CHAPTER I

INTRODUCTION

1.1 BACKGROUND AND RATIONALE

Acquired immune deficiency syndrome (AIDS) caused by the human immunodeficiency virus (HIV) is considered an urgent worldwide pandemic due to its aggressive nature and current incurability. It can be transmitted through unprotected sexual contact, blood transfusion, the use of contaminated hypodermic needles, and from mother-to-child (WHO, 2007). The HIV/AIDS epidemic continues to pose a major public health threat worldwide especially in the developing world. In 2009, the 'Global Summary of the AIDS Epidemic' reported that the number of people living with HIV was 33.3 million; newly infected people with HIV was 2.6 million and the number of AIDS-related deaths was 1.8 million, with 95% of the new cases found in developing countries (UNAIDS/WHO, 2010). Today, the highest numbers of HIV/AIDS cases are in sub-Saharan Africa and the Caribbean. In sub-Saharan Africa alone, it is estimated that more than 28 million people are living with HIV/AIDS, with 41% of the adult population (aged 15 to 49) being infected (UNAIDS/WHO, 2010).

In 1984, the first case of HIV/AIDS was identified in Thailand, in a homosexually-active male. In 2008, the number of people living with HIV/AIDS in Thailand was 13,434 and the number of AIDS-related deaths was 1,760. In 2009, the number of people living with HIV/AIDS in Thailand was 9,915 people and the number of AIDS-related deaths was 1,369. In 2010, the number of people living with HIV/AIDS in Thailand had declined slightly to 5,058 and the number of AIDS-related deaths had declined to 673 people (CDC, 2010).

Regarding the sexual transmission of HIV/AIDS in Thailand, the pattern of infection has changed over time between homosexual and heterosexual groups. There has been a particular increase in cases among males who engage in sexual practice (not necessarily exclusively) with other males (MSMs) and/or male sex-workers (MSWs).

In 2010, the 'Ministry of Public Health of Thailand', 'Chiang Mai Provincial Public Health Office', the U.S. 'Centers for Disease Control and Prevention' (CDC) and 'Fasrirung Club of Thailand' surveyed the prevalence of HIV/AIDS in Chiang Mai. They reported an overall HIV/AIDS prevalence rate was 21.0 %, 13.0 % and 12.0 % in MSW, MSM, and Trans gendered persons (TG) respectively. Keeratikan, et al. (2010) reported an increase in the rate of HIV/AIDS infection among MSWs in Chiang Mai from 12.5 % in 2008 up to 15.4 % in 2009 and up to 26.0 % in 2010. The prevalence of HIV/AIDS in MSWs (especially those within the age of 23 to 28 years old) was the highest in the Chiang Mai province when compared to other provinces in Thailand. In Bangkok, HIV/AIDS prevalence also increased among MSMs from 24.7% in 2008 up to 30.7% in 2010 (CDC, 2010).

The increased rate of HIV/AIDS infection among MSWs can be related to several factors. One contributing factor may be the increasing number of establishments aimed at homosexual male clientele such as gay bars, spas, and massage parlours. Such establishments reflect a support for openness towards commercial male sex services which may in turn result in an increased number of MSWs.

In 2008, the ‘Centers for Disease Control' (CDC) reported that most MSWs rarely use condoms, especially when engaging in sexual relations with their boyfriend and/or girlfriend (CDC, 2010). As most MSWs provide commercial sex for both men and women, it could not be argued that MSWs are not at the highest risk of HIV/AIDS infection (Kunawararak et al., 1995; Makmai, 2006; McCamish, Storer, & Carl, 2000).

In Thailand, the government has emphasised its focus on reducing the incidence of HIV/AIDS in female sex workers. In contrast, programs focused on MSWs who are at high risk of HIV/AIDS infection have been neglected (Chan et al., 1998; Muecke, 1992; Parker, Khan, & Aggleton, 1998). HIV/AIDS prevention

programs focused specifically on MSWs were limited (Beyrer, Artenstein, Kunawararak, Vancott, Mason, Rungruengthankit, Hegerich et al., 1997; Kunawararak et al., 1995). In the past, the majority of prevention programs in Thailand have emphasised educating the general public about HIV/AIDS and sexually transmitted diseases (STDs). In Thailand, for example, 'The 100% Condom Program', developed by government in 1991, was aimed at encouraging individuals to consistently use condoms whenever they had sex with commercial sex workers. Another program, a trial pilot-project, aimed at factory workers in Khon Kaen, focused on HIV/AIDS education and intervention (Rojanapithayakorn & Hanenbery, 1996). One more example was the HIV prevention program for female commercial sex workers in southern Thailand. This program included both educational campaigns and peer-educator training (Van Griensven et al., 1998).

One of the few known HIV/AIDS prevention programs, aimed primarily at MSWs, was called the 'Make Life Skills Program' which was developed by Mplus, a non-government organization. The content of the 'Make Life Skills Program' focused on sexually transmitted disease prevention, especially among MSWs. However, according to an evaluation of the effectiveness of the program by Makmai (2006), it was apparented that there was still much room for improvement. By interviewing the participants of the program, the results found that each activity required between one to two hours to complete. Moreover, the trainers delivering the program were not health care professionals. Almost all the activities, multimedia, and documents for the program had been created by Mplus. The participants suggested that to improve the effectiveness of the program, proper time-management, effective teaching practice, proper language use, and attractive instructional media were required.

Although the objective of these various programs was to reduce the incidence rate of HIV/AIDS, there were several limitations. They were not developed based on any health behaviour theories, nor were their impacts properly evaluated. It was claimed that almost all successful HIV/AIDS prevention activities were developed and conducted based on health behaviour theories (Kaljee et al., 2005). Such theories included the 'Health Belief Model' (Thato, Charron-Prochownik, Dorn, Albrecht, & Stone, 2003); 'Theory of Reasoned Action' (Munoz-Silva, Sanchez-Garcia, Nunes, & Martins, 2007); 'Theory of Planned Behaviour' (Albarracin, Johnson, Fishbein, &

Muellerleile, 2001); 'Social Cognitive Theory' (Bobrova, Sergeev, Grechukhina, & Kapigo, 2005) and the 'AIDS Risk Reduction Model' (Longshore, Stein, & Chin, 2006).

Even though HIV/AIDS incidence rates in MSWs had steadily increased, HIV/AIDS prevention programs aimed specifically at this group are minimal. Therefore, the objective of this study was to identify factors that influence condom use as a method for preventing HIV/AIDS transmission among MSWs who were working in gay bars and gay massage parlours in the Chiang Mai province. Development of this program would incorporate elements taken from the 'AIDS Risk Reduction Model' (ARRM).

There were two primary reasons for selecting the ARRM for this study. First, the ARRM was identified in studies by Longshore, Stein, & Chin (2006) and Conner, Stein, & Longshore (2005) and formulated as a framework for researchers specifically focusing on HIV/AIDS risk behaviour (Longshore, Stein, & Chin, 2006). Second, the ARRM was developed by combining the 'Theory of Reasoned Action' (Ajzen & Fishbein, 1980), 'Social Cognitive Theory' and the 'Health Belief Model' (Rosenstock, 1990). This combination of the perceptual and attitudinal factors represented in other social cognitive theories of behaviour change, make it a comprehensive model to draw from. It is important to test predictors of behaviour change before the HIV/AIDS prevention program was improved.

Therefore, in this study, the researcher began the study by identifying factors predicting condom use based on the ARRM model. The significant predictors were used to design an HIV/AIDS prevention program and to evaluate the effectiveness of HIV/AIDS prevention program.

1.2 PURPOSES OF THIS STUDY

1.2.1 Objectives

The main objective of this study was to evaluate the effectiveness of a HIV/AIDS prevention program among MSWs working in gay bars and gay massage parlours throughout Chiang Mai province, Thailand.

1.2.2 Specific objectives

There were three specific objectives to this study:

i) to identify factors influencing condom use for preventing HIV/AIDS among MSWs based in gay bars and gay massage parlours in Chiang Mai province by using elements taken from the ARRM

ii) to develop the HIV/AIDS prevention program aimed specifically at MSWs based in gay bars and gay massage parlours in Chiang Mai province by using the ARRM

iii) to evaluate the effectiveness of the HIV/AIDS prevention program towards the following: HIV/AIDS knowledge, perceived infection risk, peer norm, attitudes towards condom use, perceived self–efficacy, intention to use condoms, and condom use in MSWs

1.3 DEFINITIONS

Male Sex Workers (MSWs): men who reported that they offered commercial sex for male and/or female clients. This study focuses specifically on MSWs who work in establishments primarily served homosexual male clients and heterosexual female clients, such as gay bars and gay massage parlours in Chiang Mai province.

Gay bars (GB): drinking establishments that caters to client with an interest in sexual relations with male persons. According to Mplus' information (an organisation that supports health education for MSMs and MSWs), at January 2010, there were five gay bars in Muang district, Chiang Mai province**.**

Gay massages parlours (MP): establishments where masseurs were offered Thai massage and also commercial sex for male and/or female clients. According to Mplus, at January 2010, there were twelve gay massage parlours in Muang district, Chiang Mai province.

HIV/AIDS prevention program was a health intervention program. In this study, the aim was to develop an HIV/AIDS prevention program for MSWs using concepts from the ARRM. The application of key constructs from the ARRM was

assessed in Phase I of this study. The results, relating specifically to condom use then were used to develop phase II of the HIV/AIDS prevention program.

Psychosocial factors were a crucial consideration when assessing attitudes towards condom use for the prevention of HIV/AIDS. Some important psychosocial factors are outlined by the ARRM as follows**;**

i) **Perceived infection risk** was the person's perceived chance of getting HIV/AIDS.

ii) **AIDS knowledge** was an individual's understanding of current information about HIV/AIDS, including etiology, transmission, symptoms, diagnosis, treatment, and prevention. This study focused only on knowledge about the routes of sexual transmission and prevention of HIV/AIDS.

iii) **Peer norm** was related to attitudes about condom use, for example whether most people approved or disapproved of condom use. This study focused on attitudes towards condom use among MSWs' peers who were working at the same gay bars and gay massage parlours.

iv) **Cues to action** were trigger which encouraged an individual to change his/her behavior relating to condom use. This study focused on providing guidance as to proper condom use, via conversation with health care providers, co-workers and Mplus volunteers.

v) **Perceived self-efficacy** reflected a person's confidence in his ability to exert condom use.

vi) **Respond self-efficacy or perceived benefit** was the perception that adopting and maintaining HIV/AIDS prevention behaviours reduced HIV/AIDS risk. This study focused on the individual's beliefs about the efficacy of condom in reducing the risk of HIV/AIDS transmission.

vii) **Intention to use condom** was an individual's willingness to use a condom when having vaginal, anal, and/or oral sex with their paying partner.

viii) **Condom use** was an individual's behaviour to use a condom when having vaginal, anal, and/or oral sex with their paying partner.

Effectiveness of HIV/AIDS prevention program was the outputs of the health intervention program. In this study, effectiveness of the program was evaluated across seven areas as shown following.

i) AIDS knowledge
ii) Perceive infection risk
iii) Peer norm
iv) Attitudes toward condom use
v) Perceived self–efficacy
vi) Intention to use condoms
vii) Condom use