionnaire was used to collect data.

**3.2.2 Qualitative data collection method:** The purposive sampling was conducted for selected cases from DCSWs. Eight “old” DCSWs were selected for a focus group discussion, and two “new” DCSWs were selected for an in depth interviews. Health centre staff having contact with DCSWs were also interviewed (midwife and medical assistant) as well as four brothel owners/managers - three from old brothels and one from new brothels.

### **Inclusion Criteria for qualitative data collection methods**

#### **For DCSWs**

1. DCSWs who were working in the brothels at Osmach town during the research period were included.
2. A “new” DCSW refers to one who has worked in commercial sex for less than one year.
3. An “old” DCSW refers to one who has worked in commercial sex for more than three years.
4. The work experience was counted from the first day when they joined the profession and could be at either Osmach or elsewhere.
5. Willing to participate
6. Permitted by the brothel owner/manager

#### **For health center staff**

1. Health center staff that was had contact with DCSWs.
2. Willing to participate

#### **For brothel owners/managers**

1. Owners/managers responsible for the brothels operational in Osmach town during the research period will be included.
2. The owners/manager can be male or female.
3. A “new” brothel owner/manager refers to one who has operated the brothel for less than one year.
4. An “old” brothel owner/manager refers to one who has operated the brothel for more than three years

5. The operation time was counted from when they started the business either at Osmach or elsewhere.
6. Willing to participate

### **3.4 Research Instruments**

**3.3.1 Quantitative data:** The Questionnaires were conducted by face to face interview. Questionnaire construction and scoring methods (composed of 4 parts) are shown below:

Part 1: Demographic Characteristics and general information of DCSWs

Part 2: Knowledge and Attitude regarding STD and HIV/AIDS

Part 3: Other factors (Reinforcing and Enabling factors) related to condom use

**3.3.2 Qualitative data:** Guidelines of in-depth interviews and focus group discussion

#### **3.3.2.1 Focus group discussion of DCSWs**

The discussion was performed with “old” DCSWs. The group had a total of 8 participants who came from 6 brothels. The brothel had been selected from first three of the longest of operation. Each DCSWs had been appointed by brothel owners. The data was presented in the form of description and narration with additional discussion.

#### **3.3.2.2 In-depth interviews of “new” DCSWs, Health Center staff and brothel owners/managers**

**(i) “New” DCSWs:** Two new DCSWs were selected for interview that had less than one year work experience and had been allowed to participate by the brothel owner. The researcher conducted the interviews.

**(ii) Health centre staff:** The interviews were done with the midwife and a medical assistant. The researcher conducted the interview.

**(iii) Brothel owner/manager:** Brothel owners were selected from the “new” and “old” brothels. There was one new brothel owner and three old brothel owners. The researcher conducted the interview.

The data of in-depth interviews was presented in the form of description and narration.

### 3.5 Measurement Methods for Quantitative Data

#### **Part 1: Demographic Characteristics and general information of DCSWs**

This part of the questionnaire consisted of questions on

- **Demographic characteristics** profile of the DCSWs including age, education, steady partners and sweethearts, nationality, dependent people, income. This section of the questionnaire consisted of 17 multiple choice questions aimed at finding out the information from participants.

- **Duration in the profession** This section of the questionnaire consisted of 2 multiple choice questions aimed at finding out information from participants.

- **Past history of STDs** This section of the questionnaire consisted of 2 multiple choice questions aimed at finding out information from participants.

#### **Part 2: Knowledge and attitude regarding STD and HIV/AIDS**

This part of the questionnaire consisted of questions on knowledge regarding STD and HIV/AIDS. The questionnaires were used to measure the participants' knowledge of STDs and HIV/AIDS. It consisted of 15 questions and used the 2 point Likert scale which related to STDs and HIV/AIDS. This aimed to find out the extent of the participants correct knowledge of STD and HIV/AIDS. The answers were categorized as not correct or correct. The scoring was given as “1 for the correct answer and 0 for incorrect answer.”

This part of the questionnaire consisted of questions on the attitude regarding STDs and HIV/AIDS. The attitude questionnaires were used to measure the participants' attitude of STDs, HIV/AIDS and condom use. It consisted of 4 questions and used the 2 point Likert scale which related to STD and HIV/AIDS. There were 2 positive and 2 negative statements. This aimed to determine the extent the participants had a positive or negative attitude about STD and HIV/AIDS.

### **Part 3: Other factors (Reinforcing and Enabling factors) related to condom use**

This part of the questionnaire consisted of questions on

- **Reinforcing factors**

This consisted of questions on reinforcing factors of the DCSWs including an influence of clients, influence from brothel owners/managers/pimps, and peers on condom use. It consisted of 8 multiple-choice questions.

- **Enabling factors**

This part of the questionnaire consisted of questions on enabling factors of the DCSWs including availability of condoms, availability of health services and negotiation skills of DCSWs. It consisted of 7 multiple-choice questions, aimed at finding out the influence of these factors on condom use by participants.

- **Condom use**

This part of the questionnaire consisted of questions on condom use by DCSWs. It consisted of 3 multiple-choice questions. The answer of use of condoms was categorized as every time, almost all of the time, sometimes, never.

The scoring was rated as a scale where 3 was "use condom every time" and scales 0-2 were "not use condom every time".

The measurement method (designing the scale) for each variable is shown below:

**Table 3: Measurement Method (Designing in scale)**

Variables	Measurement scale
<b>1. Independent variable</b>	
<ul style="list-style-type: none"> <li>• Condom use</li> </ul>	Nominal scale
<b>2. Dependent variables</b>	
<b>2.1 Predisposing factors</b>	
<ul style="list-style-type: none"> <li>• Demographic characteristics of DCSWs               <ul style="list-style-type: none"> <li>- Age of DCSWs</li> <li>- Nationality</li> <li>- Education</li> <li>- Income</li> </ul> </li> <li>• Having steady partners and sweethearts</li> <li>• Having dependent people</li> <li>• Duration in the profession</li> <li>• Past history of STDs</li> <li>• Knowledge regarding STD and HIV/AIDS</li> <li>• Attitude regarding STD and HIV/AIDS</li> </ul>	<ul style="list-style-type: none"> <li>Nominal scale</li> <li>Nominal scale</li> <li>Nominal scale</li> <li>Nominal scale</li> <li>Ratio scale</li> <li>Nominal scale</li> <li>Ratio scale</li> <li>Nominal scale</li> <li>Nominal scale</li> <li>Ordinal scale</li> </ul>
<b>2.2 Reinforcing factors: the influence of</b>	
<ul style="list-style-type: none"> <li>• Client characteristics</li> <li>• Brothel owner/ manager/pimps</li> <li>• Peers (Advisor)</li> </ul>	<ul style="list-style-type: none"> <li>Nominal, Ratio scale</li> <li>Nominal scale</li> <li>Nominal scale</li> </ul>
<b>2.3 Enabling factors</b>	
<ul style="list-style-type: none"> <li>• Availability of Condoms</li> <li>• Availability of health services               <ul style="list-style-type: none"> <li>- STD clinic</li> <li>- IEC materials</li> </ul> </li> <li>• Negotiation skills of DCSWs</li> </ul>	<ul style="list-style-type: none"> <li>Nominal scale</li> <li>Nominal scale</li> <li>Nominal scale</li> <li>Nominal scale</li> </ul>

### 3.6 Quality of Research Instruments

**3.6.1 Validity:** by using the content and consultation with experts to provide feedback including the questions and guidelines for in-depth interviews and the focus group discussion.

**3.6.2 Reliability:** The reliability of the questionnaire was done for the level of knowledge. It was done on 30 randomly selected DCSWs from a different district of Oddar Meanchey Province. Using SPSS (Statistical Software package for Social Sciences) for windows version 10.0, the reliability test was done and Cronbach's alpha coefficient for interval consistency was calculated and found to be .78 so it was found to be reliable.

### 3.7 Procedure of Data Collection:

- **Study place:** field preparation for data collection
- **Tools development both quantitative and qualitative**
  - Questionnaire was developed in English
  - Translated to Cambodian language by Cambodian who had medical work experience with DCSWs. Since, the questionnaire had to be translated from English to Cambodian language. Concerning language bias, the cross check was applied from English to Cambodian and conversely back to English again.
- **Interviewers' training:** the interviewers were Cambodian women with medical background.
- **Data collection:**
  - **Quantitative data:** The questionnaires for DCSWs were collected by two Cambodian women trained staff and the researcher.
  - **Qualitative data:** The focus group discussion was conducted by Cambodian women with trained staff. One was a leader and another one was the note taker. The researcher was the observer and did not interfere with the discussion. The researcher is fluent in Cambodian. The researcher conducted the in-depth interviews. The Audio tape recorder was used for both techniques. Both techniques were closed supervision by researcher.

### 3.8 Data Analysis:

- **Quantitative data:** The completed questionnaires were coded and analyzed in SPSS software for windows version 10.0. The descriptive statistics were used to describe the predisposing, reinforcing and enabling factors, and condom use. The Chi-square test was used to determine the association between condom use and independent variables. Multivariate Analysis using binary logistic regression was used to determine the relationship between independent and dependent variables.
- **Qualitative data:** The content analysis method (coding) was applied for in depth interviews and the focus group discussion. Data from audio-tap record was transcribed and then categorizing. Field records, subjects' verbal responses were used for data analysis.

In this study, the qualitative data collection was done after finished the gathering of quantitative data aimed to clarify some information of quantitative data because it was two-way communication. The qualitative findings were validated through triangulation with both quantitative results and through crosschecking of focus group discussion and in-depth interviews.

### 3.9 Ethical Considerations:

- The participants were willing to participate in the study
- Concerning sensitive question, therefore women were chosen to collect data.
- Provided verbal informed consent to all subjects
- Assure the anonymity of the study subjects by not asking the identification of subjects
- Local authorities were informed of the research and asked their permission for data collection.
- Sharing the results to other stakeholders e.g. Provincial Health Department, NGOs etc)